Technical Annex: Cost allowances

Final Determination

Annex 4

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.

Our mission

To protect the short- and long-term interests of consumers of electricity, gas and water.

Our vision

To ensure value and sustainability in energy and water.

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 on our final determinations for cost allowances. It expands on the main body section 6.

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. Overview of FD cost allowances

1.1 SONI's business plan estimates that its 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.

1.2 As part of its response to the draft determination, SONI revised the business plan to remove some uncertain projects and respond to stakeholder feedback. The result is a reduction in the amount of revenue requested. 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).

Table 1: SONI cost request context

	UR Allowance[1] 2015-20 £000s	SONI Spend[2] 2015-20 £000s	BP Request 2020-25 £000s	New BP Request 2020-25 £000s	Proportional Increase %
Opex	62,591	68,776	94,791	92,852	**48%**
Capex	7,703	5,896	26,007	25,442	**230%**

1.3 We have sought to build up allowances via initiative decisions, salary benchmarking, pension assessments, productivity challenge and real price effect forecasts. For FD, we have not changed aspects our approach or methodology as set out DD. We have taken account of stakeholder views, including any evidence provided by SONI as part of its response to our DD. This includes that received through any face to face engagement and our query process. We have also instructed our consultants GHD to review the submission and provide recommendations, which we have taken account of.

1.4 The result of our deliberations are as follows:

Table 2: 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	15,931	15,826	16,034	15,860	14,346	**77,998**
Total Capex	2,640	2,278	1,753	1,563	1,490	**9,725**

1.5 We have provided 84% of SONI's opex request but only 38% 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

[1] Allowances reflect those following CMA referral and decisions.
[2] It should be noted that this refers to projected spend as the period has not yet finished.

increase the final determination represents against comparable existing allowances.

Table 3: Cost request and allowance context

	UR Allowance[3] 2015-20 £000s	SONI Spend[4] 2015-20 £000s	BP Request 2020-25 £000s	FD Allowance 2020-25 £000s	FD % Increase from PC15
Opex	62,591	68,776	92,852	77,998	**25%**
Capex	7,703	5,896	25,442	9,725	**26%**

[3] Allowances reflect those following CMA referral and decisions.
[4] It should be noted that this refers to projected spend.

2. Base cost allowance assessment

Change in position from DD to FD

2.1 SONI made significant representation as part of its DD response with respect to base costs. This included the fact that detail on staff numbers in the business plan was incorrect and failed to account for additional members employed post I-SEM introduction. SONI also made other representations with respect to recharged staff and salary expenses.

2.2 As a consequence of the detail submitted, we have made various changes to base allowances including the following:

- Provision for 4 additional internal FTEs related to I-SEM activity.
- Provision for 2.5 external FTEs related to I-SEM.
- Increase in IT support costs by £0.6m per annum following new market requirements.
- Inclusion of additional £100k per annum in professional fees for mandatory annual schedule and dispatch audit.
- Adjustment to recharged staff to average levels in the 2015-20 price control period.
- Re-instatement of overtime and standby allowances.
- Adjustment to non-labour costs where material increases are unsupported.

2.3 We have also uplifted SONI's baseline by 3 FTEs to account for implementation of new aspects of our regulatory framework.

Recap on DD position

2.4 The position at draft determination was generally to take the 2019-20 staff numbers and non-labour costs and roll these forward into the new price control for base costs. Uplifts would depend upon allowances for new initiatives and salary FTE provision.

Stakeholder views

2.5 Only SONI raised particular issues about the base cost allowance. SONI raised various concerns that the draft determination underestimated base costs by c. £2.3m per annum split as follows:

Figure 1: SONI estimate of base cost under provision

Opex Area	SONI Business Plan (£m)	DD Allowance (£m)
Payroll and Pension	8.5	7.2
Staff Related Costs	0.5	0.4
Total Telecoms & IT Costs	3.6	3.0
Total Professional Fees	0.8	0.5
Total Facilities Costs	0.6	0.6
Net Recharges	0.1	0.1
Total Operating Costs	0.3	0.3
Total Bt Opex	**14.4**	**12.1**

2.6 SONI attributed the under provision to a number of factors including the following:

- **I-SEM costs** – SONI is incurring annual I-SEM related costs of £1.3m which was previously funded via the Dt mechanism. The consultation response stated, *"It would appear that the I-SEM costs required within BAU costs have been omitted in the Draft Determination."* This exclusion includes 4 internal staff, 2.5 external staff, £0.6m in additional IT costs and £100k for the annual schedule and dispatch audit.
- **Recharges** – SONI has asked for full allowance of staff recharged from EirGrid. Their response states, *"The recharges below equate to an FTE request of 11.9 and a total annual allowance of £1.07m. The Draft Determination allows for £0.32m."*
- **Salary Allowance** – SONI requested that the UR provide for a basic salary FTE average of £54k instead of the £51k per FTE used. Various reasons are cited for this request including consistency with previous price control allowance.
- **Overtime & Standby** – Draft allowances were reduced based on FTE numbers but SONI contend that this is incorrect as request was based on actual spend. These costs are principally due to control room staff and, *"the additional FTE staff request in SONI's submission will not receive overtime or standby allowances."*
- **Indirect Staff Costs** – SONI claim their requested costs for these areas are generally in line with, or less than, the average for the current price control figures. As such, they should not be reduced based on FTE numbers.

FD position

2.7 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 or average of the previous price control period.
- Decisions on base IT expenditure uplifts have been taken on a service initiative by initiative basis.
- Decisions on base 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 aspects of the new regulatory framework.

2.8 We have not set out base cost request and allowances for a variety of reasons including:

- The business plan is not really structured in this fashion.
- Base 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 base allowances.

2.9 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 below.

2.10 We have not been able to replicate the SONI figures of £14.4m for base costs made in response to our DD and estimate this to be closer to £14m. However, upon review we accept that the draft determination provision was inadequate. This under provision was due to a number of factors including:

- The fact that I-SEM costs were previously funded via the uncertainty mechanism.
- The blurring of distinction between base and enhancement costs in the business plan tables (which we should have separated in the guidance table design).
- An error by SONI in the original business plan submission which included the costs but not the staff associated with I-SEM activity.
- Confusion around the level of recharged staff.

2.11 **I-SEM Costs** – The business plan submission error highlighted above resulted in an overestimation of SONI employee unit costs. We also did not make appropriate provision for these staff in the draft decision. As part of their consultation response, SONI provided updated tables and clarity around staff numbers and on-going I-SEM costs.

2.12 We have taken on board these representations and are content that SONI's request is in line with the original I-SEM Dt allowance. As a consequence, we have amended the final determination to account for I-SEM as follows:

- Provision for 4 additional internal FTEs related to I-SEM activity.
- Provision for 2.5 external FTEs related to I-SEM.
- Increase in IT support costs by £0.6m per annum following new market requirements.
- Inclusion of additional £100k in professional fees for mandatory annual schedule and dispatch audit.

2.13 **Recharges** – SONI's claim that it has been underfunded with respect to recharges appears flawed. Within the draft decision we fully funded the net position of £320k p.a. as requested. This was assumed to be SONI making use of approximately 4 additional external staff from the EirGrid group.

2.14 In fact, the reclassified payroll table highlighted that this is the net position when TNPP staff are also accounted for. Excluding these network planning staff, the actual TSO recharging position between SONI and EirGrid is almost 12 FTEs at a cost of c. £1.1m per year to SONI. SONI has highlighted the increase in these staff over the past number of years as follows:

Figure 2: Net staff recharge position between SONI and EirGrid group

Year	Other Group	SONI	Net FTE
2015/16	0.3	(1.7)	(1.5)
2016/17	20.0	(17.9)	2.1
2017/18	21.7	(15.4)	6.3
2018/19	24.9	(15.5)	9.4
2019/20	24.9	(15.5)	9.4
2020/21	30.4	(18.5)	11.9

2.15 As the figure illustrates, there has been an increasing reliance on external staff over the last price control period. The SONI consultation response allocates the reliance on EirGrid staff to areas such as all-island tariffs, system support services and IT support.

2.16 SONI is free to make use of external expertise and we accept that there may be economies of scale by 'pooling' resources in certain areas. However, this needs to be within existing allowances. There is also an expectation that SONI must retain a level of expertise within NI to ensure that local customer needs are prioritised.

2.17 Whilst the draft decision was content to accept the SONI recharged position, this was on the misunderstanding that the net cost was £320k per annum to SONI. Following review, we are not convinced that the rapid increase in external staff usage is fully justified. The final determination therefore provides for recharged staff at the average of the last price control period plus 2.5 FTEs for the I-SEM opex uplift.

2.18 This allowance equates to 9.3 FTEs remunerated at a cost of approximately £0.7m per year. This compares with the SONI request of almost 12 FTEs at a cost of c. £1.1m.

2.19 **Salary Allowance** – Review of the response on salaries does not suggest the need to change the base allowance from £51k per FTE. This is discussed more fully in chapter six. However, at a high level the following points can be made:

- No sufficient reason given why a regional price adjustment should not apply.
- The £54.5k SONI cost per FTE includes expensive TNPP staff who are separately funded outside the price control.
- Removing these staff gives a SONI request of £53k which is close to the UR allowance.
- Given the material increase in staff requested, it would be anticipated that average salary costs will decrease somewhat.

2.20 As a result of these factors, no change in the base salary provision is accounted for in the final determination.

2.21 **Overtime & Standby** – SONI have raised a reasonable point about overtime and standby allowances. The request is in line with actual cost incurred and if these costs largely relate to control room staff it would be incorrect to reduce allowances depending on overall staff reductions. Consequently, we have decided to re-instate full allowance for these costs.

2.22 **Indirect Staff Costs** – Whilst it is true that the request is not a material increase, it would seem hard to argue that such indirect costs (e.g. motor expenses, training, hotels, meals, phones etc.) are not influenced by the number of staff employed. As a result, allowances have been adjusted depending on the final staff provision against the SONI request.

2.23 **Non-labour costs** – For non-labour costs we have generally accepted the business plan request or taken the forecast expenditure. However, much like the staff recharge position, we have sometimes taken an average of the last price control period where forecast costs are increasing without justification.

2.24 **Regulatory framework uplift -** 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. While we have reduced the scope of and simplified the performance framework in many ways since DD, we recognise this is a new, material area for SONI. We have increased our allowance from DD by 1 FTE, to allow a total of additional 3 FTE resource to:

- Develop annual forward performance framework plan, evaluating delivery for year end, and engagement with stakeholders (i.e. largely with panel, UR, and internal business engagement).
- Monitor and analysis of performance throughout the year.
- Costs of enhanced regulatory reporting (more granular cost reporting)
- Development of activity concerning UR performance framework deliverables. We consider the main activity in year one will be to develop strategy which considers whole system approach and digitalisation strategy. We expect that the additional staff will need to liaise and collaborate with experts across the different SONI role areas within the business and with management to input in this area.

2.25 The impact of the final determination decisions is to increase base costs to c. £13.5m against the SONI estimated request of £14m per annum. The principle reasons for the difference is the salary allowance variance and the reduction to recharged staff costs which we do not consider to be fully justified.

3. Service initiative cost allowance assessment

Change in position from DD to FD

3.1 Overall, SONI provided little further evidence in its response to our DD actions than was in its business plan which we graded as poor at DD. It has also not contended most of the actions we set at DD, but where it has we have responded to these.

3.2 The changes we have made to allowances reflect where SONI has provided evidence requested at DD or to support it in further scoping initiatives which have a strong rationale for consideration as and where appropriate. The main changes include the following:

- Full allowance has been provided for cyber security enhancements.
- Capex allowance has been given for DSU metering.
- Opex and capex has been attributed to website and engagement portal development.
- An allowance has been provided for research into future stakeholder engagement requirements and activity.
- £50k provision has been made for SONI to take forward scoping work on alternative disaster recovery.

Recap on DD position

3.3 The SONI revised 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 35 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 H7: Partnership and engagement.

3.4 The overall cost (opex and capex) of these initiatives can be summarised as follows:

Table 4: 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	£11.7m
Initiatives H1 to H7	£2.7m
Totals	**£47.6m**

3.5 As part of the DD we reviewed SONI's initiatives according to rationale for consideration, need, options and risk (including timing), costs, and benefits. The level of scrutiny applied was in line with the UR approach paper principles i.e. more analysis of financially material projects or poorly evidenced costs. The draft determination provided for around 38% of SONI's initiative requests based on our view of the quality of the evidence provided within the business plan. It also set various actions and evidence requirements for SONI to address in order to receive further funding.

Stakeholder views

3.6 SONI was very concerned that the DD provided too little upfront funding for new service initiatives. It considered that consumers will be harmed by delays to approve new service; and that it will be forced to take a risk averse approach to initiatives that can add value for consumers if we rely too much on uncertainty mechanisms during the price control period; and that a lack of funding would prevent it from delivering consumer value.

3.7 SONI went on to note the specific effects that this might have. It said that a lack of funding would prevent it from analysing and developing a whole system vision and accompanying pathways for change; to collaborate and engage with stakeholders which will allow it to input into Government Strategy; and deter investment in renewable generation and supporting technologies. It was also concerned that a lack of funding certainty would prevent it from recruiting and developing skills to support energy transition, and undertake all-island procurement. We interpret these impacts to largely relate to allowances concerning control centre tools and system services. Finally, it was concerned that too little funding will introduce risk to the grid security of the system.

3.8 Instead, SONI considered that we should allow ex-ante funding for initiatives or projects, which in many cases it conceded have not been scoped (or in some cases started-up), and rely on protection that our proposed conditional cost sharing mechanism affords were SONI to under-spends during the period relative to the ex-ante allowance it has been provided (though we note that SONI proposes we adjust this proposal so that the burden of proof for evidence provision falls on UR).

3.9 Some other stakeholders, largely representing wind renewable generators and the Business Alliance, also raised concerns about too little funding for new initiatives (particularly in relation to control centre tools and system services). They were also concerned about potential over-reliance on use of uncertainty mechanisms.

3.10 Business alliance was concerned that adequate stakeholder engagement resources are made available to support focused collaborations with The Northern Ireland Executive, NIE Networks and to help educate and inform the wider business community. NIRIG was concerned at the lack of funding for SONI to engage so as to allow timely build of network infrastructure to allow more wind onto the system.

3.11 Manufacturing NI considered that that the DD funding strikes the balance required. It said it would support our DD view, having forensically reviewed SONI's plans, and considered that sufficient funding is provided to operate safe, secure and affordable services whilst providing support to manage the transition in the market.

FD position

3.12 SONI's service initiatives represent the most material area of SONI's cost request: £47.6m. Our

FD position is to increase our allowance to £21.6m from the £19.2m proposed at DD. The change from DD to FD accounts for where SONI has met our actions for evidence or further allowance to support SONI in further scoping of potentially worthwhile initiatives, after taking account of stakeholder views.

3.13 Appendix 1 at the end of this Annex sets out our more detailed views of SONI's response to the DD actions. We have also taken account of feedback on SONI's response from our consultants GHD. A final conclusion has been provided on each service initiative within Appendix 1. The remainder of this section provides our overarching response to stakeholders and discusses some of the initiatives in as far as they are strongly relevant to specific stakeholder concerns.

3.14 SONI, renewable wind generators and the Business Alliance are concerned that we have not provided enough funding and our approach may lead to over-reliance on use of uncertainty mechanisms. SONI goes on to say this will encourage SONI to minimise costs, delay investment and/or adopt risk averse behaviour. There are a few general points worth noting on this that are a matter of regulatory judgement, before we set out how we have applied this judgement specifically in the context of those strategic initiatives stakeholders refer to:

- We agree it is important that in reaching a position on what specific initiatives to allow funding for in FD, rather than leaving to uncertainty mechanisms during the period, we consider the potential harm to consumers from factors such as: (a) delays to new initiatives that could benefit consumers and (b) potential inefficiencies in delivery from not approving as much funding upfront.

- We should also consider the benefits of leaving approval for some initiatives to a point during the price control period. Many of SONI's proposals are insufficiently well-developed and thought out: many are no more than an idea described briefly on paper. Not only can further development of proposals improve the reliability of SONI's costings but, perhaps more importantly, it can help improve the extent to which the project is planned and options and other more appropriate or value adding ideas are fully considered, in a way that reaps the full opportunities available for consumers.

- Over the medium to longer term, we consider that it is in consumers' interests for the regulatory framework to encourage SONI to provide good evidence and supporting analysis as part of their submissions, when seeking additional funding from consumers. The incentives for SONI to do so would be reduced if we meet SONI's funding requests despite the poor-quality submissions it has provided to us.

3.15 We do not see reliance on the conditional sharing approach as a substitute for SONI planning its initiatives effectively in the first place. We also do not view the safeguard as relevant to prevent the type of risks to consumers we are most concerned about relating to poor choices SONI may make to deliver whole system outcomes. In any case, as we also explained in the DD, the evaluative process of regulatory assessment of over and under-spend envisaged for the main body of costs subject to cost-sharing would not apply where we have set an ex-ante allowance at DD.

3.16 Stakeholders were concerned about allowances relating to control centre tools and system services (renewables strategy and control centre tools initiatives):

- As we made clear in the DD, we agree that there are significant new opportunities for SONI to innovate in these service areas, as is also reflected in our service priorities with input from stakeholders: see evaluative framework guidance. This is why we met SONI's opex allowance request to allow it to scope, research and implement its control centre tools and system services and a small amount of capex for a TSO to DSO interface. We also consider that this will support SONI in clarifying its responsibilities with the potential DSO.

- SONI, therefore, has a significant pot of new resource expenditure to plan its projects properly and develop ideas further in an appropriate way. This means that we expect SONI to be able to recruit and develop the skills to support energy transition, and undertake all-island procurement, if this is what is required.

- However, we remain concerned that the business case is significantly under-scoped. We also remain particularly concerned that the majority of the items under its Renewables Strategy relate to residential / small scale renewables at the residential level which is the role of the DSO. Stakeholders have also raised the question as to whether certain control centre tools could be undertaken by the market in the future. Overall, in relation to the two programmes of work (F1 renewables strategy and F2 control centre tools), SONI has not presented any scope or justification on what these tools are, how they will operate across the TSO / DSO boundary or who has jurisdiction on the control of distribution connected generation. It is not clear if these programmes of work are a duplication of tools already mentioned in Initiative F2 or if this work is already being carried out by the DSO.

- We, therefore, disagree that not providing an allowance for SONI to undertake the capex work would prevent it from appropriately supporting investment in renewable generation and supporting technologies. To the contrary, we consider that SONI's approach risks not optimally support all technologies and investment in renewable generation, in a way which is entirely within the consumer interest.

- This is also one of the reasons why we do not consider SONI has set out an appropriate whole system vision and accompanying pathways for change, contrary to its assertion that our DD proposals will not allow it to do so. This is despite clear guidance within our March 2018 SONI price control regulatory approach, under our Delivering Service and Outcomes test area, that specified that SONI would be assessed on whether it is undertaking the role of 3rd parties without undue consideration.

- Given these concerns we see no strong reason for providing further allowance than that proposed at the DD for these areas. We do, however, see a strong reason for SONI in developing a clear and comprehensive whole system strategy – see our deliverables - given the issues that we have found during this price control process and given the nature of the energy transition during 2020 to 2025 and beyond. We remain open to further allowances in these service areas as part of uncertainty mechanisms.

3.17 Several respondents noted that a co-ordinated approach to allowances in both jurisdictions is required in relation to the system service funding as well as incentives and regulation of the grid. We and CRU operate under two different jurisdictions, with two different legislative frameworks and two different price control approaches. So what is decided upon in one jurisdiction may not be appropriate for the other jurisdiction. That being said, we do accept that a degree of co-ordination is helpful, particularly where such aspects of SONI TSO activity are decided at SEMC level. The UR is working with CRU on a SEMC project to scope the development of a framework for the procurement of system services. We have ensured our UR Service Priorities under our evaluative performance framework are broadly aligned with this approach, as was the case at

DD. We expect this provides some comfort that we are coordinating appropriately as and where may be necessary, and provides a steer on the types of service activity that SONI should be considering as part of any future requests for allowance.

3.18 In terms of SONI concerns that our disallowance poses risks to grid security of the system:

- We recognise the materiality and importance of grid security for consumers and that these are delivered in a timely way. Since the DD, we have proactively instigated and undertaken site visits to review sensitive information relating to grid security initiatives which SONI did not share within its business plan.

- We now propose to approve a full allowance for enhanced cyber security based on review of sufficiently strong and clear evidence. We also propose to uplift SONI's baseline to allow it to scope out another one of its business cases relating to the build of a new Alternative Disaster Recovery Site aimed at improving grid security. The findings of the further review of this business case fell significantly short of meeting our DD actions, but we have uplifted SONI's FD ex-ante baseline allowance to support SONI in clearly scoping it given the complexity and additionality of this task. We have set out a clear deliverable to ensure SONI delivers this in a timely way and mitigate risks of poor planning to allow it to request further allowance once it has undertaken this work effectively. We also found material issues with its physical security business case upon review of evidence. We have not uplifted the baseline to develop this as the task does not require an allowance beyond its baseline as is a relatively simple task that we would expect SONI to undertake as part of its current baseline. However, again, we have set a clear deliverable/output and success measures with timelines so SONI is held to account in a timely fashion. SONI has had prior sight of these deliverables and opportunity for engagement on deliverable and also the uplift well in advance of the publication of this FD.

3.19 SONI, NIRIG and Business Alliance had concerns about the lack of allowance for stakeholder engagement:

- SONI proposed these initiatives largely to educate landowners, business and community, mostly to support network design and build proposals through to timely development (SONI business plan Appendix H initiatives). We disallowed SONI's proposed allowance at DD for stakeholder engagement. This is largely because SONI had not demonstrated they were additional and/or value adding. We had a related concern that SONI was over-focusing its engagement on service activity where it already has significant experience and maturity. We also took account of SECG concerns that SONIs approach was not sufficiently collaborative, too traditional and there was little demonstration of trying to understand a diverse selection of stakeholder needs, particularly newer stakeholder types who may positively influence strong energy transition outcomes.

- Since the DD, SONI has revised its business case (to remove some initiatives and create a new business case: Transform Engagement). The new business case asks for an allowance to understand stakeholder needs and a desktop study to identify which engagement opportunities are utilised by other comparators (e.g. NG ESO) and which will be most beneficial to Northern Ireland; expenditure for website improvements and an engagement portal for two way collaboration with stakeholders; and partnership and engagement activity for years 2 to 5.

- From review of the new business case we are pleased to see signs that SONI is taking on feedback from SECG and our concerns. We propose to meet SONI's request full allowance for stakeholder need assessment and Year 1 research of best practice, and the expenditure for website improvements and engagement portal.

- However, we remain concerned that SONI's approach does not overcome our DD concerns in all respects. While there are potentially aspects of the 'engagement and partnership' activities that may be value adding and in line with our expectations (brief reference to "e.g. innovation days"), there is insufficient specificity of what work SONI intend to undertake with reference to these (and also what aspects of the request relate to what activity). A key concern also remains that much of the allowance continues to be in areas, as highlighted in the DD, where SON already has significant experience and maturity and/or is currently funded for. We, therefore, have disallowed the engagement and partnerships element at this point. We do, however, recognise the work we are providing allowances for may support SONI in making a case for value adding opportunities which are genuinely new. We, therefore, remain very open to SONI requesting further allowance during the price control subject to clarity, justification and potential for value add.

3.20 At the DD we noted concerns about whether increases in staff opex represent base activity or not. As an action we requested that SONI sets out a resource plan as part of its response to the draft determination. Unfortunately SONI was not able to provide the requisite data, citing an ongoing re-organisation as the principle reason for non-compliance with the request. However we still feel that such information would be beneficial and provide welcome clarity. This is anticipated to form part of annual reporting and should include mapping of what existing staff are working on to service areas (including time spent and setting out their existing activities).

4. Salary cost allowance assessment

Change in position from DD to FD

4.1 The main changes from draft to final determination include the following:

- Uplift in staff numbers for I-SEM opex and strategic initiatives such as Transforming Engagement and Cyber Security.
- Re-instatement of the full overtime and standby allowances.
- Update to pension cost provision (though this is explained in a separate chapter).

Recap on DD position

4.2 The SONI business plan was less focused on justification of the rate of pay and more on explaining the rationale for increasing staff numbers. SONI did however conduct payroll benchmarking against ASHE data comparators.

4.3 Data was also provided from the Engineer Salary Survey[5], the Brightwater Survey and NERA's benchmarking of the National Air Traffic Services (NATS). Despite the benchmarking, the overall SONI conclusion was 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.*"

4.4 In the draft determination we adopted a £51k base salary provision. This was based on actual costs, benchmarking and relevant precedent from other comparators. This position has been retained but overall salary allowances have increased in the final determination.

Stakeholder views

4.5 Besides SONI, only CCNI and MEL raised material points in relation to salary provision. The CCNI's supporting consultant's report stated the following;

"We do not think that this is sufficient justification for allowing labour costs that are almost 30% (UK ASHE SOC 2 and SOC4) or almost 35% (UK ASHE SOC3) above the median comparator levels. We believe that it is in consumers interests that SONI salary costs are remunerated at a level that is at (or much closer to) the median levels for similar roles taking account of regional differences for Northern Ireland."[6]

4.6 SONI has raised a number of specific concerns with the allowances at draft determination. These are summarised in the table below.

Table 5: SONI points on salary allowance

Salary Benchmarking & Payroll	
	SONI Comment - Salaries

[5] Source: https://theengineer.markallengroup.com/production/content/uploads/2019/06/2019-Salary-Survey.pdf
[6] SLG Economics Ltd report for CCNI, p9, Section 8.

1	SONI has reclassified its payroll submission in order to ensure that an accurate Full Time Equivalent (FTE) average salary can be calculated. *[SONI Response, Para 5.17, Page 5-5]*
2	SONI considers that the ASHE data used for benchmarking in the Draft Determination contains a number of shortcomings when it comes to making comparisons to companies such as SONI because job categories will not fit skills and activities. The data do not explicitly control for experience or education, and the data do not control for the level of unionisation of the workforce or impact of shift patterns on pay. *[SONI Response, Para 5.18, Page 5-5]*
3	SONI notes that the UR has departed from its methodology in the 2015-20 Price Control period and adjusted to reflect for Northern Ireland labour costs. This is despite its previous acknowledgement that ASHE NI was not considered an adequate benchmark. SONI note that DfE has also reported that there is relatively low confidence in the ASHE NI data for more disaggregated job categorisations compared to the UK dataset. SONI considers that an adjustment for Northern Ireland salaries is not therefore justified. *[SONI Response, Para 5.21, Page 5-5]*
4	When looking at SONI request based on the reclassified payroll information, it can be seen that SONI's request of £80.8k per FTE is below what was allowed in the 2015-20 Price Control allowance. *[Annex D, Para D-39, Page D-10]*
5	SONI has also reviewed the available ASHE survey figures from 2015 to 2019 to ascertain the progression in average salaries. Each of the areas for average FTE basic salary increased by at least 8% over this four year period. The average increase across all of the figures for basic salary average FTE was 9.63%. The average increase across the 75th percentile areas was 10.06%. Over the same period SONI's average FTE cost relating to basic salary dropped by 3.42%. *[Annex D, Para D-45, Page D-11]*
6	SONI would emphasise the specialist nature of the roles fulfilled by employees in SONI, the scarcity in the market place for such resources and the critical service for which SONI is responsible. *[Annex D, Para D-51, Page D-12]*
7	The reclassification of payroll figures, reduction of SONI averages compared to increases in ASHE salaries, as well as progressions of previously awarded Price Control amounts all indicate that the requested salary costs are both efficient and reasonable. SONI requests that the UR provide for a Basic Salary FTE average of £54k. *[Annex D, Para D-53, Page D-13]*
	SONI Comment – Other Payroll Issues
8	SONI's Price Control submission included two lines related to overtime and standby allowances. The request for both of these areas was based on previous actuals and forecast estimates for the relevant staff that get paid in these areas. The requested amounts of £143k and £239k per annum were lower than the actual average costs of the current Price Control (£160k and £281k respectively). *[Annex D, Para D-64, Page D-15]* A significant proportion of SONI staff are on contracts that do not get paid overtime or standby allowances. These payroll areas relate mainly to staff that work in the Control Room or in the IT support areas relating to the Control Room. These costs are incurred to ensure that the Control Room is protected in the event of emergency events. *[Annex D, Para D-66, Page D-15]*

9	Similarly, SONI did not request an increase to indirect staff costs relative to an increase in their FTE request for the 2020-25 Price Control period. Apart from motor and travel expenses and staff related costs (see below), SONI requested costs for these areas generally in line with, or less than, the average for the current Price Control figures. SONI therefore also feel that the costs in its Price Control submission are reflective of likely incurred costs in the next Price Control. *[Annex D, Para D-68, Page D-15]*
10	Following receipt of the final version of SONI's Triennial Valuation of its Defined Benefit Pension Scheme to 31 March 2019, SONI has reduced its pension contributions in line with the required percentage to 52.0%. SONI has also reduced the administration costs of the scheme in line with the revised valuation from £159k to £100k per annum. *[Annex D, Para D-71, Page D-15]*

FD position

4.7 As in DD, as part of our approach in setting a payroll allowance, we combined an estimate of staff resource requirement with an efficient salary provision. Our 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[7], 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.

4.8 We also relied on evidence from actual staff costs, changing wages over time and closely related precedent, particularly from the Market Operator. Judgement was also used on the basis of material increases in staff numbers.

Staff Allowances

4.9 In their consultation response, SONI highlighted some mistakes and confusion surrounding the staff request in the original business plan. SONI's revised tables and the query log have helped provide the required clarity for forecast resource.

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

Table 6: SONI staff number request[8]

Staff Category	Number of FTEs	Funding Method
Internal FTEs	117.1	Price control allowance
Recharged FTEs	11.9	Price control allowance
Connection Staff	5.0	Connection fees
TNPP Staff	11.0	Project specific allowance
Totals	**145.0**	

[7] SOC = Standard Occupational Classification.
[8] Figures derived from revised data tables.

4.11 SONI's staff number request is based on existing internal FTEs of 95 plus a further 22 additions relating to the various business plan service initiatives that it proposes. Some increase in the cost of recharged staff is also proposed.

4.12 In terms of cost, SONI is proposing an increase in payroll from current price control spend of £44.3m to £53.4m in the 2020-25 period. This increase is mostly made up of additional staff. The cost request can be broken down as follows:

Table 7: SONI staff cost request

Cost Category	Payroll Cost	Explanation
Basic Pay	£31.2m	Basic salary and wages for internal FTEs
Other Pay	£4.0m	Overtime, standby & bonus for internal FTEs
Employer Cost	£9.9m	NIC & pension contributions for internal FTEs
Indirect Cost	£2.2m	Travel, training & sundry costs for internal FTEs
Recharges	£5.3m	Cost of external staff recharged to SONI
Agency Staff	£0.6m	Any agency staff costs
Totals	**£53.4m**	

4.13 Besides the internal staff, SONI has requested £1.1m per year on recharged staff and £125k per year on agency employees. This represents a step change from existing spend. As per the base cost section, we are not convinced that the rapid increase in external staff usage is fully justified.

4.14 The final determination therefore provides for recharged staff at the average of the last price control period plus 2.5 FTEs for the I-SEM opex uplift. This allowance equates to 9.3 FTEs remunerated at a cost of approximately £0.7m per year.

4.15 Given the strategic initiative staff allowances, the resource compliment provided for via this control is 116.2 FTEs. This includes a further 3 FTEs to account for the resource associated with new reporting and engagement obligations linked with the benefit framework. Assuming the full complement of connection and TNPP staff, our decisions would equate to 132.2 staff allocated to SONI TSO activities.

Table 8: UR staff number allowance

Staff Category	UR Allowance Number of FTEs
Internal FTEs	105.3
Recharged FTEs	9.3
Agency Staff	1.6
Price Control Total	**116.2**
Other Non-Price Control Staff	
Connection Staff	5.0

TNPP Staff	11.0
Overall TSO Total	**132.2**

Salary Allowances

4.16 Within the business plan, SONI has budgeted £80k for an extra staff member. Looking at the revised payroll on a cost per FTE basis for internal staff, this seems to align quite closely to the updated data table information.

Table 9: SONI average internal FTE unit costs for 2020-25

Cost Category	Cost per FTE
Basic Pay per FTE	£54.5k
Gross Pay per FTE (Basic plus other pay)	£60.8k
Direct Cost per FTE (Basic, other & employer cost)	£76.2k
Total Cost per FTE (Basic, other, employer & indirect)	**£79.7k**

4.17 These figures do however include TNPP staff who tend to be more expensive for various historical reasons. We consider that they should be excluded from the analysis to provide a better comparison, particularly as they are funded outside the price control.

4.18 Our salary benchmarking is mainly focused on the use of ASHE data. Whilst we acknowledge some benchmarking difficulties exist, it is our view that ASHE data can be considered a reasonable comparator to take account of. In relation to the specific points raised by SONI in its DD response, 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).
- It is not the case that there would be a systematic bias against SONI in any such comparisons.
- Education can be controlled for to some extent depending on the choice of SOC. Experience can also 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.

4.19 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 a key component of our analysis, though other comparators have been used including recent regulatory precedent for the market operator.

4.20 Results of our comparisons of SONI against ASHE and other benchmarks at the level of basic pay (excluding TNPP staff) are as follows:

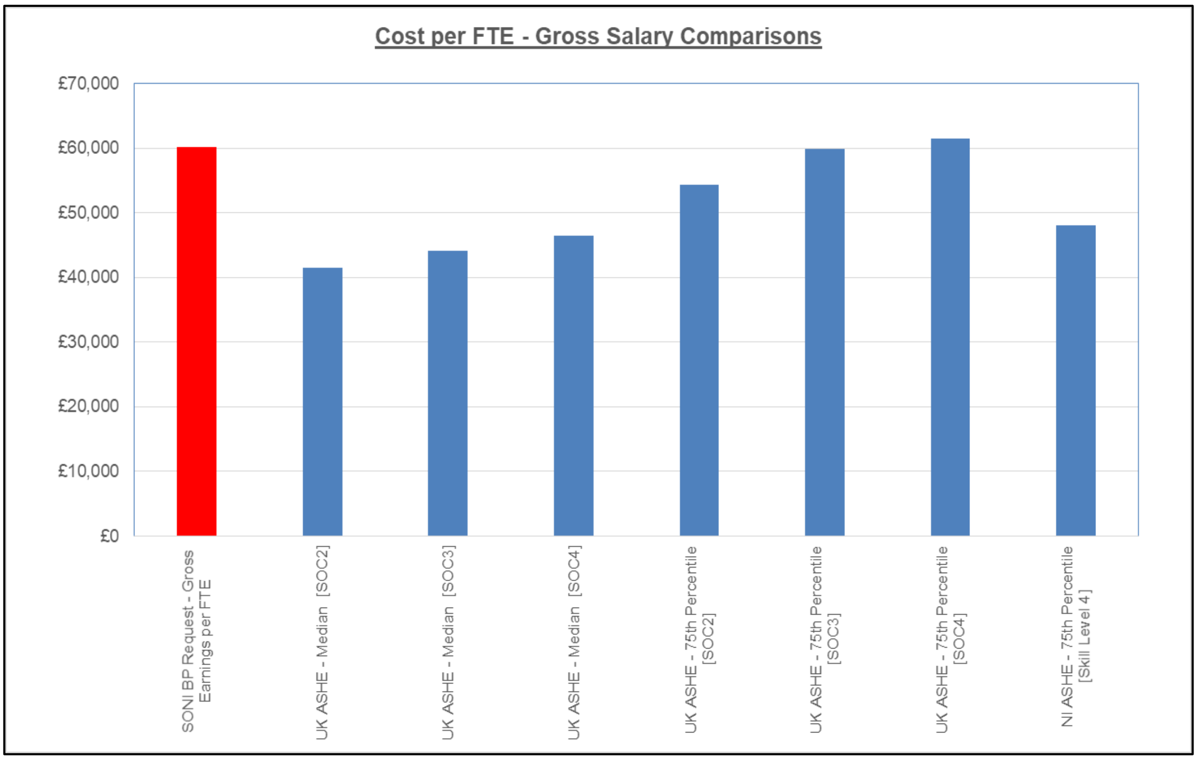
Table 10: Benchmarking results of basic pay analysis

Comparator	Cost per FTE	SONI % Differential
SONI Request - Basic Salary Cost per FTE	£53,258	0.0%
UK ASHE - Median [SOC2]	£40,781	30.6%
UK ASHE - Median [SOC3]	£42,875	24.2%
UK ASHE - Median [SOC4]	£45,712	16.5%
UK ASHE - 75th Percentile [SOC2]	£52,707	1.0%
UK ASHE - 75th Percentile [SOC3]	£57,464	-7.3%
UK ASHE - 75th Percentile [SOC4]	£58,835	-9.5%
NI ASHE - 75th Percentile [SOC2]	£45,885	16.1%
Engineer Salary Survey [NI Region]	£44,941	18.5%
Brightwater Survey – Electrical Engineer [NI]	£45,000	18.4%

4.21 As the table shows, SONI proposals are materially in excess of UK median comparators. There is also a significant gap (c. 16% - 18%) between SONI and any of the NI comparators or survey information. Proposed spend is however reasonably aligned with UK 75th percentile comparisons depending on the SOC used.

4.22 For gross pay (basic plus other pay), the following detail can be observed.

Figure 3: Benchmarking results of gross pay analysis



4.23 When accounting for the additional costs of overtime, standby and bonuses, SONI proposals are generally 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, albeit that the gap is not as great as was thought at the draft determination stage.

4.24 In terms of regulatory precedent some obvious comparators exist. These include previous SONI allowances, SEMO[9], 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:

Table 11: Regulatory precedent comparisons for direct costs

Comparator	Cost per FTE	SONI % Differential
SONI BP Request - Direct Cost per FTE	£77,090	0.0%
SONI 2015-20 Allowance	£78,150	-1.4%
SEMO Allowance	£74,697	3.2%
SEMOpx Allowance[10]	£73,808	4.4%
GMO NI[11] Allowance	£66,227	16.4%

4.25 Typically speaking, regulated monopoly allowances would often be based on salaries at the median level. Indeed CCNI raised this very point. The yardstick benchmarking would therefore suggest that allowances should be reduced, particularly in comparison to regional rates of pay.

4.26 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.

4.27 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 maintain the draft determination position and provide a staff allowance in line with the 75th percentile benchmark. This should provide SONI the resource to deliver frontier service level performance.

4.28 However, it is unclear to us why an adjustment should not be made to reflect the labour cost in Northern Ireland. SONI highlighted that this was not done in the previous price control, however regional cost and price adjustments are common place and seem equally relevant to SONI.

4.29 SONI did provide feedback citing concerns about use of disaggregated NI ASHE data to make such a change. However, when making a regional price adjustment, we have used aggregate figures across all industries. As such, any TSO concerns about low confidence data is not relevant as it was not relied upon.

4.30 SONI also made the following representations regarding salaries:

- When looking at reclassified payroll information, it can be seen that SONI's request is below what was allowed in the 2015-20 price control.
- From 2015 to 2019 ASHE comparators average FTE basic salary increased by at least

[9] Single Electricity Market Operator.
[10] SEMO and SEMOpx figures are calculated using RPI figures and an exchange rate of £1: €1.15 as of the 05/03/20.
[11] Gas Market Operator for Northern Ireland.

8% over this four year period whilst SONI's average FTE cost relating to basic salary dropped by 3.42%.

- The reclassified payroll figure of £54k indicates that the requested salary costs are both efficient and reasonable.

4.31 Whilst it is correct that the direct cost per FTE request is slightly lower in real terms (-1.4%) than the previous price control allowance, this would be expected to some extent. Such decreases would normally be the case with addition of extra staff. As SONI has requested a material increase (c.23% of internal TSO staff) in excess of 22 FTEs, it might be expected that the reduction would be even larger in this instance.

4.32 We also reviewed the time series ASHE data for the chosen UK benchmarks. Whilst it is the case that the basic median salaries increased by over 8%, this is in nominal terms. After accounting for RPI inflation over the same period, it can be seen that the chosen benchmarks have a real wage change of c.-4%. Given this information it might be expected that SONI's costs would also have fallen and the request should be lower than the previous price control.

4.33 It should also be noted that when TNPP staff are removed, SONI's salary forecast is £53.3k which is not that different from the UR position. Consequently, we have adjusted benchmarked UK 75th percentile basic pay of £58.8k by -12.5% to reflect the overall difference established by ASHE regional variance for full-time staff. The result is an allowance of £51k for basic pay as at draft determination. This further represents the most generous allowance available for all the ASHE comparators.

4.34 With the exception of pensions which are considered separately, indirect staff costs are provided for at the same percentage rate as the SONI request. We reject SONI's argument that these indirect costs should be fully supported.

4.35 Whilst it is true that the request is not a hugely material increase, it would seem hard to argue that such indirect costs (e.g. motor expenses, training, hotels, meals, phones etc.) are not influenced by the number of staff employed. Overall allowances for these line items will be lower given the difference in staff numbers and rates of pay.

4.36 We have, however, re-instated the full overtime and standby allowances as per the SONI request. We accept SONI's argument that the costs are in line with or less than existing expenditure. Given that SONI have also confirmed that the costs relate to existing control room or IT staff, we agree that it would be improper to reduce allowances based on differences between UR staff number allowance and the SONI staff request.

4.37 The result of our decisions provide allowances for internal FTEs as follows:

Table 12: 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)	£58.1k
Direct Cost per FTE (Basic, other & employer cost)	£75.0k
Total Cost per FTE (Basic, other, employer & indirect)	**£78.9k**

4.38 The table above indicates direct cost allowance of £75k per FTE which is 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.

4.39 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.

4.40 On the basis of the decisions outlined above, our payroll allowance is as follows:

Table 13: 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	10,650	10,668	10,735	10,665	10,631	**53,350**
UR Payroll Allowance	9,183	9,153	9,198	9,074	9,033	**45,641**
Proportional Allowance (%)	**86.2%**	**85.8%**	**85.7%**	**85.1%**	**85.0%**	**85.6%**

4.41 We would further encourage submission by SONI of detail on staff roles by service area as part of ongoing reporting. This will help improve the quality of payroll benchmarking going forward.

5. RPEs and productivity assessment

Change in position from DD to FD

5.1 The basic positions and approach of the draft determination have been retained. We have however undertaken additional analysis to support the decisions concerning non-labour costs and productivity. Findings of this analysis are in general support of the draft determination position.

Recap on DD position

5.2 The overall findings of the SONI business plan analysis can be summarised as follows:

Table 14: SONI assessment of RPEs and productivity

SONI Forecasts – RPEs and Productivity			
Real Price Effects			
	Range		
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			
CPIH	***1.82%***	***2.17%***	***2.00%***
Productivity			
Independent Forecasts	0.30%	0.60%	0.45%
EU KLEMS[12] - 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%**

5.3 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.

5.4 Alongside the RPEs, SONI has applied an efficiency challenge of 0.3% per annum. SONI has given more weight to TFP results for recent time periods. It has also placed emphasis 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.

[12] EU KLEMS stands for EU level analysis of capital (K), labour (L), energy (E), materials (M) and service (S) inputs.

5.5 When applied to relevant costs, the total cost trend of 0.6% above inflation results in additional revenue of £2.1m for SONI over the price control period.

5.6 In the draft determination there were a couple of areas where we were in disagreement. These included the following:

- Views on non-labour cost RPEs.
- Proposals on capital substitution and relative efficiency.

5.7 In the draft determination we largely adopted the well establish methodology undertaken by SONI. We made no provision for non-labour RPEs and had a higher productivity forecast of 0.6% per annum. This largely counter-balanced the RPE such that the cost trend was +0.08% per annum overall. These positions have been retained for the final determination.

Stakeholder views

5.8 Aside from SONI, CCNI raised some concerns about the labour RPE. Its consultant's report stated the following;

"The SONI forecasts assume that unit labour costs will increase by 1% pa above CPIH inflation, UR do not comment about this increase and allow it in their DD. We question whether real unit wage costs need to rise by this amount over the next 5 years and would suggest that that UR undertake analysis of Northern Ireland labour cost forecasts to see whether these forecasts are realistic."[13]

5.9 SONI has also raised a number of very specific points in relation to the RPE and productivity decisions. These issues are listed in the table below.

Table 15: UR response to SONI points on salary allowance

RPEs and Productivity	
	SONI Comment - RPEs
1	UR has based its assessment of non-labour RPEs on the Services Producer Price Index (SPPI) only. *[Annex E, Page 12]*
2	SPPI indexation is subjective and insufficiently accounts for RPEs of SONI's non-labour costs. *[Annex E, Page 12]*
3	Theoretically, there is no index which will provide a completely accurate picture of the movement in SONI's costs. However, matching indices with SONI's input costs on a granular level provides a possibility to reflect as closely as possible price movements of SONI's costs. *[Annex E, Page 14]*
4	SPPI is not closer in composition to SONI's cost categories and does not reflect SONI's non labour costs better than CPIH-Services. As such, SPPI is not a better proxy for SONI's non-labour costs. *[Annex E, Page 14]*
5	SPPI is an index of limited coverage, available only for selected services industries, which does not reflect SONI's non-labour cost categories better than CPIH Services. SPPI is a partial estimate of the overall inflation to UK business in the service sector, estimated to represent 59% of the total services sector at industry level. *[Annex E, Page 15]*

[13] SLG Economics Ltd report for CCNI, p9, Section 8.

6	Moreover, CPIH Services is a stable index in terms of the methodology. SPPI is a partially experimental index which undergoes significant refinement over time. *[Annex E, Page 15]*
7	UR's assessment lacks clarity in its approach. UR's proposed indexation does not explain which SPPI index is used, aggregate or industry-level, net or gross. *[Annex E, Page 15]*
8	UR does not explain how it has derived point estimates in its calculations and what time period(s) were used to calculate the overall range for non-labour RPEs. *[Annex E, Page 15]*
9	As there is an additional year of data it is possible to update the calculations. The range would now be 0.36% to 0.7%. This is not a material change to the previous range and consequently the 0.6% proposed value is still the relevant value to use. *[Annex E, Page 16]*
10	Under these circumstances the most appropriate way to incorporate RPEs and decrease risks for both consumers and SONI is to use an ex ante/ex post approach. This allows a true-up mechanism on forecast RPE values. *[Annex E, Page 17]*
11	UR's proposed approach in DD recognises RPEs with respect to labour costs, but ignores all other cost pressures on the sector, despite the evidence of service sector inflation being higher than CPIH. *[Annex E, Page 17]*
12	UR ignores the fact that the underlying inflation faced by SONI will not be the same as CPIH. By leaving the risks of input price changes with SONI, UR has also transferred the risk to consumers as it will affect the way SONI operates. *[Annex E, Page 17]*
	SONI Comment - Productivity
13	Labour productivity will be influenced by capital substitution and other factors and so raw evidence is not applicable to SONI. A high labour productivity figure is likely to be reflective of capital substitution and so over-state what efficiency savings SONI can make. *[Annex E, Page 5]*
14	After the global financial crisis economic activity shrunk. Comparing productivity improvements from that period to current trends is irrelevant and distorts the estimates. Analysis based on recent (short time) data provides closer estimates to reality. *[Annex E, Page 19]*
15	Wholesale replacement of labour in an asset light business is not possible, especially when capital investments have to be agreed at the price determination. Other regulators have also considered this question. For example, the Commission for Regulated Utilities (CRU) is currently considering the question of capital substitution and the impact it has on ongoing productivity targets for EirGrid, the Irish TSO. In its July 2020 draft determination the CRU applied a 0.6% capital substitution reduction to the ongoing productivity challenge for the asset owner to determine a value appropriate for the system operator. *[Annex E, Page 19]*
16	SONI has not experienced rapid increases in capital in previous years and does not plan to replace significant labour with capital for the future price control period. Moreover, those costs which are categorised by UR as a capital substitution are small compared to the increase in UR's proposed productivity challenge. *[Annex E, Page 19]*
17	UR's proposed productivity challenge of 0.6% is not consistent with regulatory precedents. In regulatory practice, a distinction between asset light and capital-intensive companies while estimating the productivity challenge is important. *[Annex E, Page 19]*
18	As can be seen, UR's 0 to 1% estimate is based on all precedent while SONI has focused on asset light comparisons. *[Annex E, Page 20]*
19	The UK economy entered recession on August 12th 2020 and it is unclear how quickly the economy will recover. This economic uncertainty is at a time when SONI is expected to achieve an even greater productivity challenge. *[Annex E, Page 20]*

20	The nature and scale of the efficiency challenge applied by UR disincentivises the company to put capital at risk and invest in projects at a time when this is critical to deliver the service required. *[Annex E, Page 22]*
21	All other things being equal, SONI will not earn its allowed rate of return if cost allowances are set too low owing to one or both of too low an RPE allowance and/or too high an ongoing productivity assumption. This will breach the “fair bet” regulatory principle. *[Annex E, Page 22]*
22	If the too low non-labour RPE and too high ongoing productivity challenge are combined this equates to approximately £1.8m or over 25% of the allowed return. Given that debt has to be paid, all this will fall on equity – almost 40% of the return to shareholders has been removed through these decisions. *[Annex E, Page 23]*

FD position

5.10 SONI 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. Our approach closely follows SONI's as it is a well-established methodology.

5.11 For the purposes of clarity, areas where we have diverged from SONI include the following:

- We have incorporated the Services Producer Price Index (SPPI) and various component parts into the assessment of non-labour RPEs.
- Used the latest version of the EU KLEMS dataset.[14]
- 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 respect to gas TSOs.
- Taken economy wide estimates of TFP and labour productivity into account.
- Made no adjustments for relative efficiency or capital substitution.

Real Price Effects

5.12 In terms of labour costs we have retained the 1% above CPIH forecast. This is based on OBR projections and is in alignment with SONI. Whilst we did update the data for the November 2020 OBR outlook, the net impact remained the same. Although inflation forecasts fell, so too did labour projections such that the RPE could be slightly reduced. We have however retained the DD position. CCNI queried whether real unit wage costs need to rise by this amount over the next 5 years and suggested that that UR undertake analysis of Northern Ireland labour cost forecasts to see whether these forecasts are realistic.

5.13 We agree, in principle, with the CCNI statement but are unaware of any publically available labour cost forecasts specific to the NI region. This is why there has tended to be a reliance on OBR forecasts for general UK labour costs.

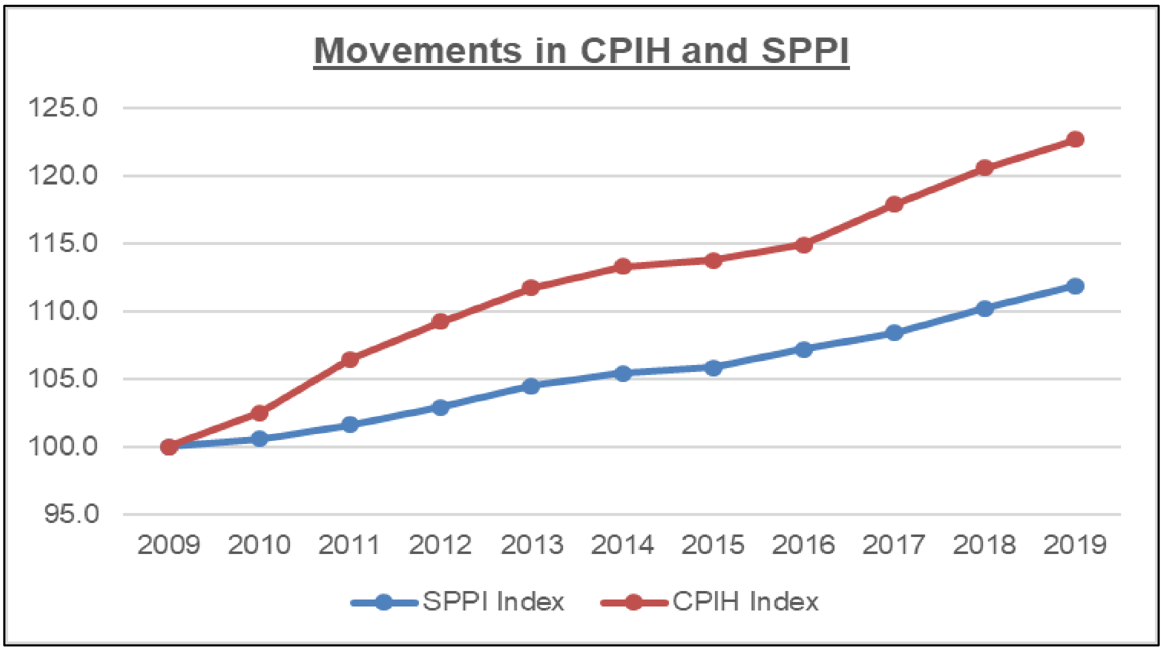
5.14 For non-labour costs, SONI has made the assumption that there is an RPE of 0.6% based on the ‘wedge’ between inflation and the services element of CPIH. We have not been able to replicate SONI figures and estimate the wedge to be c. 0.4% or lower depending on the comparison time period. This suggests that the SONI real price effect is over-estimated before even considering

[14] See the Vienna Institute for International Economic Studies (https://euklems.eu/).

any other relevant indices.

5.15 More importantly, other 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. Looking at the services index against inflation, the following can be observed.

Figure 4: Movements in CPIH and SPPI indices since 2009



5.16 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.

5.17 SONI raised significant concerns with the draft determination approach to non-labour costs. Amongst others, key criticisms included the following:

- UR has based its assessment of non-labour RPEs on SPPI only.
- Using the SPPI index is arbitrary and not appropriate.
- The index is an imperfect estimation of SONI's non-labour costs and not robust.
- UR's proposed indexation does not explain which SPPI index is used, whether aggregate or industry-level, net or gross.
- UR has also failed to explain how point estimates have been decided.

5.18 Whilst specific points are addressed below, we would make the following general observations.

- SPPI was not the chosen index as SONI claim, but rather one of two in order to establish the range. Had SPPI been solely chosen, it would have meant a negative RPE for non-labour costs.
- Criticisms of the SPPI seem either overstated or equally applicable to the CPIH (Services) index. SONI has failed to establish that CPIH (Services) is materially any better at representing their non-labour costs than SPPI.
- The SPPI index used is the All Services Gross Sector index. Links and references were

provided to SONI at draft determination via a calculation spreadsheet and will be provided again at final determination.

- In terms of the point estimate, the draft determination explained that no adjustment is required if the input price is not materially different from CPIH. Given that the non-labour cost estimates went from -0.85% to 0.41%, we concluded that the RPE is not materially different from CPIH. If anything, such a position seems conservative.

5.19 For non-labour costs, the SONI response highlighted its cost make-up against SPPI and CPIH (Services). As can be seen from the table, neither index is particularly comparable with current TSO expenditure.

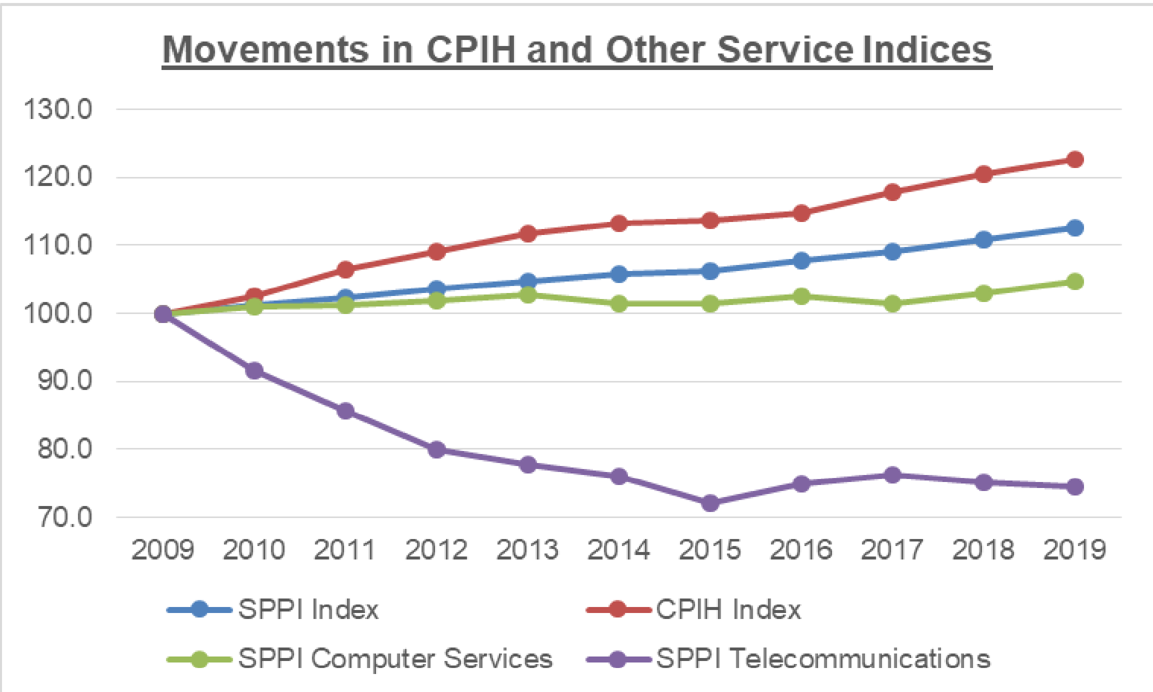
Figure 5: Composition of Indices

Components of Soni Non-labour Opex	Weight	SPPI	CPIH Services
Telecoms and IT	59%	6%	10%
Professional Fees	9%	43%	39%
Facilities	13%	37%	38%
Other Opex	15%	14%	13%
Pension Deficit	4%	0%	0%

Source: KPMG analysis

5.20 What the table does reveal is that the principal component of non-labour cost is telecoms and IT. We therefore investigated the computer services and telecommunications components of the SPPI index and compared these with CPIH inflation.

Figure 6: Movements in CPIH and relevant SPPI indices since 2009



5.21 The graphical analysis of key non-labour costs provides more evidence in support of a negative RPE. Whilst we have maintained the draft determination position of no non-labour RPE, this increasingly appears to be a conservative target.

5.22 SONI further claimed that we have ignored the fact that the underlying inflation faced by SONI will not be the same as CPIH and as such, have transferred the risk to consumers. We have not ignored the inflationary risk but have adhered to the principles of a 'fair bet' in terms of the regulatory framework. The criticism also seems unfounded given our consideration of the costs impacting on SONI and the various indices reviewed.

5.23 Finally, SONI has argued for a true-up mechanism on forecast RPE values. Whilst recognising the existing uncertainty with COVID and Brexit, we disagree with this proposal on the basis that it would both be burdensome and imperfect. In fact, such an approach could potentially add risk to the TSO if there is a price shock/crash to the chosen index which does not impact on SONI (given that they may not be that closely aligned).

Productivity

5.24 In terms of the efficiency challenge, SONI raised significant concerns with the draft determination approach. Key criticisms included the following:

- The draft determination focus on long-term productivity trends is incorrect as use of more recent data provides better forecasts of what is realistically achievable.
- UR has not set a productivity challenge relevant for SONI as an asset-light company and is not supported by regulatory precedent.
- Wholesale replacement of labour in an asset light business is not possible, especially when capital investments have to be agreed at the price determination.
- The nature and scale of the efficiency challenge applied by UR disincentivises the company to put capital at risk and invest in projects at a time when this is critical to deliver the service required.

5.25 Whilst specific points are addressed below, we would make the following general observations.

- We have undertaken analysis of shorter time trends and are content that the productivity challenge is still robust.
- Use of EU KLEMS data is intended to reflect a proxy industry and should therefore be relevant as an asset light comparator. The overall challenge also seems conservative in comparison to the CRU approach at draft determination stage for EirGrid.
- We are not arguing that wholesale replacement of labour is possible for SONI, but there should be recognition that there is some scope for 'capital deepening'.
- Our position is a best estimate given productivity forecasts and historical trends. Within their RIIO-2 draft determination Ofgem consultants state that, *"The OBR assume that hourly productivity growth will rise gradually over the forecast period, reaching 1.2% in 2024 and steadily rising towards 1.5% over the long term."*[15] This suggests that our challenge is reasonable.

5.26 In response to SONI critique, we investigated improvements over the shorter term post the 2008 financial crisis. Whilst recognising that trends are lower, using these figures for EU KLEMS and labour productivity still results in a range of 0.3% to 0.7% per annum. However, we have concern with using these figures exclusively given post-recession data will naturally be starting

[15] See CEPA Frontier Shift Methodology Report, p16

from a low base. Longer term trends will help avoid this business cycle bias.

5.27 SONI have also argued for focus on asset light precedent as they have limited scope for benefiting from capital substitution. In terms of regulatory precedent the UR productivity challenge at 0.6% is tougher than CRU's 0.4% challenge for EirGrid. However, it should be noted that CRU's productivity decision is in the context of applying no RPEs. Therefore in terms of overall cost trend, our position is more generous than CRU.

5.28 The 0.6% productivity target set for SONI can also be compared with the most recent regulatory precedent of 1% per annum set by the CMA for Ofwat companies.[16] Whilst we have taken the SONI specific circumstances into account in terms of its asset light nature, and we recognise the CMA determinations are provisional at this point, the scale of the CMA productivity challenge in the context of also applying catch-up efficiency targets illustrates the reasonableness of our final determination position.

5.29 We have further placed reliance on labour productivity performance which may be more applicable to an asset light entity. SONI argue that labour productivity will be influenced by capital substitution and other factors and so raw evidence is not applicable.

5.30 Whilst productivity will be dependent on capital substitution, in our view SONI can also benefit from such an effect. Productivity is also seen in the services sector of the economy, which may be more comparable to SONI than production or manufacturing where capital substitution might have a greater impact.

5.31 Furthermore, SONI has argued that there is no need for a capital substitution adjustment as there is little scope to replace labour with capital. SONI has also adjusted EU KLEMS findings by -25% to reflect changes resulting from relative efficiency improvements as opposed to frontier shift.

5.32 From our perspective we understand the arguments raised. A reduction to productivity forecasts would be appropriate if SONI were able to evidence that they are a frontier performer. However, 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.

5.33 It is also important to understand that 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.). SONI has claimed that those costs categorised by UR as a capital substitution are small compared to the increase in UR's proposed productivity challenge. However, this position does not seem reasonable.

5.34 Within its business plan, SONI identify savings in the region of £15m for one capital project (Transition to Cloud) alone. It is not clear if the savings quoted refers to SONI and EirGrid combined. Assuming only 25% of the savings are applicable to SONI, if realised, such efficiency from this one project would outperform the entire productivity challenge we have set the TSO. This indicates the reasonableness of the challenge imposed.

Final Decision findings for RPEs and Productivity

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

[16] See CMA Provisional Determination, p184, para 4.377.

Table 16: UR assessment of RPEs and productivity

UR Forecasts – RPEs and Productivity			
Real Price Effects			
	Range		
Category	**Low**	**High**	**Point Estimate**
Labour	0.45%	1.14%	1.00%
Non-Labour	-0.85%	0.41%	0.00%
Overall RPE	***0.04%***	***0.91%***	***0.68%***
Inflation			
CPIH	***1.68%***	***2.00%***	***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)	0.45%	1.02%	0.74%
ONS Labour Productivity	0.48%	1.16%	0.82%
Regulatory Precedent	0.00%	1.00%	0.62%
Overall Productivity	***0.00%***	***1.16%***	***0.60%***
Cost Trend			
Total Cost Trend	***-0.56%***	***0.31%***	***0.08%***

5.36 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.

5.37 For productivity we have retained 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.

5.38 In overall terms the real price effect is largely cancelled out by expected efficiency. The final determination has allowed an overall cost trend of **+0.08% per annum**. When applied to relevant opex items, this provides SONI with c. £222k additional revenue over the price control period. This compares to the SONI request of £2.1m in their revised business plan.

Table 17: RPE and Productivity Combined Cost Trend

	2020-21 %	2021-22 %	2022-23 £000s	2023-24 £000s	2024-25 £000s
Annual Cost Trend (%)	0.08%	0.08%	0.08%	0.08%	0.08%
Cumulative Cost Trend (%)	**0.15%**	**0.23%**	**0.30%**	**0.38%**	**0.46%**

5.39 SONI has argued that if incorrect targets are set this equates to approximately £1.8m which will all fall on equity. Even assuming the targets are set incorrectly and SONI calculations are correct, the impact on SONI shareholders would be much less than the TSO claims. SONI figures fail to account for the revised cost sharing framework where customers would bear 75% of any overspend.

6. Pension cost allowance assessment

Change in position from DD to FD

6.1 Since the draft determination we have only made two changes to the pension allowance. The DB contribution rate has been uplifted to 52% as per the SONI request. The 10 year deficit recovery period has been retained but re-profiled in line with the SONI request until the next actuarial report is complete. Otherwise the DC contribution rate and the administration expenses remain the same as at draft determination.

Recap on DD position

6.2 SONI's business plan submission was based on an interim actuarial report. The revised submission post draft determination included a final actuarial report and the subsequent agreements between SONI and the pension trustees.

6.3 The key elements of the revised submission included the following:

- Employer contribution rate of 52% for the DB staff.
- Deficit repair payments of £861k per annum based on a deficit of £4.4m.
- DB administration costs of £100k per annum.
- DC contribution rates of 7%.
- DC administration costs of £144k per annum.

6.4 The approach at draft stage was one of a holding position until the actuarial report was received. We have subsequently updated our views based on the revised report and GAD review.

Stakeholder views

6.5 In terms of pensions the main responses focused on the issue of the deficit recovery period. SONI made the following comments:

- If the UR's decision means that SONI cannot afford anything shorter than a ten year recovery plan, then the trustees may have to reconsider their employer covenant assessment.
- It would be highly likely that The Pensions Regulator (TPR) would be concerned by a ten year recovery plan. TPR's data shows that only around 20% of schemes have a recovery plan length of ten years or longer and that these are mostly from covenants described as "weak".
- The risk of a "stranded surplus" noted by UR is very low in the opinion of SONI's pension advisors. If a Scheme's funding position improved significantly the deficit recovery plan would be renegotiated.

6.6 NIE Networks also queried the 10 year recovery period. NIE Networks stated that;

"this proposal by the Utility Regulator is against a backdrop of recent Pension Regulator guidance that schemes with strong employer covenants should generally have recovery plan lengths which are significantly shorter than the median recovery plan which is 7 years.

Although we are currently unaware of the strength of SONI's employer covenant, the Utility

Regulator does not explicitly appear to have taken the Pension Regulator's recent guidance into consideration. NIE Networks considers therefore that the Utility Regulator should clarify its position in this regard."

6.7 CCNI further opined on the issue noting that the 10 year recovery period was more appropriate.

FD position

6.8 At the draft determination SONI's pension submission for the defined benefit (DB) scheme was not based on a formal valuation but an initial high-level estimate of the funding levels. For this reason, we could not assess appropriate allowances for the defined benefit scheme.

6.9 For the final determination we have engaged GAD[17] to review the assumptions of the actuarial report. A separate annex of their findings is provided as part of the final determination.

Deficit repair allowance

6.10 SONI's business plan proposes a 7 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, at draft determination we considered an appropriate approach to be recovery over a 10 year period.

6.11 We considered that this is a more proportionate burden on consumers. It also 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.

6.12 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.[18]

6.13 SONI has argued against the 10 year recovery period, making the following points:

- SONI believes that the seven year recovery period agreed as part of the valuation is a sensible plan for the Scheme given its circumstances.
- It would be highly likely that The Pensions Regulator (TPR) would be concerned by a ten year recovery plan.
- If the UR's decision means that SONI cannot afford anything shorter than a ten year recovery plan, then the trustees may have to reconsider their employer covenant assessment.

6.14 We have decided to retain the 10 year recovery period. However we have profiled allowances for the first three years in order that they align to SONI's agreement with trustees. This will ensure the employer covenant but encourage robust negotiations at the next actuarial valuation.

6.15 Whilst GAD provide further detail, we would make the following general points in relation to SONI's concerns:

[17] Government Actuary Department.
[18] All other things being equal.

- TPR are concerned about ability to pay reducing over time. This doesn't apply to SONI as a regulated utility.
- Ofgem have adopted 10 year recovery plans for comparable schemes.
- Pension Regulator allows for scheme flexibility based on specific circumstances.

6.16 We are inclined to agree with both CCNI and GAD advice on this issue. We note that a shorter recovery period is not essential when there is no reduction in ability to pay over time. We also recognise that Ofgem have adopted 10 year recovery periods for similar schemes. Furthermore, a 10 year recovery period was adopted previously by UR when we stated, *"The UR's final conclusions are that the pension deficit allowance should be £706k recoverable over a period of 10 years starting from the valuation year of 2016/17 as set out in in the Draft Decision."*[19] This position was accepted by the CMA in their final determinations.[20] Such precedent therefore seems appropriate to apply to SONI again.

Incremental Deficit

6.17 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 for post the cut-off date.[21] It is not currently a material figure but a greater deficit will emerge as liabilities are accrued post the pension deficit cut-off date.

6.18 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. Going forward, SONI will need to monitor the funds for both the 'established' and 'incremental' deficits.

6.19 No allowance is however provided for incremental deficit as it is not a recoverable figure. This position is retained in the final determination

Ongoing contributions

6.20 Upon receipt of the updated valuation and GAD review, we are content to provide the requested DB contribution rate of 52%. This is in spite of the fact that we have some concerns about the assumption used in the valuation.

Administration costs

6.21 SONI has reduced the defined benefit administration expenses to £100k per annum as per the actuarial valuation and the draft determination. We have accepted this position in the final determination.

Defined contribution scheme

6.22 The approach to the contribution allowance for the defined benefit scheme in our draft determination is to estimate the salary roll for the defined contribution members and application of the contribution rate (7%) to this. This position has been maintained in the final determination. Expenses are as requested by SONI in the business plan tables submitted.

[19] See UR decision paper on SONI pensions, p3.
[20] See CMA Final Determination, Table 10.2, p236.
[21] The date after which consumers are no longer liable for the Defined Benefit scheme deficit is March 2019.

Summary of FD findings

6.23 We have provided full allowance for the defined benefit contributions and the scheme administration costs. We have also included the SONI contribution rate of 7% for the DC scheme though allowances are less than requested. This is due to lower staff levels and salary costs.

6.24 We have retained the 10 year deficit recovery period but re-profiled allowances in line with the SONI request until the next actuarial report is complete. The combined impact is a pension allowance of £7.8m against a request of £9.1m in total.

6.25 The revised request and the updated allowances are provided in the table below:

Table 18: SONI pension request and UR allowance

	2020-21 £000s	2021-22 £000s	2022-23 £000s	2023-24 £000s	2024-25 £000s	Totals £000s
Deficit Repair Request	861	861	861	861	861	**4,305**
Defined Benefit Request	483	453	466	337	296	**2,035**
Defined Contribution Request	529	550	553	580	577	**2,789**
SONI Pensions Request	**1,873**	**1,864**	**1,880**	**1,778**	**1,734**	**9,129**
Deficit Repair Allowance	861	861	861	258	258	**3,100**
Defined Benefit Allowance	483	453	466	337	296	**2,035**
Defined Contribution	520	524	524	541	547	**2,656**
UR Pensions Allowance	**1,864**	**1,838**	**1,851**	**1,136**	**1,101**	**7,791**

6.26 The pension allowances represent 85% of the amounts requested.

7. Overall summary of UR proposed allowance

Business plan cost request

7.1 The request (excluding margin, asymmetric risk and PCG) submitted by SONI is £93m opex and £25.4m capex split by year as follows.

Table 19: 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	17,567	18,041	18,643	19,444	19,156	**92,852**
Total Capex	8,949	5,714	4,078	3,554	3,146	**25,442**

Allowance final determinations

7.2 We have sought to build up allowances via initiative decisions, salary benchmarking, pension assessments, productivity challenge and real price effect forecasts.

7.3 Besides this, we have made three other minor adjustments to our allowances. This includes:

- We have provided an allowance of £1.25m (including contingency) within opex allowances for network planning feasibility studies. This is split by £1m for consultancy spend and £250k for contingency.
- Certain stable and predictable costs such as licence fees, ENTSO-E[22] and CORESO[23] 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 3 additional FTEs to cover the resource required to enable SONI to undertake the relevant proposals, monitoring, analysis and reporting associated with the new regulatory framework.

7.4 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. SONI made no explicit rejection of these changes. The result of our deliberations are as follows:

Table 20: 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	15,931	15,826	16,034	15,860	14,346	**77,998**
Total Capex	2,640	2,278	1,753	1,563	1,490	**9,725**

[22] ENTSO-E = European Network of Transmission System Operators for Electricity.
[23] CORESO = Co-Ordination of Electricity System Operators.

7.5 We have provided 84% of SONI's opex request but only 38% 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 21: Cost request and allowance context

	UR Allowance[24] 2015-20 £000s	SONI Spend[25] 2015-20 £000s	BP Request 2020-25 £000s	FD Allowance 2020-25 £000s	FD % Increase from PC15
Opex	62,591	68,776	92,852	77,998	**+25%**
Capex	7,703	5,896	25,442	9,725	**+26%**

[24] Allowances reflect those following CMA referral and decisions.
[25] It should be noted that this refers to projected spend as the period has not yet finished.

8. Appendix: FD position on individual service initiatives and our view of SONI response to DD actions

8.1 The draft determination sets out all the UR views on the initiatives need, options, costs and benefits. It also discusses the distinction between base and enhancement costs, query responses and findings of the deep-dive audit. We have not re-stated this information in this appendix but readers should refer back to the draft determination for this detail.

8.2 The draft decision did however set out actions for the TSO to address where full funding was not provided. The focus of this section is to recap on these actions, set out the SONI evidence submitted and our view of whether the actions have been met. A final summary view on each initiative is also provided. Any projects where full funding has been provided is excluded from the analysis. An empty box indicates that no actions related to this area.

Table 1: Initiative D.1: Assets Reaching End of Life

Strategic Initiative - D.1: Assets Reaching End of Life			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	We are willing to re-assess the disallowances if SONI can provide: • SONI's IT strategy demonstrating a breakdown of server replacement cycles. • How these servers will be affected by the transition to cloud. • Why the server and storage expansions are required in light of cloud transitions.	• SONI are not challenging the disallowance of contingency costs highlighted in our draft determination, this is due to uncertainty mechanisms included within the design of the new price control. • Server and storage equipment is typically refreshed every 5 years. The operation of infrastructure components outside these lifetimes leads to a heightened risk of systems failure (due to lower reliability) and higher vendor costs associated with extended support.	• In relation to SONI's hardware lifetime table demonstrating server and storage equipment is refreshed every 5 years. We had asked for SONI's IT strategy, we envisaged this as evidence to demonstrate server replacement cycles as well as the need for requested server storage (while transitioning to the cloud). An IT strategy would provide us with the confidence that SONI have detailed forward looking plans for these assets over the next 5 years. • SONI state this growth in data is being driven by new distributed generators,

		• Table H2 has again been highlighted showing the transition of servers to the cloud. • In addition to the renewal of the servers that are remaining on premise there are constantly increasing quantities of data being generated and stored which is forcing SONI to invest in additional storage.	new stations and new tech being installed to the system. However, no specific evidence of how existing servers are needing additional storage is provided, nor is there any evidence provided as to how much storage will be required in 5 years. • We agree with GHD that SONI has provided some additional evidence in the transition to cloud highlighting the number of servers affected. However, in relation to IT storage, the number of servers is not relevant, the evidence should relate to the volume of storage. This is important when transitioning to cloud as, by definition, the cloud is not a specific server, rather distributed across multiple servers especially for backups of data.
Options (including risk)			
Robust and efficient cost			
Benefits			
Justification for being additional to baseline			

FD summary view	Our final determination will not be providing any further allowance for this initiative from that set out in the draft determination (partial allowance of £4.80m capex). SONI have demonstrated timelines for their infrastructure refresh (Table H1) which includes servers and storage, however, as part of our draft determination actions, we requested an IT strategy from SONI, which was not provided. There is a lack of evidence in relation to the volume of storage. This is important when transitioning to cloud as, by definition, the cloud is not a specific server, rather distributed across multiple servers especially for backups of data. The information provided by SONI does not demonstrate that there is a strategy or a detailed forward looking plan in place for 'Server & Storage Expansions' and 'Storage Area Networks'.

Table 2: Initiative D.4: Simplify and Standardise IT Solutions

Strategic Initiative - D.4: Simplify and Standardise IT Solutions			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	In our DD we provided £550k from the requested amount of £1.2m. We deemed that some activities within this initiative ('Application Updates & Change Requests', 'REMIT & ENTSO-E' and 'Customer Relationship Management') did not sufficiently establish the need for the proposed capex allowance. In our DD we asked SONI to provide the following actions; • Provide the needs case for disallowed items. • Provide assurance that there is rationale for considering certain activities we have flagged by evidencing that they are not part of other initiatives.	**Application Upgrades & Changes** • Upgrades and change requests are difficult to predict and come from a variety of sources which SONI have identified. • There will be more frequent updates required to EDIL due to increased distribution generators. • Enhancements have become more complex and SONI's systems have become more interdependent recently due to ISEM **Overlap** • SONI has demonstrated the reasoning as to why there is no overlap between this initiative and D5 (Maintain and Develop Cyber Security)	**Application Upgrades & Changes** • SONI have provided some additional information in relation to the complexity of, and increase in the number of application changes and change requests they will receive. However, we agree with GHD that these tasks should be covered in everyday business tasks at SONI and do not warrant the need for additional capex. **Overlap** • SONI's DD response sets out a description of the differences between the two initiatives, highlighting there is no overlap, which we acknowledge.

		Change control • Process includes changes to the production environments, not only the process for change control. SONI have provided an extract from their Change Management Process Document relating to changes to production services amongst other things. Part of the extract states, "The scope of the change management process includes all changes to Production Services which are supported and managed by PIO". **REMIT & ENTSO-E** • SONI has to respond to changes in requirements from ENTSO-E and ACER. The work will involve enhancing the data interfaces that were developed over the last 4/5 years and implementing new interfaces. SONI will have to source the interface data, which is complex. This data is then extracted and transformed to the format required on the ENTSO-E and ACER platforms before being sent. **CRM** • There was a pilot CRM project completed in early 2020 for a small number of users	**Change Control** • An extract from change management process document has been provided. We agree with GHD that this additional information is not evidence that would suggest that the change process is anything other than an ongoing business task and does not warrant the need for the capex requested. **REMIT & ENTSO-E** • We agree with GHD that the ENTSO-E data transparency platform came into effect in 2015 with steady improvements over the last 5 years. SONI has referred to developing interfaces over the last 4 /5 years to provide the necessary information. Changes to the data transparency platform are managed by ENTSO-E and they do not request 'new interfaces' on a regular basis. The UR would expect that there are changes to existing interfaces and would be business as usual. ENTSO-E would consult on major data changes, which would be uniquely identifiable and more than minor revisions. **CRM** • We do not feel that the CRM solution warrants any capex. SONI have indicated that they will be implementing

		and the full CRM Solution will be delivered in late 2020. • CRM solution will continued being rolled out to more users over the PC period.	a single point of contact approach to customer engagement.
Options (including risk)			
Robust and efficient cost	• Explain how costs are efficient, based on good sources and are beneficial to customers.	**Application Updates and Change requests** • SONI have stated there are around 15 to 20 different requests each year which range in price from £100 to £13,000 • Deployment costs of upgrades and change requests are made up of vendor costs, hardware (if required), internal project management, business analysis, test resources. **CRM** • Costs associated with migrating significant volumes of data from EQMS and CSCS to new CRM. Licence costs for the agreed platform were agreed as part of a 3-year Microsoft agreement which was recently signed. **Cost Efficiency** • SONI have stated costs are based on their spend over the 2015-20 period, and reflect any increases in volume that will arise due to the increase in complexity	**Application Updates and Change requests** • We agree with GHD that the number of requests per year could range from 15-20. SONI state that the costs of these requests range from £100 to £13,000, however, there has been no evidence of costs provided by SONI to demonstrate these amounts are accurate. • From GHD's experience they suggest that the majority of changes would be in the lower range of costs. Therefore we agree with GHD that these changes/updates could easily be absorbed into business as usual. **CRM** • We have highlighted a lack of need for the CRM solution, therefore the costs are not relevant. **Cost Efficiency** • We agree with GHD that SONI's response does not provide any additional support to cost efficiency. It is simply stated that SONI costs are

		that has occurred in the market over the final years of this control. SONI's costs include the substantial synergies and economies of scale that we can leverage as part of a larger group. These services are procured competitively, in line with our procurement policy.	efficient and in-line with procurement policy. There are no projected figures provided as evidence to demonstrate SONI's spend over the 2015-2020 period, which they state these costs are based on. There is no evidence to demonstrate how SONI have factored the relationship between the increase in complexity and the cost.
Benefits			
Justification for being additional to baseline			
FD summary view	Our final determination will not be providing any further allowance for this initiative from that set out in the draft determination. We will be allowing a partial allowance of £550k capex. **Application Updates and Change requests** - These tasks should be covered in everyday business tasks at SONI and do not warrant the need for additional capex. **REMIT & ENTSO-E -** Changes to existing interfaces should be business as usual tasks and do not warrant the need for additional capex. **Customer Relationship Management –** There is a lack of need for this initiative particularly given the signal to move to a single point of contact. For each of the above areas of IT Standardisation we requested evidence of the efficiency of costs, how costs are based on good sources and are beneficial to customers. This was not evidenced in SONI's DD response. There was explanations as to where the costs were based from, however there was no evidence provided to demonstrate these figures were accurate.		

Table 3: Initiative D.6: SONI Workplace BAU

Strategic Initiative - D.6: SONI Workplace BAU			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**

Rationale for consideration and Need	• We did not provide any draft determination actions to SONI. We were content that our queries throughout the draft determination process were sufficient in reaching our decision in the DD. We acknowledge SONI did provide a response to our DD determination allowance. • In our DD we proposed to allow a partial allowance of £125k of capex requested for this initiative of the £460k requested in total. This was for investments in SONI's building premises (Gas Boilers, Building Energy Management System and Small Capital Projects)	**Gas Boilers** • SONI can confirm that some work was done to the boilers as part of the building project under the 2010-15 price control. This work ensured that they were able to heat the extension to CHCC and could be controlled by the energy management system that was installed at the time. This was integral to the building project and ensured that the useful life of the existing boilers was maximised. • This was not itemised within the line items available from SONI's financial systems and no specific boiler overhaul contract was let, it was clearly included within the scope of the contracts that SONI entered into for the building extension. SONI incurred at least £20k to secure this additional functionality. **Building Energy Management System** • SONI's building management system installed in 2014, contains basic functionality and the system will have reached the end of its useful life before 2025. SONI want to enhance this to become a BEMS • SONI highlight the SECG have highlighted the importance of SONIs own carbon footprint.	**Gas Boilers** • We have proposed to allow the majority of allowance requested for the gas boilers in the draft determination (£75K of the £100K requested) as we recognise SONI have highlighted some need to replace the gas boilers as mentioned in our DD (through limited life expectancy, high maintenance costs and leakages). • In the query process we were told that SONI had not partaken in any work to maintain the boilers in the 2010-2015 period. We acknowledge that in the draft determination response that SONI are confirming they incurred at least £20k in work done to the boilers. However, we have not been provided evidence that there has been any work spent to maintain the boilers in the 2010-2015 period. **Building Energy Management System** • SONI have suggested their current building management system will have reached the end of its useful life before 2025. This is very vague and no evidence has been demonstrated to suggest this.

		Small Projects • SONI are obliged to provide a safe working environment, they need to maintain the fabric of the building to ensure it remains fit for purpose. These investments are not optional, but each element cannot be predicted with a strong degree of accuracy. • The range of assets provided in SONI's business plan is provided to demonstrate the type of asset they expect to replace, these estimates are indicative based on the costs they expect to occur.	**Small Projects** • As SONI have suggested, these costs are difficult to predict, therefore the need cannot be fully evidenced for the small projects. SONI have illustrated these costs are indicative of the costs they expect to occur. Due to the fact that the need cannot be fully demonstrated we will not be providing the full allowance. However, we agree that throughout the 5 year period there will be a need to replace some items as demonstrated by SONI, therefore we have provided a partial allowance.
Options (including risk)			
Robust and efficient cost			
Benefits		**BEMS** SONI have listed various benefits in upgrading to a BEMS system, including; • Learning how the building works and predicting how the system can deliver optimum comfort levels. • Achieve energy efficiency on its own. • Fine tune buildings HVAC services. • Predict temperature forecasts for each zone in the building.	**BEMS** • Although SONI have listed some benefits included in the functionality of a Building Energy Metering System, the need highlighted in relation to the BEMS is not warranted and there is no associated consumer benefit.
Justification for being additional to baseline			

FD summary view	Our final determination will not be providing any further allowance for this initiative from that set out in the draft determination. We will be allowing a partial allowance of £125k capex. **Gas Boilers -** We acknowledge that SONI have identified some need to replace the gas boilers, therefore we have provided the majority of the allowance requested by SONI for their replacement (£75k), however, we have not been provided any evidence to suggest SONI has spent any of the allocated allowance from the 2010-2015 price control to maintain the boilers, therefore we have not provided the full allowance. **BEMS -** There is a lack of need identified to implement a building energy management system at SONI and there is no associated consumer benefit. **Small Projects -** We agree with SONI's DD response that these costs are difficult to predict, therefore the need cannot been fully and appropriately demonstrated or well supported for all the items to provide the full capex allowance requested. We acknowledge that throughout the price control period there will be a need to replace some items as demonstrated by SONI, therefore we have provided a partial allowance.

Table 4: Initiative E.1 and E.2: Telecoms Opex and Capex Spend

Strategic Initiative - E.1 and E.2: Telecoms Opex and Capex Spend			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	• We further welcomed views about the transfer of assets to the TAO. • We 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) giving an allowance of £6.1m. • We did not allow SONI the RTU and UPS replacements as we expect NIE Networks to be the owner of assets in the field and to request these assets via their D5 mechanism.	• SONI proposed that engagement takes place with NIE Networks and SONI so that proposals can be discussed. • They state that full funding should be provided out to the end of September 2025, and should a change occur before then, this can be amended as appropriate in accordance with paragraph 8 of Annex 1 and in line with any amended licence obligations. • SONI stated that NIE Networks do not currently have staff with the appropriate	• SONI did not provide any rationale as to why transmission assets in the field, should not be in the ownership of the Transmission Asset Owner. • SONI undertook a confidential report review of the implications and implementation issues associated the transfer of ownership. They did not provide the full report to the UR but provided a summary of the potential issues. - These changes are contrary to the contractual position between SONI and NIE Networks – SONI would

	• We provided £225K for the Moyle HVDC Equipment Replacement Project and £300k for IP Telephony Upgrade, giving an opex allowance of £525k.	training to support the SONI assets located outside CHCC.	incur substantial financial penalties if it broke these contracts. - The TIA will need to be reviewed to ensure that SONI has sufficient ability to specify the functionality that is required. - SONI staff fulfilling these roles also provide 24/7/365 support for the EMS therefore this transfer will not be straightforward. • We acknowledge that engagement will be required between SONI and NIE Networks on the transfer and support roles but these can be worked out through the TIA. • Regarding roles and responsibilities, it is the ownership of the assets that should be under TAO and the TSO should have access as required, similar to its current needs. We will work with both companies to ensure that costs to NI consumers are efficient.
Options (including risk)		• SONI noted that they are concerned that the UR is not providing any funding beyond RP6 and UR are assuming an outcome to the RP7 process. SONI also have concerns of the lack of funding for OTN costs over the last two years of the PC. • They state that the funding set out in SONI's licence for the 2020-25 period should reflect the current arrangements and should be updated as part of the	• This SONI determination sends a clear signal that the OTN costs (including support on the assets) will fall within NIE Networks remit from RP7 onwards and we will engage with NIE Networks to ensure it is within their business plan for RP7. NIE Networks in their response stated that they are content with the proposals. • This should be sufficient for SONI to take comfort that from RP7 it will be under NIE Networks consideration.

		implementation of the outcomes of this review.	
Robust and efficient cost	• SONI had requested £7.3m in opex and £1.4m in capex over the period. • We proposed an opex allowance of £6.1m and a capex allowance of £0.525m.	• SONI consulted with the OTN managed service provider to build the cost profile for the migration to IP. • Under the OTN contract both NIE Networks and SONI carry out annual industry benchmarking against the rate card to ensure that competitive rates are provided by the OTN managed service provider.	• SONI provide no additional specific cost information in their submission related to telecoms.
Benefits			
Justification for being additional to baseline			
FD summary view	As stated in the DD 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 NIE Networks has not noted any future contractual position concerns between SONI and NIE Networks. They stated in their response that they are content with the UR proposal and welcome the clarity of roles that this provides. NIE Networks also stated that they would wish to explore further with the UR and SONI the practical implications of this change. In 2021, the UR will engage with SONI and NIE Network on the timings and implantations of the transfer of the assets, this will include a TIA review by both companies to ensure that SONI and NIE Networks has sufficient ability to specify the functionality that is required. With the transferring of assets from TSO to TAO, we are not suggesting increasing nor reducing SONIs headcount. The transfer of the assets should release some future opex tasks and SONI can reassign this to assist the move within their own telecoms to a more IP based system in other aspects of the business. No change from the DD position.		

Table 5: Initiative F.1: Renewables strategy

Strategic Initiative - F.1: Renewables strategy			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	• SONI proposed to develop a number of schemes (tools and systems) for scheduling and monitoring of renewable generators. It requested £3.6m capex and £3.5m opex allowance.	• SONI state that up front funding is essential to secure SONI's influence over the shape of these investments and to minimise the cost to customers in Northern Ireland. • SONI raised concerns with our DD and urged the price control team to engage with UR wholesale to ensure their knowledge and priorities are reflected in the FD. • SONI provided links to all the historical documents/engagement to the DS3 program since 2010. It said that its ability to participate in all-island stakeholder engagement and procurement exercises will be dependent on it being confident of funding to implement the outcomes of the exercises. • In relation to costs SONI are concerned that the UR believes that it is possible to obtain benchmarked costs for this work, while they believe that only the TSOs to have relevant experience at this time.	• SONI provided an additional Annex I - DS3+ Formatted to provide additional detail on the program. It has identified a strong rationale for considering further expenditure on system services and dispatch and scheduling related activity, as we noted in the DD, but the scope is still ill-defined with little demonstrable change from that submitted within its business plan. • SONI did not provide much additional detail in relation to the capital costs. It was a descriptive table restating their request for capex monies. • We disagree that SONI cannot undertaken engagement. We have allowed its opex request and it can use this to engage. We note that SONI has still not engaged with the point made by some stakeholders at SECG about designing service to *actively* address barriers to participation by non-traditional technologies and actors. We expect it to consider this more fully and openly than it has to date.
Options (including risk)	• We requested further detail on the capex allowances in particular:	• While SONI did provide extra detail on the consultations and decisions, the rationale for the estimation of the capital costs is	• SONI said that these capex costs are bespoke capital investments which are not currently in existence and therefore

	- High level design led by the national regulatory authorities (NRAs). - Bilateral working between TSOs and NRAs. - 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.	based on a table with some description rationale. • SONI also disagreed with our DD view that many of the elements are DSO. It said its proposals are within the legislative framework. It said that the electricity market in Northern Ireland is based on central dispatch and this means that SONI is obliged to schedule and dispatch all generation that participates in the SEM. The threshold for mandatory trading within the balancing market is 10MW, which includes generators connected to the distribution system. It went on to say that in addition generation below this threshold can opt in to the market, and SONI must therefore also control the output from those sites.	by their nature cannot be directly benchmarked against other investments. Precise estimates will only be known once tenders are received for the specific work package. We consider that SONI's updated evidence of the estimation of this expenditure remains unconvincing at this time. • We remain of the view that much of the business case relates to DSO remit. This is because much of SONIs requested expenditure extends to lower than 10MW. We agree that SONI may needs visibility of 10MW generators, but it also seeks tools to monitor 'DSM at a residential level'. We are not aware of any residential property with a 10MW connection. We still take the view that the distribution network is the responsibility of the DSO, and the TSO does not need detailed visibility of the DSO network as they do not have ownership or control. • The Grid Code rules still apply in relation to the sharing of information so the TSO has information they need to make the network secure. We did allow SONIs' request for funding to develop the TSO-DSO interface. It may be that the DSO sees it as appropriate that the TSO has sight of certain information, and so as such we consider that the DSO should lead on this development rather than the TSO deciding what they need. Again, this is because the distribution network is the responsibility of the DSO and tools relating to small

			scale renewables should be the remit of the DSO.
Robust and efficient cost	• We proposed to allow SONIs full staff opex request and part of its capex i.e. the request for £0.9m for the TSO DSO interface item.	• SONI requested £3.6m capex and £3.5m opex allowance.	• We consider it is not possible to determine that the capex is efficient as the business case has not been scoped. We have therefore naturally determined the allowance is set to zero until SONI detail the cost.
Benefits		• SONI is able to shape the direction of the investments to ensure they are appropriate for Northern Ireland. • Jobs are created in Northern Ireland and skills are developed here; and a signal is sent to investors that the green economy in a priority in Northern Ireland.	• As we have provided full allowance of the staff request we see no reason why SONI should not be able to shape the strategic direction.
Justification for being additional to baseline			
FD summary view	There is a lack of evidenced engagement in the response with the DSO, we also have concerns that the TSO proposes to undertake DSO roles. We consider that trials on the distribution system particular at residential level should be the responsibility of the DSO not the TSO. SONI has also acknowledge that some of the costs are difficult to estimate as its does not yet know the full scope of the work. We note that in July 2020 the SEMC issued a paper on the scope of the development of a framework for the procurement of System Services to apply from 1 May 2023 onwards https://www.semcommittee.com/news-centre/system-services-future-arrangements-scoping-paper. We are still at early stages of this, the scope of the programme is still being defined and the programme plan being developed, and it is likely SONI will need to engage and take account of this work. More time is needed to determine the costs as it would be a risk to consumers to provide an allowance for something that is not yet developed. FD recommendation is to give SONI more time to develop the scope, the products and the incentives and once the costs are better defined SONI can come back within the time frame and request additional capex. We have allowed the full opex so that SONI can establish the program, engage effectively and respond with appropriate options, ways forward and costs. We are open to receiving uncertainty mechanism claims accordingly.		

	In the future submission we expect SONI; • To comprehensively scope out the request. • Identify clearly and robustly the costs and benefits. • Be appropriate in working out the options and risk (including timing).SONI should engage effectively with customers and other stakeholders such as NIE Networks in its DSO capacity. It should ensure that harder to reach and new customers are effectively engaged given concerns from some stakeholders that the design of its business plan proposals so that it actively address barriers to participation by non-traditional technologies and actors. • Engage with vendors to spec out the proposal and clear identify the costs which they expect NI customers to fund. • A bottom-up assessment of costs (with benchmarking where possible). • Produce a defined business case and comprehensive project plan with timescales and success measures for the capex allowance. No change from the DD position.

Table 6: Initiative F.2: Control Centre Tools

Strategic Initiative - F.2: Control Centre Tools			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	• 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. - Detailed design by TSOs in conjunction with DSOs. - Detailed design approved by SEMC.	• SONI did not provide a satisfactory response to the DD actions, they asked the UR to consider the benefits that can be obtained for Northern Ireland through the provision of funding for this work up-front, but did not provide any details as to what the funding was actually for. • They refuted the comment that SONI was" potentially undertaking DSO without proper justification". • They did not provide a roadmap but did expect to follow a similar process as was done under DS3.	• SONI provided little evidence provision, they stated that these tools only relate to decisions that are made by the TSO when scheduling and dispatching the system. • SONI did not provide any additional information as to the nature of the capex costs or the breakdown of their value. • We fundamentally disagree that SONI does not need to engage or

	• SONI to submit cost request for required capex.	• SONI said that that as the proposals aim to maintain stable and secure system at the cutting edge of operation with non-synchronous generation, we are unsure why the UR would expect us to consult upon them.	collaborate. Some stakeholders with extensive knowledge of energy systems have pointed out that more effective collaboration and a more effective means of understanding stakeholder needs would lead to better outcomes in addressing potential barriers to participation by non-traditional technologies and actors.
Options (including risk)	• SONI will need to engage effectively with customers to understand and take account of their diverse needs.	• No further optionality was provided, only that these tools were needed. • SONI said that as System Operator it is vital that only one entity is in charge of the frequency on the all island system and the DSO cannot be dispatching high volumes of MW at a distribution level because the frequency would become unstable.	• SONI may need tools to aid in the dispatch of generation connected to the distribution network, however SONI request was conceptual and provided no detail on the nature of the tool and how it would benefit. We note that stakeholders raised concerns that certain activity could potentially be undertaken by the market in the future We also note that small scale generation (SSG) aggregation / dispatch and DSU (Demand side Unit) dispatch appear to relate to the control and dispatch of embedded distribution connected generation. Prior to developing tools for dispatching distribution connected generation or demand side units, we would expect a clear delineation of responsibility between the TSO and the DSO. We have agreed that the request for funding on establishing the formal interface between the TSO and DSO is allowed under initiative F1 – renewable strategy and implementation programme to undertake this activity.
Robust and efficient cost	• SONI has requested £0.6m in opex and £4.0m in capex over the period.	• In regards to costs they said that SONI and EirGrid have recently procured	• SONI has not provided detail on the specific breakdown of the £4m capex

	• We proposed to allow SONI £118k of the opex request which equates to 0.5 staff for 3 years.	similar tools. The estimates are based on those costs, where the scope also required the development of control room tools that are not in use anywhere else in the world. • The costs submitted are based on an all-island development and procurement exercise. • Should SONI not be in a position to enter into contracts quickly, we would not have the same influence over the scope and would need to update our cost estimates to reflect the circumstances at that time.	costs, apart from stating that these are estimates from similar tools recently procured, however provided no evidence on the breakdown of these procured similar tools as the initiative has not yet been scoped. • As such, we consider it is not possible to determine that the capex requested amount is efficient and we have therefore naturally determined the allowance is set to zero until SONI detail the cost. • Once the costs have been specifically established SONI can come and request for additional capex under the uncertainty mechanism.
Benefits			
Justification for being additional to baseline			
FD summary view	SONI has not provided sufficient evidence that the requested amount is efficient. As such, the DD position remains however, once the costs have been specifically established SONI can come back within the price control period and request for additional capex under the uncertainty mechanisms. • To comprehensively scope out the request. • Identify clearly and robustly the costs and benefits. • Be appropriate in working out the options and risk (including timing).SONI should engage effectively with customers and other stakeholders such as NIE Networks in its DSO capacity. It should ensure that harder to reach and new customers are effectively engaged given concerns from some stakeholders that the design of its business plan proposals so that it actively address barriers to participation by non-traditional technologies and actors. • Engage with vendors to spec out the proposal and clear identify the costs which they expect NI customers to fund. • A bottom-up assessment of costs (with benchmarking where possible).			

	• Produce a defined business case and comprehensive project plan with timescales and success measures for the capex allowance. No change from the DD position.

Table 7: Initiative F.4: Migration to IP Technology

Strategic Initiative - F.4: Migration to IP Technology			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	• SONI had 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).	• SONI stated that the additional telecoms engineer will provide support for the OTN managed service contract and governance arrangements. • A dedicated project manager is required to mitigate risks. This specialist role will be required irrespective of the outcome of the review. • Telecoms engineer role is to provide the specialist technical input that SONI will need under the updated governance arrangements.	• SONI has failed to provide anything other than anecdotal evidence that the need of additional resource is required. They have not specifically identified what additional work is required nor why it is above their normal activity. • It is not clear that this is not a typical activity, though does currently appear to be the TSO responsibility at present. We would expect this role to be fulfilled within base costs.
Options (including risk)			
Robust and efficient cost	• Explain why additional staff is required and identify an itemised breakdown of the capex request.	• The opex was for additional staff and the capital cost estimate reflects the outturn cost of:	• SONI did not provide the itemised breakdown of the capex costs as requested apart from stating that It is

		- Planning the project/project management - Hardware - System interfaces - Installation - Commissioning and testing.	not based on point estimates, instead it reflects that aggregate expected capital expenditure, where some items may turn out to be more straightforward and others more complex to deliver.
Benefits			
Justification for being additional to baseline			
FD summary view	We are not convinced that additional staff is required above and beyond base costs and no specific details were provided on the breakdown of the capex request. We would expect SONIs existing corporate telecoms engineer to progress any migration to IP Technology and to mitigate risks. Therefore we are not changing our position from the draft determination.		

Table 8: Initiative F.5: Data Services

Strategic Initiative - F.5: Data Services			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	• Demonstrate that there is no duplication against BAU activity and elsewhere in its request.	• The investigation and development of the strategy is clearly additional to the work we already undertake and therefore the costs outlined are not duplicated in BAU costs. • This work is clearly additional to SONI's BAU activities and is even called out as an essential deliverable through the evaluation framework.	• No evidence demonstrated in SONI's DD response as to why the data services should not be base activity. • While we agree there is rationale for considering how SONI improves its use of data, the UR and GHD agree that this solution is not fully scoped, defined or justified.

Options (including risk)			
Robust and efficient cost	• Justify why consumers should pay for this investment given the enhanced operational efficiency. • Explain what the £60k for internal project services relates to.	• The Internal Project Costs are for dedicated staff time gathering business and data requirements, piloting and training on possible products. This is additional to the staff requested elsewhere in this business plan and may be resourced by backfill of other roles. • The other costs are for consultancy and hardware/software to trial some new tools.	• Costing evidence has not been provided in the response, costs are not broken down and there is no underpinning evidenced as to how SONI came up with these costs.
Benefits			
Justification for being additional to baseline			
FD summary view	SONI has requested approx. £100k capex for this initiative, we will be awarding none of the requested amount. We are in agreement with GHD that no further evidence has been provided to support any allowance for this specific initiative. This solution is not well scoped, defined or justified. This should be a normal activity we would expect SONI to carry out.		

Table 9: Initiative F.7: Promoting Change

Strategic Initiative - F.7: Promoting Change			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration	• No DD actions proposed.	• SECG members have specifically called out their desire to see a stronger	• No new evidence submitted.

and Need		emphasis on SONI's own sustainability and leading by example in the energy transition.	
Options (including risk)			
Robust and efficient cost		• While SONI endeavours to adopt a sustainable approach in all its activities and ensure that this is followed, our BAU resources do not provide for the joined up strategic approach.	• No new evidence submitted.
Benefits			
Justification for being additional to baseline			
FD summary view	This appears to be a base activity and we have received no evidence to the contrary. We have provided no specific additional allowance.		

Table 10: Initiative G.1: Alternative Disaster Recovery and Business Continuity (DRBC) Site

Strategic Initiative - G.1: Alternative Disaster Recovery and Business Continuity (DRBC) Site			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	• Evidence that the facility needs to be 500 sqm in size. • Visibility of the current business continuity plan including any updates following the impact of COVID 19.	• Only once SONI are confident in funding for this project will they start the process of clarifying the scope, identifying the	• SONI provided the UR and GHD the opportunity to review their business continuity plan. The UR and GHD were of the same opinion that this business case presented to support the capex and opex spend did not provide any detail on the proposed solution nor does it clearly detail the requirements

		requirements, search and short list options [redacted] • Can provide an update of the continuity plan if required.	for the new disaster recovery site. The requested spend is not based on a clear identified scope or option. • We recognise there is a need for an alternative disaster recovery site, however we are disappointed that no attempt has been made to complete a detailed plan which fully scopes out potential sites and the necessary components involved in a DRBC site. • Therefore we will provide SONI some allowance, to carry out a preliminary assessment (to be submitted to the UR no later than 6 months from the SONI price control final determination publication) of a new location for the DR site that would then naturally establish a clear scope, and an associated cost of the DR site. • This is to be presented to the UR in the form of a business plan. The aim of this is to establish the most optimal location, [redacted]

			[redacted] -
Options (including risk)	• Evidence that existing NIE Network sites are not appropriate.	[redacted]	• Optionality of sites should be developed in SONI's DRBC business plan, as highlighted above.
Robust and efficient cost	• 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).	• SONI have provided some estimated cost information. • Need is agreed but SONI concerned by project delays if no funding provided.	• SONI did provide a breakdown of fit-out costs for an alternate DRBC SITE. • However, further evidence of cost should be developed in SONI's DRBC business plan, as highlighted above.
Benefits			

Justification for being additional to baseline			
FD summary view	SONI has requested £1.75 million in capex and £0.75 million per annum in opex for the replacement of the existing disaster recovery site. Although the need is clear for a new Disaster Recovery site, we were disappointed to find the business plan severely lacking in a proposed solution and clearly demonstrating the requirements or potential costs for the new disaster recovery site. We will provide SONI with resource to carry out a preliminary assessment of a new location for the DRBC site, which will be presented to the UR in the form of a business plan. The details we expect SONI to deliver in this business plan have been highlighted above and in the 'Output Monitoring' document. We expect SONI's submission of this business plan within 6 months of the published date of the FD. Once SONI have provided the UR with the required business plan, this initiative will be dealt with via uncertainty mechanism.		

Table 11: Initiative G.2: Control Centre Training

Strategic Initiative - G.2: Control Centre Training			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	• 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.	• Training facility only provides for EMS functionality. Cannot replicate the market impact of control room decisions. • Training would be scenario based rather than standard training on a new product.	• SONI have listed all the IT products not in their training simulator. However, it is not clear why all these products are required.
Options (including risk)			
Robust and efficient cost	• 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.	• Funding requested is for additional functionality so not duplicate. • Itemised breakdown of capital costs has been provided.	• Itemised breakdown of capital costs has been provided by SONI in response, this demonstrates that capex costs are not duplicated. • However, it is not evident as to why an additional staff member is required.
Benefits			
Justification for being additional to baseline			
FD summary view	SONI has requested approx. £400k opex and £830k capex for control centre training. We propose to provide no allowance for the final determination. SONI have not made it clear as to why all the products listed in their response need to be part of the training simulator. We acknowledge that capex costs are not duplicated, however, it is not clear why an additional staff member is required. We agree with GHD's views that costs associated with a 'live' training environment (i.e. EMS / SCADA) is significantly higher as the need for duplicate servers, simulation etc is higher. We also agree with GHD that the market impact on control decisions is not business critical so there does not need to be EMS live system, this is therefore not essential for SONI.		

Table 12: Initiative G.3: Physical Security

Strategic Initiative - G.3: Physical Security			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	• A copy of the consultant's security report.	• Need is established by risk assessment and NIS Directive.	• SONI have shared their security report with UR and GHD. • The consultant report assesses the current state of the physical security and identifies areas of weakness and areas that SONI may wish to address. The report does not provide a strategy or plan for remediation. • We agree with GHD that SONI need to develop a long term strategy, business case and cost for their physical security plans at Castlereagh House within 3 months of FD publication. • We require SONI to build on their external consultant's report assessing the 2018 state of the physical security and areas of weakness in SONI. We expect three deliverables from SONI; 1) **A long-term strategy** (to be delivered within 3 months of the SONI price control final determination publication)

			[redacted] 2) **A business case** (to be delivered within 3 months of the SONI price control final determination publication) detailing the work that is needed to bring the current arrangements up to an acceptable level. [redacted]
Options (including risk)			
Robust and efficient cost	• Differentiation between what is replacement spend and what is enhancement security. • Some justification for the costs e.g. quotes, tenders, unit rates etc.	• This initiative replaces security assets with the modern equivalent.	• Itemised breakdown of capital costs has been provided via the query log (UR-117). • Differentiation between replacement and enhancement has not been provided.

			[redacted]
Benefits	• Estimate of the impact on physical security incidents and maturity assessment scores.	• Investment is an insurance against security incidents.	• No new info provided.
Justification for being additional to baseline			
FD summary view	SONI has requested £1.2 million in capex and £1 million per annum in opex for physical security. As highlighted above, while SONI's consultant's report does identify areas of improvement in physical security, the report lacks a detailed strategy identifying SONI's physical security short, medium and long term plans or detailed costing information from reputable security vendors. We require a long term strategy for SONI's physical security and a business plan identifying the scope SONI need to do to bring current physical arrangements up to an acceptable level along with reasonable cost estimates. These deliverables should be submitted to the UR no longer than 3 months after the publication of the final determination [redacted] Once SONI have provided the UR with the required business case and long-term strategy, this initiative will be dealt with via an uncertainty mechanism.		

Table 13: Initiative G.4: Cyber Security

Strategic Initiative - G.4: Cyber Security			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for	• The cyber risk assessment report.	**Cyber risk assessment report**	**Cyber risk assessment report**

consideration and Need	• 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.	[redacted] [redacted] [redacted] **Evidence of how proposed enhancements mitigate cyber risks** [redacted] • [redacted]	• SONI provided the UR and GHD access to their cyber risk assessment report as requested in the DD actions. SONI provided meetings with the Cyber Security team to answer any questions the UR/GHD had on SONI's cyber security enhancements. • We found this a very useful exercise in demonstrating the ongoing Cyber Security strategy at SONI. The report allowed us to understand the elements of Cyber Security that SONI are focusing on through various projects and how these would mitigate cyber risks. • From follow up sessions with the Cyber Security Team we were provided evidence of scoping, approval, validation, challenge, and cost control throughout specific Cyber Security Enhancement projects. • From reviewing SONI's risk assessment report, it was clearly evident that the proposed initiatives were enhancements to SONI's cyber strategy and not BAU tasks.
Options (including risk)			

Robust and efficient cost	• How costs are split between each of cyber projects/areas (Not DD actions but a question asked in follow up work shop)	[redacted]	• We were provided with additional evidence of a cyber project being delivered to budget. We agree with GHD that the requested cost for opex and capex is reasonable.
Benefits			
Justification for being additional to baseline			

FD summary view	SONI has requested £163k in capex and £1.12 million per annum in opex for cyber security. After fulfilling the requested DD actions, we will provide the full requested allowance for cyber security enhancement. We found that being able to see SONI's cyber assessment risk report and spending time with the SONI cyber security team very useful. We could see that the cyber projects had been scoped out, approvals had been sought and granted, tenders had been released and as the initiatives were enacted, there was regular updates to the committee. It was clear that these projects were mitigating cyber risks and were enhancing SONI's cyber functionality rather than being BAU tasks. We were provided evidence of project costs being on target and we agree with GHD that the opex and capex requested from SONI in the business plan are fair. In contrast to the draft determination, a full allowance has been provided for this project.

Table 14: Initiative G.5: European Network Codes (EUNCs)

Strategic Initiative - G.5: European Network Codes (EUNCs)			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	• Identify and provide a timeline for implementation all aspects of the network codes beyond 2020.	• Network code compliance is a legal obligation. • SONI have provided a list of activities and a timeline for the ROSC.	• SONI have not provided a timeline for all aspects of network codes beyond 2020 (only provided ROSC area of Network Code).
Options (including risk)			
Robust and efficient cost	• Identify and evidence within its resource plan of under resourcing.	• The estimate of 2 additional FTE as requested is based on SONI's experience to date of reading, implementing and ensuring compliance with the codes. • This request covers the additional ongoing workload SONI will need to deliver in parallel with the remaining activities.	• We asked SONI to provide a resource plan of what and how much time is currently spent on its existing TSO activities and how this will change with enhancements. • We envisaged this as being evidence whereby SONI could demonstrate the need for the extra employees

			requested for network code activities, however, this was not provided.
Benefits			
Justification for being additional to baseline	• 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.	• SONI have indicated that table 'H.5: Network Code articles that include enduring obligations' are requirements above BAU.	• This table does not provide any evidence to demonstrate that these tasks are beyond BAU activities.
FD summary view	SONI has requested £800k for two additional FTEs to implement EUNCs. We propose that no allowance will be provided in the final determination. The need to undertake work is clear but the need for two staff to complete the work is not evident. We asked SONI to provide a resource plan of what and how much time is currently spent on its existing TSO activities and how this will change with enhancements, but this has not been provided. We agree with GHD that there wasn't further justification of the need for the extra staff. European legislation is consistently evolving and we would expect that this is more toward a business as usual approach. SONI explain that they need more resource but this is not evidenced sufficiently without a resource plan.		

Table 15: Initiative G.6: Capacity Market Secondary Trading

Strategic Initiative - G.6: Capacity Market Secondary Trading			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	• 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.	• Business plan submission aimed at delivering full solution as per the capacity market code. • A full system is essential to give generating units the flexibility and ease to transfer its obligations in the event of a planned or forced outage. • Staff are required to support operation of the trading platform.	• We do not consider that SONI has addressed the key need in light of the interim solution. • Whilst the proposed benefits may exist, this will not really be known until the working of the interim solution can be evaluated after implementation.

		• An enduring secondary trading system will provide a better functioning, more efficient market. • As other generating units would take on the obligations of the original units this would contribute to security of supply. • We anticipate less forced outages, given this initiative will improve Generating Units' ability to undertake maintenance regularly.	• The evidence for additional staff also seems open to debate given the automation process.
Options (including risk)			
Robust and efficient cost			
Benefits			
Justification for being additional to baseline			
FD summary view	Whilst CRU have provided an ex-ante allowance, this seems like an initiative which would be best placed under the uncertainty mechanism after observing the implementation of the interim solution. Such an approach would also seem to be in line with SEMC who state, *"the SEM Committee will ask the Market Monitoring Unit to monitor the operation of the Alternative Secondary Trading Arrangements."* SONI also state, *"Work in this regard, however, cannot proceed without SEMC approved changes, hence their timing and associated costs are subject to these decisions."* Given that such decisions are yet to be taken, an ex-ante allowance seems premature. No further allowance beyond the draft determination has therefore been provided.		

Table 16: Initiative G.7: DSU State Aid Compliance

Strategic Initiative - G.7: DSU State Aid Compliance			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**

<table>
<tr><td>Rationale for consideration and Need</td><td></td><td></td><td></td></tr>
<tr><td>Options (including risk)</td><td>Evidence of the scope of works.</td><td>Scope of this work is subject to confirmation of the proposed changes by RAs to implement enduring arrangements for DSUs.
Requirements for metering of DSUs, which is essential to the proper functioning of a market with almost 1 GW of unmetered DSUs, have not been specified in RAs policy decisions.
Propose to use Dt/Zt request to cover this initiative once scope is clearly defined.</td><td>We are in agreement with SONI that as the decisions on DSU enduring arrangements are yet to be taken, this activity should be moved to the uncertainty mechanism.
We further accept that metering of DSUs is essential and should be undertaken.</td></tr>
<tr><td>Robust and efficient cost</td><td>A detailed breakdown of costs.
Detail on the basis of cost validation.</td><td>The work to implement the meter data calculation is estimated to cost: €1.5M (2020-2022). As an all-island solution. SONI would be expected to contribute £336k towards this.
Table H.7 Meter Data Calculation Costs
<table>
<tr><th>Meter Data Calculation Implementation Costs</th><th>Cost £k</th></tr>
<tr><td>Capital Equipment</td><td>11</td></tr>
<tr><td>Project Management Staff</td><td>28</td></tr>
<tr><td>Developer contractor</td><td>28</td></tr>
<tr><td>Software Development</td><td>213</td></tr>
<tr><td>Licences</td><td>22</td></tr>
<tr><td>Contingency</td><td>34</td></tr>
<tr><td>Total Costs</td><td>336</td></tr>
</table></td><td>SONI has provided a breakdown of the capital costs associated with metering DSU units.
Upon review, we are content that the costs are reasonable.
However, we do not think a contingency allowance is appropriate in the existing regulatory framework.
GHD is in agreement with this position.</td></tr>
<tr><td>Benefits</td><td></td><td></td><td></td></tr>
<tr><td>Justification for being additional to baseline</td><td></td><td></td><td></td></tr>
<tr><td>FD summary view</td><td colspan="3">SONI can see some benefits associated with moving this to an uncertainty mechanism. However, they have requested £336k associated with metering DSUs. We consider this to be a reasonable request given the requirement to meter these generators. We have therefore provided allowance of £302k for this metering in the final determination. The allowance excludes the contingency request which is not appropriate under the current price control framework.</td></tr>
</table>

Table 17: Initiative G.8: Implementing an MIP Solver

Strategic Initiative – G.8: Implementing an MIP Solver			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need			
Options (including risk)			
Robust and efficient cost	• 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.	• This project has progressed significantly over recent months and the UR has been urging SONI to deliver this quickly. We have therefore decided to accelerate the approval of this ahead of the formal price control processes. • The cheaper solutions mentioned in the draft determination are suitable for modelling the optimisation problem. However, the free solvers do not provide suitable performance and stability compared to commercial solvers. • Part of the vendor deliverable will be to provide performance test results of multiple commercial solvers so that SONI can select the most cost effective, optimum solver for enduring solution. • Details of the costs are included in the Dt/Zt submission	• We are content with SONI's suggestion to review this project via the uncertainty mechanisms.
Benefits	• Why potential benefit could be derived across other auctions.	• This can be followed up separately in the context of the Dt/Zt submission.	

Justification for being additional to baseline			
FD summary view	We are content to assess this project separately via the uncertainty mechanism. No allowance is provided for in the final determination.		

Table 18: Initiative G.9: State Aid Cross Border Capacity

Strategic Initiative - G.9: State Aid Cross Border Capacity			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	• 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.	• It currently appears that this functionality will not be required to be in place until the Celtic Interconnector is available for forward trading and able to facilitate participation in capacity auctions.	• We agree with the TSO proposals to move this project into the uncertainty mechanism given the doubt about need and timing.
Options (including risk)	• Provide assurance that spend will not result in waste or stranded assets. • Provide further justification with evidence for the level of costs proposed.	• We will use an uncertainty mechanism to secure funding for this should the need transpire before the end of this price control period.	• We agree with the TSO proposals to move this project into the uncertainty mechanism.
Robust and efficient cost			
Benefits			
Justification for being additional			

to baseline			
FD summary view	We are content to assess this project separately via the uncertainty mechanism if required. No allowance is provided for in the final determination.		

Table 19: Initiative G.10: Market Related TSO Governance

Strategic Initiative - G.10: Market Related TSO Governance			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need			
Options (including risk)			
Robust and efficient cost			
Benefits			

Justification for being additional to baseline	• For the purpose of a future allowance, SONI would have to evidence why this is not a BAU activity.	• This work has arisen because of the considerable number and complexity of the obligations placed on the TSO through the new trading rules and also the TSO aspects of the Market Related Network Codes. • The complexity of the audits under the I-SEM is also becoming clear to SONI now that we have completed the first cycle of them. This is a step change in the level of transparency and oversight provided for customers. • This was not anticipated when the I-SEM operational costs were calculated. It is essential that SONI can support these audit and compliance requirements.	• We do not consider that SONI has adequately demonstrated this 0.5 FTE not to be part of base costs. • Whilst there is increased complexity, this has been funded via specific I-SEM opex allowances. • SONI has managed the I-SEM audits within the existing price control period. • These audits should also become more efficient over time as the annual requirements become normalised.
FD summary view	It is difficult to understand how this is not part of base costs given the schedule and dispatch audit has already occurred using existing resources and should become easier over time. No additional provision has been made in the final determination for this project. It is our view that SONI are already funded for this activity.		

Table 20: Initiative G.11: Metering System

Strategic Initiative - G.11: Metering System			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need			
Options (including risk)			
Robust and efficient cost	• Provide detail on the cost breakdown, basis of estimates and scope of activity.	• A detailed requirements gathering phase has been completed and a review of the product	• SONI has provided a breakdown of costs as requested.

<table>
<tr>
<td></td>
<td>Provide assurance that customers are not funding this activity twice.</td>
<td>landscape. This has allowed us to develop a more detailed costs proposal which is outlined.

<table>
<tr><th></th><th>Cost Breakdown £k</th><th>Cost Type</th></tr>
<tr><td>Business Analysis</td><td>£65k</td><td>Capex</td></tr>
<tr><td>Project Manager</td><td>£55k</td><td>Capex</td></tr>
<tr><td>Solution Architect</td><td>£48k</td><td>Capex</td></tr>
<tr><td>Vendor Implementer</td><td>£420k</td><td>Capex</td></tr>
<tr><td>Software Licenses</td><td>£220k</td><td>Capex</td></tr>
<tr><td>Technology Infrastructure</td><td>£72k</td><td>Capex</td></tr>
<tr><td>TOTAL</td><td>£880k</td><td></td></tr>
</table>

A Common Meter Data Collection System will be sourced and installed separately in each jurisdiction. This will cater for the different telecommunications environments.
A Common Meter Aggregation and Substitution System will be sourced and installed across both jurisdictions.
SONI can confirm that £104k was requested in the 2014 submission to cover part of this work. We are happy to work with the UR to calculate the reduction that should be made to reflect that some of this may be retained by SONI under the current 50/50 risk sharing mechanism.
The savings of the old applications have been taken into account and it’s only the net increase in annual licencing costs that are being sought as part of this initiative.
</td>
<td>
However, it is not clear what the scope of work is or the timeline it will be delivered to.
As a replacement of existing systems, we would also appreciate more detail on the current level of costs as SONI have confirmed that this claim only relates to net increases.
Further evidence of the benefits would also be useful.
It is our view that this project should form part of an uncertainty mechanism application.
</td>
</tr>
<tr><td>Benefits</td><td></td><td></td><td></td></tr>
<tr><td>Justification for being additional to baseline</td><td></td><td></td><td></td></tr>
</table>

FD summary view	Rationale to undertake work is clear. However, despite SONI noting that the solution requirements have progressed, the scope of requirements and timeline delivery is still unclear. Adjustment for previous capital allowances will also have to be made. This makes it difficult to understand what an efficient cost is without making an arbitrary adjustment. It is our view that this project should form part of an uncertainty mechanism application, so no capital allowance is provided as part of the final determination. Within the uncertainty mechanism SONI should provide: • Scope of works and detailed timelines for delivery and success measures. • The basis for cost estimates. • Details on the current level of spend and the net request increase. • Benefits of the investment in terms of grid impact and dispute resolution.

Table 21: Initiative G.12: Operational Support for IT Projects

Strategic Initiative - G.12: Operational Support for IT Projects			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	• 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.	• SONI internal challenges identified this as a gap between funding requests. • SONI confirm these resources are only requested under this initiative. • SONI have said they are not IT staff but operational specialists who are the end users of the systems being developed.	• SONI have provided no additional evidence to demonstrate that resources are not funded via base allowances. • SONI have stated that internal challenges have identified this as a gap between funding requests, however, there has been no evidence to demonstrate this. • No additional evidence has been provided of existing levels of staff as requested. This does not provide us with the assurances needed to demonstrate that more FTE's are required.
Options (including risk)			

Robust and efficient cost			
Benefits			
Justification for being additional to baseline	• Provide detail on the existing levels of IT staff and justification for an increase of 3 FTEs as part of a resource plan.	• The purpose is to provide backfill staff so that SONI Engineers who have their main role e.g. can be released to support the development and delivery of the new systems.	• We agree that when commissioning any new system, there is a need for end users involvement at various stages of the project. • However, this involvement is a business as usual activity that should be factored into employee's roles.
FD summary view	SONI has requested £1.2m in opex for three additional FTEs for operational support to IT. We propose to allow none of the requested amount. GHD and the UR agree that no new evidence has been provided that would change our initial view from the draft determination. It would be expected that all staff have a proportion of training time as part of their normal activity so would not expect to fund additional staff to facilitate this. We are of the opinion that the need for additional resources required to support the delivery of the IT projects should be captured and justified within the relevant project initiative.		

Table 22: Initiative H.1: Rebranding

Strategic Initiative - H.1: Rebranding			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need			
Options (including risk)			
Robust and efficient cost			

Benefits			
Justification for being additional to baseline	• SONI would have to demonstrate both need and that these activities are not part of baseline costs for additional allowance to be provided.	• SONI has reviewed the approach to engagement following internal reorganisation and this initiative has been removed from our request. We have combined our approach into one new strategic initiative.	• We are content with this approach.
FD summary view	No additional allowance has been provide for this initiative. This is in line with the draft determination and SONI's revised position.		

Table 23: Initiative H.2: Education and Engagement Campaign

Strategic Initiative - H.2: Education and Engagement Campaign			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	• We do not consider this project to be well supported in terms of need or benefit.	• SONI has reviewed the approach to engagement following internal reorganisation and this initiative has been removed from our request. We have combined our approach into one new strategic initiative.	• We are content with this approach.
Options (including risk)			
Robust and efficient cost			
Benefits			
Justification for being additional to baseline			
FD summary view	No additional allowance has been provide for this initiative. This is in line with the draft determination and SONI's revised position.		

Table 24: Initiative H.3: Pre-Application Process and Data Availability

Strategic Initiative - H.3: Pre-Application Process and Data Availability			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	• Demonstration why existing connection staff cannot provide the service.	• This work is outside the scope of the services provided by the current connections staff. • While the staff currently facilitate pre-application engagement, the information is limited to that available in the formal publications under SONI's TSO licence. • SONI's ambition is to deliver a higher quality service that will make NI an attractive place for investment in generation and system services provision.	• We remain unconvinced by the explanations provided. • SONI has indicated that they already facilitate pre-application engagement to some extent.
Options (including risk)			
Robust and efficient cost	• Evidence of why the costs should fall on electricity consumers when those seeking a connection are the beneficiary.	• SONI would be currently unable to charge for this service through connections charges under TSO licence conditions 25 & 30 – any additional charges could be subject to legal challenge. • This initiative is intended to help attract new entrants and ease the process, by adding additional charges we would be placing a barrier to entry.	• From a principle perspective, we disagree that the costs should fall on electricity consumers when the benefit accrues to the connector. • Whilst we recognise the issue of cost recovery for applications that don't connect, this is always a risk. • However, we do disagree that the costs cannot be recovered from applications that do proceed to connection. Indeed the TCCMS already provides for this to some extent when it states,

			""If SONI has carried out relevant feasibility studies in relation to the connection in advance of the submission of the connection application, then a reasonable credit may be allowed in respect of these feasibility studies. This will be at the sole discretion of SONI and will be dependent on SONI being able to reasonably use the outcome and results of the feasibility studies to produce the Connection Offer."
Benefits	• Service level agreements for the pre-application process. • Frequency of data publication proposals.	• These will be developed if the funding is approved. It is premature to draft this type of information before we understand the resources that will be available to deliver this initiative. • SONI indicated in our business plan submission that data would be published on a monthly or quarterly basis. We are unable to provide a more detailed answer without the resources necessary to set up this initiative.	• We do not consider the responses to be adequate. • Data publication and service level agreements might be considered to be the forecast outputs of the activity. • It is not unreasonable for SONI to provide this detail prior to funding.
Justification for being additional to baseline	• Unclear why the existing connection staff cannot undertake this activity		• Unclear why the existing connection staff cannot undertake this activity
FD summary view	Whilst we are generally supportive of the initiative activity, it is still unclear why the existing connection staff cannot undertake this activity and why these costs must be recovered from the general electricity consumer. We are in disagreement with the SONI position that the costs cannot be charged to applicants where the work results in a connection offer. Based on our deliberations, no additional allowance has been provide for this initiative. We would however anticipate that improvements in this area should be facilitated and SONI should undertake the activity.		

Table 25: Initiative H.4: Industry Partnerships

Strategic Initiative - H.4: Industry Partnerships			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	For funding to be provided SONI would need to demonstrate all of the following: • What is deficient in current engagement and why this is the case. • What activity proposed is above and beyond BAU engagement. • How SONI will incorporate two-way engagement and feedback. • How SONI will engage with new technology and market participants.	• SONI has reviewed the approach to engagement following internal reorganisation and this initiative has been removed from our request. We have combined our approach into one new strategic initiative.	• We are content with this approach.
Options (including risk)			
Robust and efficient cost	For funding to be provided SONI would need to demonstrate all of the following: • 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.	• SONI has reviewed the approach to engagement following internal reorganisation and this initiative has been removed from our request. We have combined our approach into one new strategic initiative.	• We are content with this approach.
Benefits			
Justification for being additional to baseline	• SONI is well-established now in engaging with stakeholders on gaining support for its infrastructure projects. Many of the activities listed are BAU.	• SONI has reviewed the approach to engagement following internal reorganisation and this initiative has been removed from our	• We are content with this approach.

		request. We have combined our approach into one new strategic initiative.	
FD summary view	No additional allowance has been provide for this initiative. This is in line with the draft determination and SONI's revised position.		

Table 26: Initiative H.5: Improving Industry Communication and Understanding

Strategic Initiative - H.5: Improving Industry Communication and Understanding			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need	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.	• SONI has reviewed the approach to engagement following internal reorganisation and this initiative has been removed from our request. We have combined our approach into one new strategic initiative.	• We are content with this approach.
Options (including risk)			
Robust and efficient cost			
Benefits			
Justification for being additional to baseline	• Initiative activity is BAU as far as we are concerned.	• SONI has reviewed the approach to engagement following internal reorganisation and this initiative has been removed from our request. We have combined our approach into one new strategic initiative.	• We are content with this approach.

FD summary view	No additional allowance has been provide for this initiative. This is in line with the draft determination and SONI's revised position.

Table 27: Initiative H.6: Dedicated Customer Account Team

Strategic Initiative - H.6: Dedicated Customer Account Team			
DD quality assessment	**Recap of UR draft determination actions and comments**	**SONI draft determination response position and rationale**	**UR view of SONI meeting draft determination actions**
Rationale for consideration and Need			
Options (including risk)			
Robust and efficient cost			
Benefits			
Justification for being additional to baseline	• Initiative activity is BAU as far as we are concerned.	• The current method of interaction for customers engaging with the TSO is entirely ad hoc communication directly with the various teams within SONI, as there is no funding to support a specialist single point of contact. • The diversity of customers and scope of the work is increasing, with evolving customer needs and many new entrants with limited experience of developing transmission scale generation and demand connections. • While some of this work may fall within the scope of the connection charges, the majority of it falls outside those boundaries.	• We do not consider the TSO responses to be adequate. • Whilst recognising increased customer diversity, the issue appears to be one of organisation rather than of resource. • A single point of contact seems like a sensible idea but one which should already be undertaken.

		• This initiative will provide customers with a single point of contact within SONI and help create new relationships, while managing existing ones.	
FD summary view	Based on the SONI responses we are not minded to provide an additional allowance. It is our view that this activity is already funded and SONI should undertake it.		

Initiative H.7: Transforming Engagement

8.3 Besides the original initiatives, SONI submitted a new engagement initiative to replace the previous request under H1, H2, H4 and H5. The new initiative makes application for an additional £1.9m over the price control split as follows:

Table 28: Costs for initiative H7

Cost Type	Methodology	Source of Cost Data	Cost Data Validation	Cost Calculation
Transforming SONI Engagement through Understanding				
Undertake assessment of stakeholder needs by segment	Bottom Up Cost	Estimate based on previous experience	Internal Review	70,000
Specific learning projects – research	Bottom Up Cost	Estimate based on previous experience	Internal Review	200,000
Improved Digital Content and Engagement				
Additional 1 x FTE Digital Content Specialist	Bottom Up Cost Assessment	Standardised FTE Costs	Internal Review	400,000
Website and Digital Content, including Engagement Platform (Capex)	Bottom Up Cost Assessment	Estimate based on previous experience	Internal Review	300,000
Engagement and Partnership Activities				
Additional 1 x FTE Technical Engagement Specialist	Bottom Up Cost Assessment	Standardised FTE Costs	Internal Review	400,000
SONI Engagement Vehicle including fit-out and running costs (Capex)	Based on search for comparators	External Cost Research	Internal Review	115,000
Consultation Event Costs[1]	Bottom Up Cost Assessment	Previous experience	Internal Review	100,000
Key Stakeholder Partnership Programme	Bottom Up Cost Assessment	Previous experience	Internal Review	325,000
Total				**1,910,000**

8.4 We welcome the detail provided and the fact that SONI has amended plans in light of SECG and UR feedback. In terms of the activity we are still unconvinced about the value and additionality of some of the proposed activities. As a consequence, we have provided the following allowance above existing base levels:

1) £300k in capex to update the website, digital content and develop the engagement platform and green energy app.

2) One additional staff member to facilitate the website content and digital engagement.

3) £70k in opex in year one of the price control to undertake an assessment of stakeholder needs and engagement priorities.

8.5 This results in a combined allowance of £765k for the initiative. We would anticipate that the TSO will present the stakeholder needs assessment conclusions to the regulator upon completion. We would also expect that this work will allow SONI to bring forward further plans with respect to improving engagement and any associated resource requirements.

[REDACTED TABLE 55]