

SONI Annual Performance Report

2022 – 23

Appendix 2

Role 2 Independent Expert

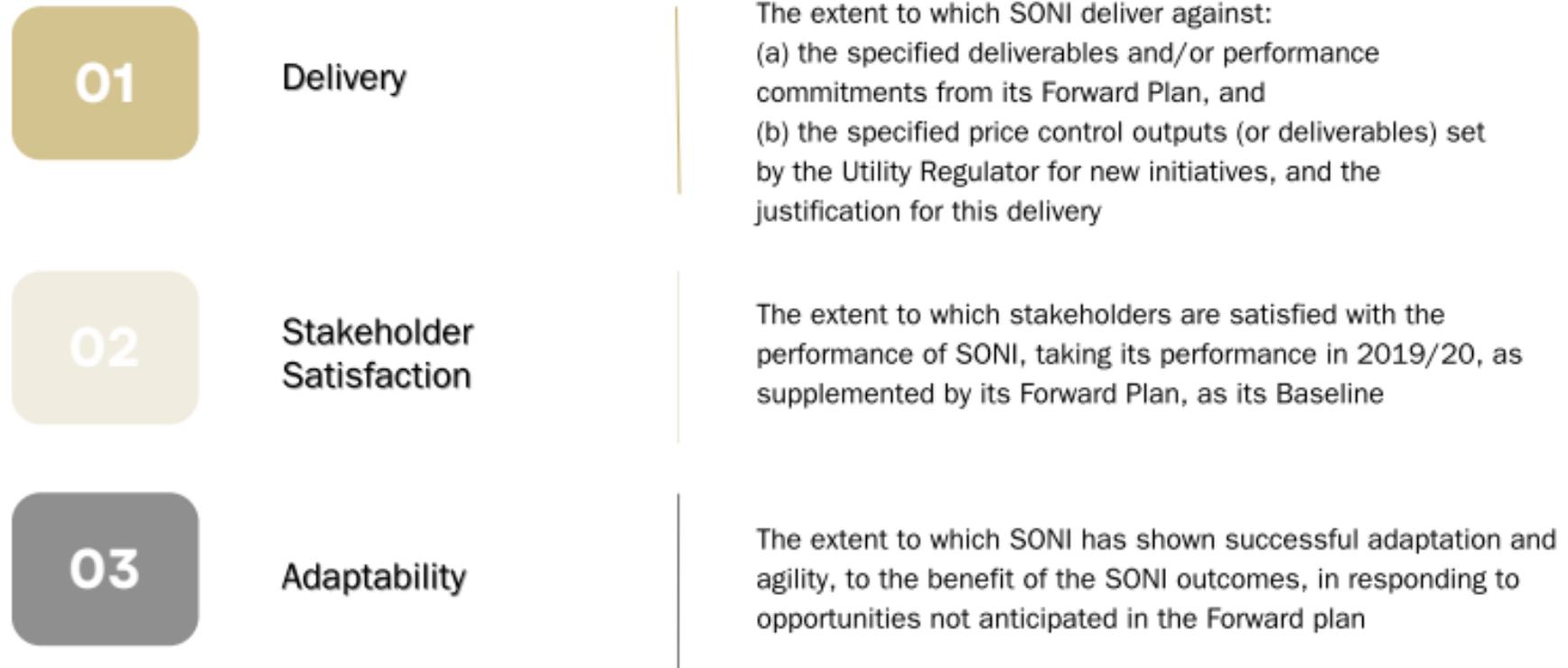
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Role 2 Independent Expert – Assessment Criteria

SONI's performance will be assessed by an independent panel and the UR on the following criteria:



For consistency and based on the advice contained in the UR's Evaluative Performance Framework Guidance document¹, we have applied the above criteria to the SONI Performance Report.

Figure 1 Assessment Criteria

¹ [epf-guidance.pdf \(uregni.gov.uk\)](https://www.uregni.gov.uk/epf-guidance.pdf)

Role 2 Independent Expert – Plan Delivery

Figure 2 summarises the position at end of September 2023 for each of the projects included in the 2022-23 SONI Forward Work Plan.

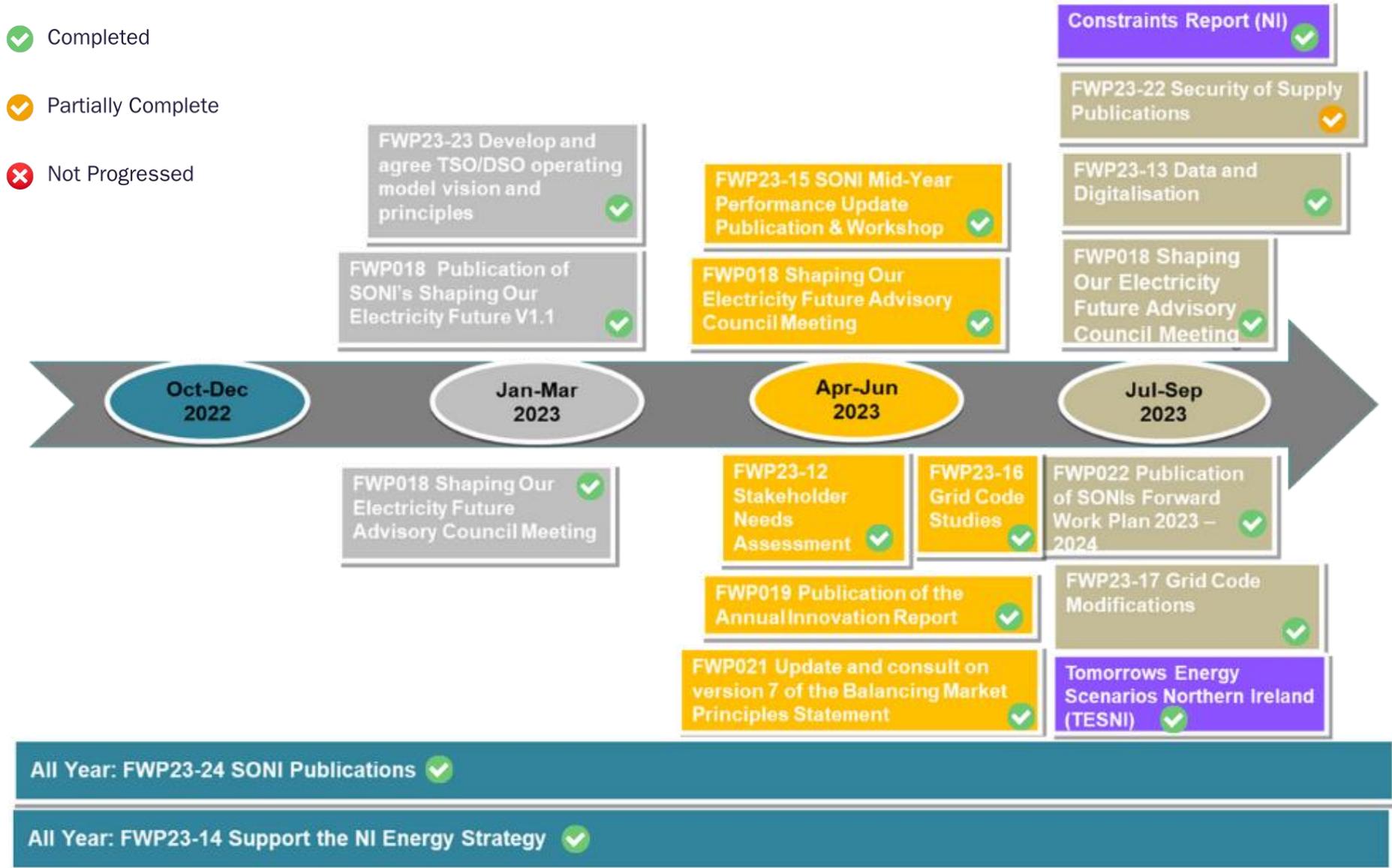


Figure 2 Overview of Projects

Summary of Role 2 Deliverables



Figure 3 Role 2 Delivery Pie Chart

19 Milestones:

- **18** Completed ✓
- **1** Partially Completed ✓

The 1 remaining milestone which is not complete is a **delay outside of SONI's Control**

SONI has completed 2 Additional Deliverables in this space.

The table below provides a complete view of the projects presented within the Forward Work Plan across Role 2 Independent Expert.

PROJECT ID	PROJECT NAME	MILESTONE	STATUS
FWP018	SOEF	Advisory council	
FWP018	SOEF	SOEF V1.1 Publication	
FWP23-23	SONI TSO-DSO Operating Model	Develop and agree the TSO – DSO operating model vision and principles	
FWO018	SOEF	Advisory council	
FWP23-12	Stakeholder Needs Assessment	Stakeholder Engagement and the timely provision of the stakeholder needs assessment.	
FWP019	Annual Innovation Report	Publication	
FWP23-15	SONI Mid Year Performance Review	Publication of short report	
FWP23-15	SONI Mid Year Performance Review	Stakeholder workshop	
FWP021	Balancing Market Principles Statement	Version 7 publication	
FWP23-16	Grid Code Studies	Providing outcome of the studies considering minimum generation parameters for Grid Code to Grid Code Review Panel and UR	
FWO018	SOEF	Advisory council	
FWP23-13	Data & Digitalisation	Agree open data sharing with NIE Networks	
FWP23-14	Support the NI Energy Strategy	Support 5 identified actions in DfE's Path to Net Zero Action Plan Active participation in relevant Working Groups associated with Energy Strategy	
FWP022	SONI Forward Work Plan 2023/24	Publication FY24 FWP	
FWP23-17	Grid Code Modifications	Battery Grid Code Modifications RoCoF Modifications	
FWP23-22	Security of Supply Publications	Publications - GCS & Winter Outlook	
FWP23-24	SONI Publications	Publications over the period to include the All-Island Transmission System Performance Report and the Annual Renewable Energy Curtailment and Constraint Report	

Figure 4 Deliverables

Cost Scale

Based on feedback on the 2022/23 forward workplan, SONI has created a Cost Scale in order to assist the audience in understanding the scale and/or importance of a project, and detailed where on this scale each project lies. The costs indicated are SONI related costs and do not cover any costs accrued by any stakeholder SONI may be collaborating with on said project. We have applied the cost scale to the projects listed under this Role.

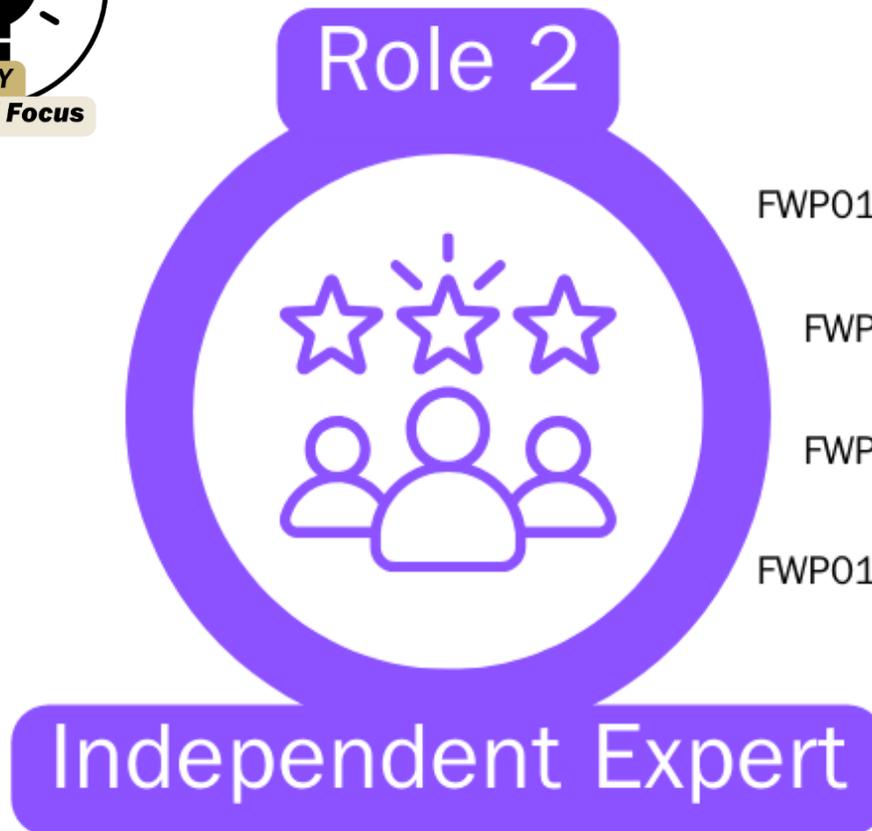
This scale applied is detailed below:

Table 1 Cost Scale

Low	Medium	High	Very High
£0 - £500k	£500k - £1M	£1M - £5M	£5M +

Key Areas of Focus

In the 2022/23 Forward Work Plan, SONI highlighted our key areas of focus for the period, which include strategic projects that SONI deems to be of utmost importance for both SONI and Northern Ireland consumers. These projects are highlighted throughout this document and delivery of these areas of work is summarised below.



FWP018: Shaping Our Electricity Future Version 1.1 ✓

FWP23-12: Stakeholder Needs Assessment ✓

FWP23-14: Support the NI Energy Strategy ✓

FWP019: Annual Innovation Report ✓

Figure 5 Role 2 Key Areas of Focus

Deliverables

Table 2 FWP018: Shaping Our Electricity Future Version 1.1 and Associated Engagement Activities

Deliverable	FWP018: Shaping Our Electricity Future Version 1.1 and Associated Engagement Activities
<p>Description of Activities</p>	<p>SONI published its Shaping Our Electricity Future Roadmap at the end of 2021. Since this publication, there have been changes to government policy in Northern Ireland.</p> <p>In Northern Ireland, the Climate Change Act (Northern Ireland) 2022 has set an 80% RES-E target by 2030. As a result, we considered it appropriate to review and update the Shaping Our Electricity Future Roadmap before the end of 2022 in response to these policy changes. We intend to publish this updated version “Shaping Our Electricity Future V1.1” in February 2023.</p> <div> </div> <p>On 22 July 2022 SONI published its Shaping Our Electricity Future V1.1 – Call for Inputs². This call for inputs was held for a period of 6 weeks to be used to gather views from stakeholders on what should be considered in the update.</p> <p>SONI also hosted an industry focused webinar which took place on 11 August 2022. This was held while the call for inputs remained open as this type of forum can be used not only for SONI to gather feedback on stakeholder views, but for stakeholders to inform each other of their views and this may encourage a more detailed response from stakeholders. Through this event³ we were able to engage directly with stakeholders, identify what themes were coming from stakeholders and therefore use this information to be incorporated appropriately into the V1.1 update. SONI is using these engagements to welcome feedback and comments from industry and encourage the provision of any information which industry considers relevant.</p>
<p>Delivery</p>	<p>Position as of 30 September 2023:</p> <p>Part 1 – January Advisory Council – Complete</p> <p>Part 2 – “Shaping our Electricity Future V1.1” – Complete</p> <p>Part 3 - May Advisory Council – Complete</p> <p>Part 4 - September Advisory Council – Complete</p>
<p>Date Revision</p>	<p>Shaping our Electricity Future V1.1</p> <p>SONI has been engaging with DAERA in relation to Climate Action Plan for NI. We shared our view on power sector modelling and the impact on carbon emissions, and which is linked to the emerging position based on the technical modelling parameters of SOEF v1.1. SONI was collaborating in further</p>

² [SONI SOEF Preparing for 80% Report Final.pdf](#)

³ [PowerPoint Presentation \(soni.ltd.uk\)](#)

	<p>knowledge sharing with DAERA. It is important for SONI that this engagement was undertaken prior to publishing SOEF V1.1 and therefore SONI published later than anticipated in July 2023.</p>
Stakeholder Satisfaction/Engagement	<p>SONI held progress update sessions in January/February 2023, and pre-publication sessions in May/June 2023 with key stakeholders including UR, NIE Networks, DfE and DAERA. Feedback from these sessions was extremely positive, with the quality of the engagement undertaken by SONI highlighted and welcomed.</p> <p>In addition, SONI (in conjunction with EirGrid) established and hosted a number of advisory council meetings. The dates of these meetings are summarised below. SONI hosted one additional meeting than those indicated in the Forward Work Plan.</p> <p>Meeting 3 – January 2023 Meeting 4 – March 2023 Meeting 5 – June 2023 Meeting 6 – October 2023</p> <p>The Material from these meetings is published at the link below: Shaping Our Electricity Future (soni.ltd.uk)</p>
Adaptability	<p>As an all-island project, the project team has had to respond quickly to a number of revisions to policies and targets in Ireland, including the publication of sectoral emissions limits in July 2022 and Climate Action Plan 2023 in December 2022. This has required fast revisions to assumptions and subsequent modelling. This was in addition to the engagement with DAERA on the Climate Change Act for Northern Ireland.</p> <p>During preliminary work, the challenge with delivering 80% RES-E targets led the project team to perform an assessment of a wide range of flexibility technologies to ensure the targets could be met; this work was beyond the original scope of the project.</p> <p>During the course of the project, assumptions for some technologies in NI were amended to align with updated assumptions NIE Networks made for its RP7 workplan. At the same time, assumptions for large scale generation and demand from low carbon technologies from SOEF were used by NIE Networks to inform the RP7 submission.</p> <p>SONI was able to adapt an emissions calculation tool to perform some exploratory analysis into changes in emissions in the power sector out to 2030 to help inform DAERA’s work in preparing a Climate Action Plan for NI.</p>
Cost Scale	Low

Table 3 FWP23-12: Stakeholder Needs Assessment

Deliverable	FWP23-12: Stakeholder Needs Assessment	
<p>Description of Activities</p>	<p>SONI plans to undertake a Stakeholder Needs Assessment with the aim of using this material to develop a Stakeholder Engagement KPI.</p> <p>The stakeholder needs assessment will take the form of a public consultation to gather information and views across all stakeholders and cover the entirety of the SONI business and projects which are in progress or planned. This is targeting a consultation in early 2023.</p> <p>SONI will use the feedback provided to facilitate the development of a Stakeholder Engagement KPI. This is targeted to be completed by June 2023.</p>	
<p>Delivery</p>	<p>Position as of 30 September 2023: Complete</p>	
<p>Date Revision</p>	<p>The research was completed in September 2023, and the report was delivered to the Head of Communications and Engagement in October 2023. The project experienced a short delay due staff turnover within SONI and the appointment of a new Head of Communications and Engagement in Q2 2023.</p>	
<p>Stakeholder Satisfaction/Engagement</p>	<p>Due to the nature of this project, extensive stakeholder engagement took place to inform the development of the Stakeholder Needs Assessment. Over 90 SONI stakeholders were identified across different areas of the organisations and different stakeholder groups and approached to participate in a mixture of in-depth interviews or a quantitative survey. Stakeholders were identified by key SONI subject matter experts as key targets to approach. In total, 28 stakeholders participated in the research following three approaches with invitations to contribute.</p> <p>The stakeholder research considered areas such as perceptions of SONI, the areas SONI should be prioritising, SONI’s strengths and areas which require improvement and views in relation to how SONI engages. It included the following groups of stakeholders:</p> <ul style="list-style-type: none"> • General public • Customers (Connections) • Market participants • Regulatory • Industry • Government and political representatives • Business Groups • Civic society and other representative bodies <p>In addition, an online survey between June 28, 2023, and July 10, 2023, of a representative sample of 500 adults ages 21+ in Northern Ireland was commissioned and undertaken by Penta. The survey considered the surveyed public’s views in relation to key areas of energy policy, such as security of supply, consumer priorities and NI’s renewable energy targets. The survey also considered the public’s understanding and perceptions of SONI and gauged their desire to hear from SONI further.</p> <p>The stakeholder aspect of the research found that 86% of stakeholders who participated were very (36%) or somewhat (50%) satisfied with their engagement with SONI.</p> <p>Key findings included:</p> <ul style="list-style-type: none"> • Generally speaking, SONI engages at the right cadence and through the right methods for current stakeholders. • There is a good understanding of SONI’s role. 	

	<ul style="list-style-type: none"> • The areas stakeholders engage with SONI most frequently on are: new grid infrastructure, future energy demand and supply, system operations and connections to the grid. • According to stakeholders, the top issues facing the grid are: meeting NI’s renewable energy targets; developing enough infrastructure to manage more renewable energy and ensuring a safe, reliable, consistent supply of electricity. • Stakeholders think that SONI should prioritise the following areas in the next 5 years: having enough resources to do the job; having knowledgeable people and providing useful, accurate, consistent communication to all constituencies. • SONI strengths are seen as: communicating at my level of understanding; having knowledgeable people, being committed to renewable energy and having a safe, reliable, secure supply of electricity. • Priority areas for improvement were identified as: ensuring customers can connect to the grid in a timely fashion, having enough resources to do the job and planning and upgrading grid infrastructure. <p>This research will be a vital component in developing SONI’s Stakeholder Management Strategy. It will also provide invaluable insights to inform the development of the stakeholder engagement approach for SONI’s forthcoming Price Control process.</p>
Adaptability	<p>This is the first time SONI has undertaken an independently commissioned stakeholder needs assessment covering a wide range of themes and areas of the organisation. The development of an internal working group of subject matter experts provided crucial support to the independent research provider to appropriately engage with stakeholders to ensure the more accurate findings possible.</p>
Cost Scale	<p>Low</p>

Table 4 FWP23-13: Data and Digitalisation

Deliverable	FWP23-13: Data and Digitalisation
<p>Description of Activities</p>	<p>SONI exists in an environment where we are a data driven organisation. Leveraging and sharing data is a key enabler for the transformation of the power system for future generations. SONI recognises that there is a gap between where we are today, and the future data capabilities needed.</p> <p>A joint working group has been established with NIE Networks and the first meeting took place in April 2022. SONI and NIE Networks will be meeting regularly (every 3 to 4 weeks) to progress a programme of work which both parties have agreed. This is in order to develop a joint approach to data and digitalisation where appropriate and to work collaboratively on initiatives such as the development of an NIE Networks open data portal, which was demonstrated at the UR’s Data and Digitalisation Workshop in September 2022. This will have direct links to the SONI SmartGrid Dashboard⁴ so together we present “one version of the truth”, in that our data is aligned.</p>
<p>Delivery</p>	<p>Position as of 30 September 2023: Complete</p>
<p>Date Revision</p>	<p>SONI and NIE Networks jointly developed a ‘Data Strategy Principles’ document which was agreed by both parties and shared with the UR in May 2023. This paper documents learning from industry, how we can work together, promote open data and how we can improve data sharing in common areas of interest. Therefore, the deliverable was fully achieved.</p>
<p>Stakeholder Satisfaction/Engagement</p>	<p>SONI and NIE Networks met on several occasions between October 2022 and September 2023 as part of the Joint Data & Digitalisation Working Group.</p> <p>We discussed areas such as:</p> <ul style="list-style-type: none"> • Data Strategy Principles’ document • OFGEM Data Best Practice Principles • System Frequency data (from SONI website) to NIEN DSO Dashboard to ensure ‘one version of the truth’ on both websites. • Initiate the digitalisation of the information transfer between NIEN & SONI • Make progress against EDTF Recommendations • Consider UR proposals for new Licence Conditions relating to Data & Digitalisation for SONI and NIE Networks <p>SONI continues to engage with NIE Networks on a number of areas relating to the NI Energy Strategy including Data and Digitalisation.</p>
<p>Adaptability</p>	<p>NIE Networks open data portal is now live. This has a direct link to the SONI SmartGrid Dashboard so together we present “one version of the truth”, in that our data is aligned. i</p> <p>In addition, the UR shared (with SONI) some draft licence modifications it is considering. SONI actively engaged with the UR providing feedback on the proposed modifications. We remain available to support the UR through this process.</p>
<p>Cost Scale</p>	<p>Low</p>

⁴ [Smart Grid Dashboard](#)

Table 5 FWP23-14: Support the NI Energy Strategy

Deliverable	FWP23-14: Support the NI Energy Strategy
<p>Description of Activities</p>	<p>SONI has reviewed the NI Energy Strategy and the 2022 Action Plan⁵ and identified 5 areas where we are actively supporting DfE in its policy development:</p> <ul style="list-style-type: none"> • Renewable electricity support scheme (AP12) • Develop an action plan to deliver 1GW of offshore wind from 2030 (AP14) • Prepare a Northern Ireland Smart Systems and Flexibility Plan (including Data/Digitalisation) (AP19) • Build further evidence and understanding on the linkages across our whole energy system (modelling) (AP22) • Review legislation and regulation requirements in the context of energy decarbonisation goals (AP21) <p>We also expect to support the development of the CBA for Smart Metering (AP20).</p> <p>SONI has and will continue to engage with DfE and other stakeholders to support the delivery of the 2022 Action Plan. This involves engagement in various working groups and regular engagement with the leads and teams within the DfE. This work also involved regular engagement with the UR and NIE Networks as well as industry (e.g. Off shore developers).</p> <p>SONI does not have visibility of the DfE Action Plan for 2023 and therefore will need to be adaptable in order to continue to support the delivery of the NI Energy Strategy. Our expectation is that many of the initiatives included in our forward work plan will complement and benefit the work being progressed by DfE.</p> <p>The key activities SONI plan to progress include:</p> <ul style="list-style-type: none"> • Maintain regular schedule of meetings between the relevant government departments and SONI • Arrange briefings with relevant stakeholders on key SONI outputs (e.g. GCS, SOEF, TESNI, etc.) • Representation on relevant working groups and influence to align with internal work plans to ensure consistency and efficiencies. • Partnership arrangement with NIE Networks – joint working to support DfE deliverables
<p>Delivery</p>	<p>Position as of 30 September 2023: Complete</p>
<p>Date Revision</p>	<p>Active participation in relevant Working Groups associated with Energy Strategy</p> <ul style="list-style-type: none"> • SONI has actively participated in the DfE’s Offshore Working Group; we have undertaken analyses and prepared reports and presentations to ensure that discussions are well informed. • We have provided input to the DfE’s work to develop a support mechanism for renewable generation. • We have provided insights to the DAERA work on the Carbon Budgets for Northern Ireland and made a full response to that consultation. • We have participated in the Smart Systems and Flexibility work undertaken by DfE. • SONI staff have participated in the steering group overseeing the development of the strategy. • Engaged with DfE and responded to a Data and Information Request in relation to Smart Meters <p>This work is continuing into the next reporting year, with DfE’s annual plans aligned to calendar years.</p>



⁵ [The Path to Net Zero Energy. Safe. Affordable. Clean. \(economy-ni.gov.uk\)](https://www.economy-ni.gov.uk)

	<p>The timing of SONI's input to this NI Executive Strategy is driven by the workplan of the relevant government departments. We have delivered all inputs within the relevant timeframes.</p> <p>SONI's role in the development and delivery of this strategy will be ongoing for the foreseeable future. We will continue to support this vital work across all relevant workstreams.</p>
Stakeholder Satisfaction/Engagement	SONI is delivering its input to the development of the strategy through a range of fora, where we are one of many interested stakeholders. In these groups we are both sharing our expertise and listening to other viewpoints. SONI has a unique perspective, given our role at the centre of the electricity system and we have been sharing the results of modelling and analyses to inform discussions.
Adaptability	The government department workplans were not published until part way through the SONI Forward Work Plan year. We have been flexible within our planning & resourcing to ensure that we have been able to accommodate these externally driven timelines and have made staff available for this work despite conflicting priorities.
Cost Scale	Low

Table 6 FWP019: Annual Innovation Report

Deliverable	FWP019: Annual Innovation Report	
Description of Activities	<p>Preparation and Publication of the SONI Annual Innovation Report.</p> <p>A key business improvement that we will be undertaking over the period will be the preparation and publication of our Annual Innovation Report. As part of this annual innovation reporting process, we will seek to consult on our multi-year innovation programmes.</p> <p>The proposed strategic innovation programmes are SONI’s view of the crucial areas of innovation that need to be investigated to ensure we can respond effectively to the challenges ahead.</p> <p>SONI plans for the Annual Innovation Report to be published in February 2023, with a consultation to be open for feedback from February 2023 to March 2023. SONI will then consider all responses provided and use this feedback to inform our decision-making process on which projects stakeholders consider bringing the most benefit to the transmission system and grid security.</p> <p>A final version of the Annual Innovation Report will then be published by April 2023.</p>	
Delivery	Position as of 30 September 2023: Complete	
Date Revision	<p>The report was delivered 31 March 2023. However, additional time was required to complete the consultation response, as some consultants requested additional time to formulate their response submission. We took all consultant responses into account and sought the opinion of internal SMEs when addressing relevant responses related to their fields of expertise. Therefore, the version including the consultation response was published later.</p>	
Stakeholder Satisfaction/Engagement	<p>On the 20th of February 2023, EirGrid and SONI published the Annual Innovation Report for consultation. This consultation utilised the new consultation portal, and for transparency, the full submissions are available for viewing on the respective portals. There was a total of four responses to the consultation, three through the EirGrid portal, one through the SONI portal. One of the respondents did not permit the sharing of their name. However, the other three respondents are listed below:</p> <ul style="list-style-type: none"> • Wind Energy Ireland, • EDF Renewables, and • Northern Ireland Electricity Networks <p>Consultants viewed the content of the Annual Innovation Report positively and were largely supportive of the proposed focuses. Only minor changes were required to the initial report based on these responses.</p> <p>Please see the <i>2022 Annual Innovation Report Consultation Response</i> available here.</p>	
Adaptability	<p>The team quickly adapted to the new consultation response timeline, managing to publish the initial report before the deadline, while simultaneously developing the consultation response Annex. The team set up contact with relevant SMEs to deliver accurate feedback and applied this communication to the text.</p> <p>Going forward SONI will consider formalising the review timeline (including external consultation), so as to avoid any delays related to planning. However, the 2022 Annual Innovation Report received only minor points related to review from external consultants, advising SMEs and Group Regulation, so can therefore be considered a success.</p>	
Cost Scale	Low	

Table 7 FWP23-15: SONI Mid-Year Performance Review

Deliverable	FWP23-15: SONI Mid-Year Performance Review
<p>Description of Activities</p>	<p>Publication of a Mid-Year Performance Review and Industry Workshop</p> <p>As part of the Evaluative Performance Process, SONI will be providing a mid-year update on the deliverables which are detailed within this Forward Work Plan for 2022-2023. This will involve a publication which will detail the progress made to date on each project, what has been achieved and what is to be achieved by September 2023.</p> <p>SONI will also hold an industry workshop to present our mid-year update to stakeholders and be available for questions from stakeholders on our achievements to date and planned deliverables over the second half of the period.</p>
<p>Delivery</p>	<p>Position as of 30 September 2023:</p> <p>Publication of Mid-Year Update - Complete</p> <p>Mid-Year Update Workshop - Complete</p>
<p>Date Revision</p>	<p>The Mid-Year Performance Report⁶ was published on 28th April and SONI invited customers and stakeholders to attend a virtual workshop⁷ on 17th May.</p>
<p>Stakeholder Satisfaction/Engagement</p>	<p>The attendees of SONI's presentation represented a wide range across industry:</p> <ul style="list-style-type: none"> • Utility Regulator • Evaluative Performance Framework Independent Expert Panel • Renewable NI • Department for the Economy • NIE Networks • ESB • ABO Wind • Light Source BP • VIOTAS • Electric Land • Consumer Council • Secure Meters • Heron Energy <p>SONI provided our stakeholders with progress updates on all projects detailed within our Forward Work Plan and engaged in valuable discussions with key stakeholders. SONI received positive feedback following this process.</p>
<p>Adaptability</p>	<p>This report was the first of its type within the Evaluative Performance Cycle. The development of this report and the framework as whole, required an incredible amount of input and collaboration across the SONI business.</p>
<p>Cost Scale</p>	<p>Low</p>

⁶ [SONI-Mid-Year-Performance-Update-2022-23.pdf](#)

⁷ [SONI-Mid-Year-Update-Presentation.pdf](#)

Table 8 FWP022: SONI Publication of the Forward Work Plan 2023 – 2024

Deliverable	FWP022: SONI Publication of the Forward Work Plan 2023 – 2024
Description of Activities	<p>Continued implementation of the Utility Regulators Evaluative Performance Framework.</p> <p>During the period, SONI will be progressing our implementation of the Evaluative Performance Framework (EPF). This will include following the processes involved in a standard year of the EPF as per the guidance issued by the UR. A key process which occurs during the period will be the publication of our annual Forward Work Plan for the period 2023 – 2024 which will be targeted for the end of September 2023.</p> <p>Over the period SONI will be monitoring the progress of the 2022 – 2023 plan. By the end of December 2023, SONI will receive feedback from the UR and Independent Panel on our plan for the period. The UR will also invite stakeholders to provide submissions on the 2022 – 2023 plan following its publication. These opportunities for feedback will be significant to SONI in considering its preparation for our 2023 – 2024 Forward Work Plan.</p> <p>Following receipt of the feedback, SONI will begin the planning of next year’s plan, reviewing all feedback and assessing this against the changes made from the 2021 – 2022 plan and this publication. SONI will use this feedback to inform our 2023 – 2024 plan. The initial phase will be using the feedback provided to assess the layout and structure of the 2023 – 2024 Plan. Following this, SONI will commence preparation of the 2023 – 2024 Plan whilst maintaining an awareness internally of the workshops, consultations and various engagement activities that are ongoing and the opportunities to incorporate feedback from these events, as well as maintaining an awareness of developing policies with regards to the DfE’s Energy Strategy Action Plan and the UR’s Forward Work Programme alongside policy and legislative changes.</p> <p>The 2023 – 2024 Forward Work Plan will then be published by the end of September 2023.</p>
Delivery	Position as of 30 September 2023: Complete
Date Revision	Not Applicable
Stakeholder Satisfaction/Engagement	SONI published the Forward Work Plan for 2023/24 on 26 th September and following a 6-week consultation period (lead by the UR), SONI presented at a Stakeholder Event held by the Utility Regulator on 23 rd November.
Adaptability	The Evaluative Performance Framework requires the demonstration of continuous improvement from SONI. This development of this Forward Work Plan included adapting this report to better suit the needs and wants of our stakeholders.
Cost Scale	Low

Table 9 FWPO21: Balancing Market Principles Statement

Deliverable	FWPO21: Balancing Market Principles Statement
<p>Description of Activities</p>	<p>Consulting upon Balancing Market Principles Statement (BMPS) V7.0</p> <p>An important business improvement activity to focus on is the enhancement of the Balancing Market Principles Statement (“BMPS”). During the year, SONI reviewed the process of the BMPS, which we then consulted on with industry, stakeholders and the UR. SONI responded to the feedback received and prepared a final version for publication.</p> <p>The intention is that the Balancing Market Principles Statement is informative and comprehensive, and that it is striking a balance between detail on the technical complexity of the scheduling and dispatch process and accessibility for informed industry participants.</p> <p>This took place over the period 2022-2023, with the final version BPMS V7.0 published in June 2023.</p>
<p>Delivery</p>	<p>Position as of 30 September 2023: Complete</p>
<p>Date Revision</p>	<p>Not Applicable</p>
<p>Stakeholder Satisfaction/Engagement</p>	<p>Market Participants (MP’s) were invited to comment on any updates to the BMPS (i.e. updates to the scheduling and dispatch processes). There was good engagement from Market Participants with 7 companies providing comment on the BMPS after the 28-day consultation. The comments from the market participants varied but generally, as is the case each year with the BMPS consultation, the MP’s comments outlined their views on what should change in the scheduling and dispatch processes itself rather than how the BMPS delivers against the SEM Committee Terms of Reference, which is mandatory under our licence. They also requested further clarification on certain updates, that were related to changes that only apply in Ireland due to the introduction of Temporary emergency Generation there.</p> <p>We also engaged with the Regulatory Authority’s for final endorsement of the BMPS and the responses we had given to MP comments.</p>
<p>Adaptability</p>	<p>SONI followed a set process and had a tight window (7 days) to address any comments following the consultation.</p>
<p>Cost Scale</p>	<p>Low</p>

Table 10 FWP23-16: Grid Code Studies

Deliverable	FWP23-16: Grid Code Studies
Description of Activities	<p>A Grid Code Modification proposed⁸ has raised some complex questions as to the appropriateness of some of the technical parameters in the SONI Grid Code given the technology currently available and statutory requirements. Technical studies are required to assess the potential benefits of a change to clause CC.S1.1.3.8 of the SONI Grid Code in respect of the minimum stable generation in relation to the maximum continuous rating of generating units connected to the NI System.</p> <p>Over the period SONI will work with technical specialists to study the potential minimum generation parameters and will share the outcome with the Grid Code Review Panel and UR. Should these studies recommend that the parameters are updated, SONI will then follow the modifications process to seek UR approval to modify the code.</p>
Delivery	Position as of 30 September 2023: Complete
Date Revision	<p>The project was postponed from April 2023 to July 2023, due to a SONI-Related delay. Following a turnover in staff, a new team lead was appointed in early2023, and this appointment was a pre-requisite to the commencement of the studies. The project was initiated shortly after and given the extent of analysis to be performed, required 6 months to complete, as expected. The project was ultimately completed within budget and to a high quality.</p>
Stakeholder Satisfaction/Engagement	<p>Updates on the project were delivered at the NI Grid Code Review Panel in May and July and a resultant Grid Code modification was proposed at the Grid Code Review Panel in September. At the September Panel, agreement was reached to progress with a submission of a proposed update to the Grid Code to the UR for approval, off the back of the analysis that was performed.</p> <p>This was an important project for the Northern Ireland electricity system. Minimum generation parameters have a significant impact on the security and flexibility of the electricity system and the system’s ability to accommodate ever increasing levels of Renewables and meet Renewable Energy targets. The proposed modification to the Grid Code was first raised in 2019, so the completion of these studies, achieving agreement at the Grid Code Review Panel to progress with a proposed update to the Grid Code and submission of a modification proposal to the Utility Regulator represents a milestone for the NI Grid Code.</p>
Adaptability	Not Applicable
Cost Scale	Low

⁸ Para 6.4 - in 2021-06-25-epk-36-month-derogation-ktg6.pdf (uregni.gov.uk)

Table 11 FWP23-17: Grid Code Modifications

Deliverable	FWP23-17: Grid Code Modifications
Description of Activities	<p>SONI expects to be delivering modifications to the Grid Code during 2022/23. These are described below and will cover:</p> <ul style="list-style-type: none"> Battery Grid Code Modifications RoCoF modifications <p><u>Battery Grid Code Modifications</u></p> <p>Objectives & Key Benefits: Incorporation of current Battery Implementation Note into Grid Codes to provide legal basis and clarity for TSOs and Industry</p> <p>Key Actions & Deliverables: Bring forward modifications to the SONI Grid Code to incorporate the existing Battery Implementation Note, conduct the related consultation and submit recommendations to UR before end 2022/23.</p> <p><u>RoCoF Modifications</u></p> <p>Objectives and key benefits: SONI has been working with industry to change the RoCoF capability of the generation portfolio in Northern Ireland to accommodate additional volumes of renewable generation. This transition and the associated testing is now at a stage where the new obligations can be codified in the Grid Code and enter into force.</p> <p>Key actions and deliverables: SONI’s consultation on the proposed modification closed at the end of August 2022. SONI will be submitting report and request for approval, with the aim of ensuring the new parameters are in effect during the year.</p>
Delivery	Position as of 30 September 2023: Complete
Date Revision	<p>Battery modification submitted to UR for approval in June 2023.</p> <p>RoCoF modification already incorporated into published Grid Code.</p>
Stakeholder Satisfaction/Engagement	Significant engagement with industry throughout both the Battery and RoCoF modification development and consultation processes.
Adaptability	Through consultation and working closely with Energy Storage Ireland and EirGrid, SONI were able to ensure that the proposed Battery Storage modification proposal was updated to ensure that it was appropriate and fit for purpose for both System Operators and Customers.
Cost Scale	Low

Table 12 FWP23-22: Security of Supply Publications

Deliverable	FWP23-22: Security of Supply Publications
Description of Activities	<p>Over the period SONI will make a number of publications which can be captured under Security of Supply. These include:</p> <p>All Island Generation Capacity Statement SONI is required to produce an annual Generation Capacity Statement (“GCS”), in accordance with Condition 35 of the TSO Licence. The development, planning and connection of new generation capacity to the transmission or distribution systems can involve long lead times and high capital investment.</p> <p>Consequently, this report provides information covering a ten-year timeframe. The main purpose of the GCS is to inform market participants, regulatory agencies and policy makers of the likely minimum generation capacity required to achieve an adequate supply and demand balance for electricity for the next decade.</p> <p>SONI will be publishing the next GCS for the period 2023-2032 prior to Autumn 2023, subject to Regulatory Approval from UR.</p> <p>Winter Outlook The Winter Outlook presents a more detailed view focusing on the upcoming winter in Northern Ireland. This document is published annually in October and helps inform the electricity industry and supports preparation for the coming months. We study the expected generation capacity and the forecast demand to determine if there is adequate generation capacity margin.</p> <p>Security of Supply is a significant priority for SONI, and we continue to engage with the UR and DfE over the period to ensure the continuity of a safe, secure and reliable Transmission System.</p>
Delivery	<p>All Island Generation Capacity Statement – in progress.</p> <p>Winter Outlook – Complete</p>
Date Revision	<p>Winter Outlook: Published 16th October.</p> <p>All Island Generation Capacity Statement:</p> <p>On 25th September 2023, SONI submitted the Generation Capacity Statement (GCS) for 2023 – 2032 for approval in line with Condition 35 of our TSO Licence. SONI continues to engage with the UR. The GCS cannot be published until SONI received approval from the UR.</p>
Stakeholder Satisfaction/Engagement	<p>Winter Outlook: There were a number of briefings done to key stakeholders ahead of publication – DfE and UR were kept informed of Winter Outlook up to publication, but we also attended briefings alongside NIE Networks to CEO and Directors of NI Councils, Manufacturing NI, NI Local Government Association, NI Business Alliance. Really positive feedback was received throughout these engagements.</p>

	<p>SONI has been working throughout this year to proactively communicate the issues arising around security of supply with the UR and DfE and to ensure that our work in this area is coordinated and consumer focused.</p> <p>All Island Generation Capacity Statement: SONI participated in monthly engagements with the TSO in Ireland (EirGrid), and the regulatory authorities UR and the CRU. Feedback from regulators is that working level engagements have been very collaborative.</p> <p>SONI actively survey the conventional power plant owners in Northern Ireland, and we have received timely feedback from the relevant stakeholders throughout the process.</p> <p>SONI has also actively engaged with DfE on the GCS to explain the process and the key messages. DfE hosted SONI at their offices and were appreciative of the engagement.</p> <p>Early engagement with the regulators is incorporated into the Generation Capacity Statement process. On the 28th of March '23, SONI presented the demand forecasts to the UR for the Generation Capacity Statement (GCS) for 2023 – 2032, this was subsequently followed by sharing a draft copy of the demand section of the report on the 17th of May '23 to enable feedback to be received and incorporated.</p> <p>The generation assumptions including outage statistics were presented on the 8th of June '23, followed by the draft section of the report shared for review on the 16th of June 23. The draft copy of the preface, exec summary and introduction to the report was shared for review on the 6th July '23. Subsequently the combined full report, incorporating feedback on from the regulators on the individual sections, was shared for review on the 28th of July '23. This then led to a formal request for approval in September 2023.</p>
Adaptability	<p>Winter Outlook: This was delivered on schedule.</p> <p>Wider response to emerging issues: In addition to the work that we foresaw in this area, SONI has delivered considerable additional value in our role as trusted advisor to DfE and UR around Security of Supply. To assist them in their statutory roles, SONI undertook considerable modelling to assess the implications of delays to new generation and the impact of operational constraints within their permits. We investigated all potential solutions to the scenarios identified that are within our licensed activities. This work included undertaking a procurement exercise to explore the potential to secure additional short term sources of system services at economic cost and initiating technical studies to inform work on possible medium term solutions.</p> <p>All Island Generation Capacity Statement: SONI have demonstrated adaptability in the latter stages of the annual cycle where we have made senior staff available to support round table discussions with the UR. In the current edition of the GCS, it is important for SONI to create a GCS summary document that will provide power system adequacy insights to inform policy makers, regulators and industry to take the appropriate actions.</p> <p>The approval process for the document is complex and challenging; particularly given the different roles of the UR and the CRU.</p>
Cost Scale	Low

Table 13 FWP23-23 SONI TSO – DSO Operating Model

Deliverable	FWP23-23 SONI TSO – DSO Operating Model
Description of Activities	<p>Develop and agree TSO/DSO operating model vision and principles.</p> <p>The aim of the project is to ensure that SONI and NIE Networks are working together in a collaborative and effective manner to jointly address electricity system and customer needs, and to deliver whole-of-system solutions to deliver on the Governments’ policy ambitions.</p> <p>SONI and NIE Networks are working together and have developed a TSO-DSO joint programme of work.</p> <p>Development of the enduring TSO-DSO Operating Model is a key focus of the next iteration of the SONI/NIEN multi- year plan.</p> <p>Key Deliverable: March 2023 - Agreed Vision and Principles for the TSO-DSO Operating Model, supported where appropriate by a set of illustrative end-to-end use cases</p>
Status	Position as of 30 September 2023: Complete
Date Revision	Not Applicable
Stakeholder Satisfaction/Engagement	There was extensive engagement between SONI and NIE Networks in the development of the operating model vision and principles, including at least five day-long or half-day in-person workshops attended by subject matter experts and senior management, with additional calls to progress documenting and agreeing the outcomes.
Adaptability	A number of pragmatic approaches were agreed between SONI and NIE Networks in order to deliver the output of this project. This included recognising where certain simplified approaches to the operating model may be ok given certain assumptions and may be ok earlier on in processes such as trials, while noting the aspects which may need to be considered further with different assumptions and for enduring processes. It also included considering which aspects could be discussed in detailed design stages rather than at this stage of the higher-level vision and principles.
Cost Scale	Low

Table 14 FWP23-24: SONI Publications

Deliverable	FWP23-24: SONI Publications
Description of Activities	<p>Over the period SONI will make a number of publications. These include:</p> <p>All Island Transmission System Performance Report The All-Island Transmission System Performance Report include transmission system data and performance statistics which are key to ensuring that stakeholders are informed and measure our success in achieving our decarbonisation targets. We will have a strong focus towards our 75% SNSP which is now an operational policy, Low Carbon Inertia Services, and Minimum Number of Conventional Generation Units, which are key to ensuring we achieve our decarbonisation outcome.</p> <p>SONI is required by our licence obligations to publish this Report by the end of June each year, which we exceeded in 2022 by providing this in May 2022. We are therefore setting a target date for publication earlier than anticipated at May 2023.</p> <p>Annual Renewable Energy Constraint and Curtailment Report SONI also publishes an Annual Renewable Energy Constraint and Curtailment Report⁹ on our website each year. It is prepared in collaboration with EirGrid, as TSO for Ireland, in order to cover the Northern Ireland, Ireland and the All-Island aspects of the electricity system. The Annual Renewable Energy Constraint and Curtailment Report details the level of dispatch down energy for the year, as required under European¹⁰ and Member State Legislation¹¹. SONI will be publishing the 2022 – 2023 report by August 2023.</p> <p>SONI has provided the following publications for a number of years:</p> <ul style="list-style-type: none"> • Short-Term Demand Forecasting Methodology • Wind and Solar Forecasting Methodology • Demand Forecast (ENTSO-E) • Demand Forecast (Smart Grid Dashboard) • Demand Forecast (BMI) • Wind Forecast (ENTSO-E) • Wind Forecast (Smart Grid Dashboard) • Wind Forecast (BMI) <p>Since 2019, SONI has made improvements in our Energy Management System (EMS) which we continue to implement and as such now also offer additional detail as follows:</p> <ul style="list-style-type: none"> • Demand Forecast (Market Data Static Report on SEM-O website) • Demand Forecast (Market Data Dynamic Report on SEM-O website)

⁹ <https://www.soni.ltd.uk/media/documents/Annual-Renewable-Constraint-and-Curtailment-Report-2021-V1.0.pdf>

¹⁰ Article 16C of the 2009 Renewable Energy Directive (2009/28/EC) states: “If significant measures are taken to curtail the renewable energy sources in order to guarantee the security of the national electricity system and security of energy supply, Members States shall ensure that the responsible system operators report to the competent regulatory authority on those measures and indicate which corrective measures they intend to take in order to prevent inappropriate curtailments.”

¹¹ Article 4.4 of Statutory Instrument 147 of 2011 states: “If significant measures are taken to curtail the renewable energy sources in order to guarantee the security of the electricity system and security of energy supply, the transmission system operator shall report to CRU on those measures and indicate which corrective measures it is intended to take in order to prevent inappropriate curtailments.”

	<ul style="list-style-type: none"> • Aggregated Wind Forecast (Market Data Static Report on SEM-O website) • Aggregated Wind Forecast (Market Data Dynamic Report on SEM-O website) <p>SONI also jointly (with EirGrid) produces a number of publications which are made available on the TSO section of the SEMO website, alongside the SONI website. These are detailed in Section 6 of the Balancing Market Principles Statement¹². SONI will continue to provide accurate and timely information for the weekly publication of the Operational Constraints Updates.</p>
Status	Position as of 30 September 2023: Complete
Date Revision	Not Applicable
Stakeholder Satisfaction/Engagement	Not Applicable
Adaptability	Not Applicable
Cost Scale	Low

¹² <https://www.soni.ltd.uk/media/documents/EirGrid-and-SONI-Balancing-Market-Principles-Statement-V6.0.pdf> - Section 6 Publications, pages 55 to 59

Additional Deliverables

As initially highlighted in the Mid-Year Performance Report¹³, in addition to the extensive suite of projects included in the 2022/23 Forward Work Plan, SONI has been adaptable and has initiated two additional projects based on feedback from stakeholders.

Table 15 Tomorrows Energy Scenarios Northern Ireland (TESNI)

Deliverable	Tomorrows Energy Scenarios Northern Ireland (TESNI)
<p>Description of Activities</p>	<p>SONI is responsible for a safe, secure and reliable electricity transmission system, now and in the future – we must accommodate existing and future energy demands. Shaping Our Electricity Future included extensive stakeholder engagement to understand the electricity system investments required to address decarbonisation and energy security needs up to 2030. Looking out beyond 2030, Tomorrow’s Energy Scenarios 2023 has been developed to outline a range of credible pathways for Northern Ireland’s clean energy transition, with specific focus on what this means for the electricity transmission system from 2035 to 2050.</p> <p>TESNI has been developed to show how the electricity system can tend towards our decarbonisation goals for Northern Ireland (informed by the sixth Carbon budget and the Climate Act 2022). Following significant changes in energy and climate policy, we have adopted a new approach for TES 2023 scenarios and analysis. Scenarios have been developed to represent various approaches and speed of decarbonisation, while targeting a Net Zero Power System from 2040-2050.</p> <p>In 2023, SONI undertook:</p> <ol style="list-style-type: none"> 1. Model development. 2. Pre-consultation engagement with targeted stakeholder groups – government, industry, and academia. 3. Incorporated feedback and published the final consultation report in early October.
<p>Status</p>	<p>Complete</p>
<p>Stakeholder Satisfaction/Engagement</p>	<p>Engagement at an early stage was seen important so during development of TES 2023, pre-consultation engagement was undertaken with key stakeholders in Northern Ireland. This included government departments, Utility Regulator, NIE Networks and the gas system operator.</p> <p>Stakeholder feedback was considered and informed the final consultation report. Pre-consultation stakeholder satisfaction was assessed based on the level of engagement, interest and feedback received during engagements.</p>
<p>Adaptability</p>	<p>Development of TES 2023 built on preceding analysis and reports for Shaping Our Electricity Future and TESNI 2020. It was informed by published and developing policy in Northern Ireland and Great Britain, Ireland and Europe.</p> <p>SONI reacted to feedback to the Forward Work Plan and incorporated this delivery into our plans in addition to the other projects. This is in recognition of the strategic nature of this project. In addition, SONI has had to practice adaptability throughout development of TES 2023. This included:</p> <ul style="list-style-type: none"> • Stakeholder alignment on the scope and approach to be taken for TES 2023

¹³ [SONI-Mid-Year-Performance-Update-2022-23.pdf](#)

	<ul style="list-style-type: none">• Developing the TES 2023 scenario framework, modelling and assessment of electricity demand and generation• Concurrent and integrated analysis and reporting for Northern Ireland and Ireland• Engagement with stakeholders pre-consultation and addressing stakeholder feedback where appropriate
Cost Scale	Low

Table 16 Constraints Report (NI)

Deliverable	Constraints Report (NI)
Description of Activities	<p>In order to develop a constraints report for Northern Ireland, the following activities have been undertaken over the 2022/23 period:</p> <ul style="list-style-type: none"> • Development of internal project plan/programme of work and Terms of Reference • Identification of key stakeholders (internal and external) • Agreement on scenarios and sensitivities and internally formalise agreements on study assumptions. • Preparation Assumptions Document • Engagement externally on assumptions (21st February) • Data collection and Plexos model update • Running the study cases/simulations and processing of results • Preliminary results communicated to internal stakeholders. • Briefing webinar with UR (28th June) • Conduct webinar to communicate final key results to customers (29th June) • Preparation of report and get internal approvals. • Engagement with DfE to brief them on results (4th October) • Publication of results to the SONI website (12th October) • Responding to questions for Renewables NI (RNI) • Final webinar with industry stakeholders (7th December)
Status	Complete
Stakeholder Satisfaction/Engagement	<p>The following activities were undertaken:</p> <ul style="list-style-type: none"> • Engagement externally on assumptions with RNI – this took the form of a webinar (21st Feb) and then responses to additional queries via email. • Briefing webinar with UR (28th June) • Webinar to communicate final key results to RNI/industry (29th June) • Engagement with DfE to brief them on results (4th October) • Publication of the report (12th October) • Responding to questions for RNI following publication of the report • Final webinar with industry stakeholders - following final webinar, a survey was sent to all participants to seek their feedback. (7th December)
Adaptability	Not Applicable
Cost Scale	Low