

# **SONI Price Control 2010 - 2015**

## **Consultation Paper**

**14 January 2011**

# 1 Executive Summary

SONI Ltd (SONI) is the Transmission System Operator (TSO) for Northern Ireland and is subject to a regulated price control.

Since SONI's last price control submission, the Single Electricity Market (SEM) was introduced in November 2007 and the company underwent divestment from Northern Ireland Electricity plc (NIE) in March 2009. SONI was then acquired by EirGrid, the System Operator (Transmission and Distribution) for the Republic of Ireland. The introduction of the SEM brought considerable changes to SONI's business. It still functions as the System Operator for Northern Ireland but, in a joint venture with EirGrid, also took on additional responsibilities as Single Electricity Market Operator (SEMO)<sup>1</sup>.

Challenges identified by SONI over the duration of the next price control include:

- The EU 3<sup>rd</sup> energy package which may require SONI's role to change;
- Renewable generation targets which will entail SONI meeting an increasing level of connection requests;
- Ensuring the various codes and agreements that SONI are party to are provided with data which is accurate, validated and delivered when required;
- Retirements of key post holders and recruitment of new staff;
- A requirement to develop data storage and archiving to meet the demand for requests for detailed data analysis;
- A necessity to further harmonise the processes associated with operation and use of the transmission system due to European and SEM developments;
- Development of the Grid Code, to accommodate new types of generation connecting to the system (e.g. CHP, biomass, etc.)

The Utility Regulator has taken these factors into consideration in its price control review. The overall objective of this price control is to ensure that SONI can continue to operate the transmission system in Northern Ireland securely and efficiently, and at a reasonable cost to consumers. The Utility Regulator proposes to continue with a RPI-X type price control, designed to incentivise SONI to control its operating and capital costs. This proposed price control also includes incentive mechanisms to improve quality of service.

This consultation paper considers SONI's allowed revenue to recover its own operating costs, depreciation and a reasonable return on investment.

SONI's price control submission included a breakdown of actual costs incurred for the last price control period (2007-2010), and forecasted costs for the period 2010-2015. The Utility Regulator carried out a detailed assessment of the operating costs ("Opex") proposed by SONI, including payroll, pensions, IT and communications. A high level analysis of other Opex was completed. Any costs noted in this paper are quoted as 2010 prices. SONI's total

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<sup>1</sup> SEMO is regulated under a separate price control.

proposed Opex for the 5.5 years of this price control was £60.8m<sup>2</sup>. The Utility Regulator proposes that this allowance should be reduced to £44.9m<sup>3</sup>.

SONI also submitted proposed capital expenditure (“Capex”) requirements of £11.3m for the period. The Utility Regulator reviewed this submission and is proposing a capex allowance of £4.8m.

The cost of capital proposed by the Utility Regulator in this price control is 5.45% (pre-tax real), compared to SONI’s proposal of 6.70%.

The Utility Regulator considers it appropriate to also incentivise SONI to operate the network efficiently and reliably, particularly in the context of optimising all-island dispatch costs and integrating renewable generation. Proposed incentives for this price control relate to efficient dispatch of generation as well as increased transparency.

This consultation paper presents a Utility Regulator proposed allowed revenue for the SONI price control 2010-2015 of £64.2m, compared to SONI submission of £84.6m. Additional allowed revenue may be available to the company, dependant on performance with regard to incentives.

**Table 1: Summary of SONI Allowed Revenue**

£M	SONI Submission	Utility Regulator Proposal	% Reduction
Payroll	34.4	24.9	-28%
Pension (ongoing)	6.1	2.4	-61%
IT & Communications	10.5	9.9	-6%
Other Opex	9.0	7.3	-19%
<b>Total Opex</b>	<b>60.0</b>	<b>44.4</b>	<b>-26%</b>
Pension (deficit)	0.8	0.5	-37%
<b>Total Opex incl Pension deficit</b>	<b>60.8</b>	<b>44.9</b>	<b>-26%</b>
Depreciation	16.9	14.5	-14%
Return	6.9	4.8	-31%
<b>ALLOWED REVENUE</b>	<b>84.6</b>	<b>64.2</b>	<b>-24%</b>

All figures in the table above are quoted at 2010 prices.

The Utility Regulator welcomes views on the information presented in this consultation paper. If you wish to express a view on the content we would welcome your response. Responses should be received by 12 noon on Friday 4 March 2011 and should be addressed to:

Billy Walker and Kevin O’Neill  
Electricity Directorate

<sup>2</sup> This includes an Opex allowance of £0.8m in respect of a pension deficit

<sup>3</sup> This includes an Opex allowance of £0.5m in respect of a pension deficit

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Individual respondents may ask for their responses in whole or in part, not to be published, or that their identity should be withheld from public disclosure. Where either of these is the case, we will ask respondents to also supply us with the redacted version of the response that can be published.

As a public body and non-ministerial Government department, we are bound by the Freedom of Information Act (FOIA) which came into full force and effect on 1 January 2005. According to the remit of FOIA, it is possible that certain recorded information contained in consultation responses can be put into the public domain. Hence, it is now possible that all responses made to consultations will be discoverable under FOIA – even if respondents ask the Utility Regulator to treat responses as confidential. It is therefore important that respondents note these developments and in particular, when marking responses as confidential or asking the Utility Regulator to treat responses as confidential, should specify why they consider the information in question to be confidential.

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### 3 Introduction

SONI Ltd (SONI) is the Transmission System Operator (TSO) for Northern Ireland and is subject to a regulated price control. This consultation paper discusses the requirements, deliverables and costs associated with the SONI business for the period 2010 to 2015.

#### 3.1 Company Overview

SONI is the operator of the transmission system in Northern Ireland. It controls the flow of electrical power from the generation plants across the transmission system and onto the distribution system. It performs the role of dispatching generators on the most economic basis across the island of Ireland (in conjunction with EirGrid) while maintaining the supply of electricity in a safe, secure and stable manner.

SONI has to ensure that generation precisely balances with consumption at all times. It is required to undertake its duties in conjunction with EirGrid's licensed TSO business in the Republic of Ireland. SONI is also responsible for operating the Moyle Interconnector with Scotland under an Operating Agency Agreement with Mutual Energy Limited and for management of the transmission connection process for both generation and demand customers.

Since their last price control submission, SONI (System Operator Northern Ireland) has experienced a series of changes. The most significant of these was the introduction of the Single Electricity Market (SEM) in November 2007. Following this was the divestment of SONI from Northern Ireland Electricity plc (NIE) in March 2009 and its acquisition by EirGrid plc, the System Operator (Transmission and Distribution) for the Republic of Ireland.

The introduction of the SEM has resulted in some changes to SONI's responsibilities. It still functions as the System Operator for NI but, in a joint venture with EirGrid, also took on additional responsibilities as Single Electricity Market Operator (SEMO)<sup>4</sup>. The SEMO business is outside the scope of this paper.

#### 3.2 Regulatory Framework

SONI operates under a regulatory framework and is issued a licence by the Utility Regulator. This includes requirements relating to generation and transmission system adequacy reporting, the provision of connection offers, the accomplishment of technical standards and obligations in respect of the Moyle Interconnector (operation and administration).

SONI's revenue is determined by the Utility Regulator and is made up of a number of components as detailed in their licence:

$$M_{TSOt} = A_{TSOt} + B_{TSOt} + D_{TSOt} + K_{TSOt}$$

<sup>4</sup> SEMO is regulated by a separate price control.



In year  $t$ ,  $M_{TSO_t}$  is SONI's annual revenue cap. The use of a revenue cap is common in many price controls applied to regulated businesses. The components of the above formula can be defined as controllable or uncontrollable costs.

$A_{TSO_t}$  is the total cost estimate relating to Ancillary Services (which includes the provision of Moyle frequency response services). These costs are treated as pass-through as they are considered to be outside SONI's control.

$B_{TSO_t}$  is SONI's allowed revenue to cover their predictable and controllable costs (as defined in this price control), which includes operating costs (Opex), depreciation on the Regulatory Asset Base (RAB) and an appropriate return for investors on those assets.

$D_{TSO_t}$  encompasses unpredictable costs approved individually by the Utility Regulator. These costs are treated as pass-through as they are considered to be outside of SONI's control. Such costs are defined in the annex to SONI's licence and include:

- Costs associated with the ENTSO-E tariffs<sup>5</sup>;
- Costs of implementing the EU 3<sup>rd</sup> energy package;
- Costs associated with the SEM modifications process if it can be demonstrated that they result in material unforeseen changes to TSO systems;
- The cost of implementing other changes of law or significant policy changes; and
- Licence Fees.

$K_{TSO_t}$  is a correction facility whereby under or over-recoveries in the previous year can be collected by the business (under-recovery) or given back to consumers (over-recovery).

The focus of this paper is on the  $B_{TSO_t}$  element of the revenue formula.

### 3.3 Responses to Consultation

The Utility Regulator welcomes views on the information presented in this consultation paper. If you wish to express a view on the content we would welcome your response. Responses should be received by 12 noon on Friday 4 March 2011 and should be addressed to:

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<sup>5</sup> ENTSO is a European wide group of TSOs that SONI are part of <https://www.entsoe.eu/the-association/>

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## **4 Approach to Price Control**

### **4.1 Regulatory Principles**

The principles underpinning the regulatory proposals contained in this paper are to ensure the revenues and resulting tariffs are:

- Sustainable;
- Stable;
- Transparent;
- Predictable; and
- Cost-reflective.

These are based on best practice regulation of natural monopolies. The Utility Regulator's task essentially consists of creating a framework within which, in return for providing monopoly services to an acceptable quality, the regulated business receives a reasonable assurance of a revenue stream in future years that will cover its costs.

### **4.2 Policy Framework**

There are a number of policies which may have an impact on SONI during the next price control. These include:

- the EU 3<sup>rd</sup> energy package, currently being consulted on by the Department of Enterprise, Trade and Investment (DETI)<sup>6</sup> which involves certification of organisations and a possible re-allocation of responsibility and asset ownership;
- the facilitation of renewable connections since SONI are obliged to respond to transmission connection applications;
- regional integration, which includes EU legal requirements regarding interconnection.

The Utility Regulator is aware that there is ongoing work associated with the EU 3<sup>rd</sup> energy package which could impact significantly on the SONI TSO business. If such changes occur, the Utility Regulator proposes to review the parts of the business affected and re-open those aspects of the price control.

### **4.3 Proposed Approach**

The overall objective of this price control is to ensure that SONI can continue to operate the transmission system in Northern Ireland securely and efficiently, and at a reasonable cost to consumers.

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<sup>6</sup>

[http://www.detini.gov.uk/consultation\\_on\\_the\\_implementation\\_of\\_the\\_eu\\_third\\_internal\\_energy\\_package\\_25\\_october\\_2010](http://www.detini.gov.uk/consultation_on_the_implementation_of_the_eu_third_internal_energy_package_25_october_2010)

The Utility Regulator proposes to continue to use a RPI-X type price control for operating expenditure (Opex) to incentivise SONI to control their own costs. Therefore an Opex allowance will be proposed. The Utility Regulator proposes to continue with a revenue cap approach for SONI's tariffs.

The Utility Regulator proposes ex ante regulation for capital expenditure (Capex), providing strong incentives for cost efficiency, rather than ex-post evaluation which would incur a higher regulatory burden and lower degree of flexibility for SONI. Again it is the intention of the Utility Regulator to propose an allowance for Capex.

Any costs incurred by SONI which are unforeseen or outside of the 'normal' course of business are treated as  $D_{TSO_t}$  costs. Costs which fall under the  $D_{TSO_t}$  term are not considered in this paper, but any submissions will undergo robust analysis before receiving approval. It is the Utility Regulator's intention to minimise the number of areas considered under  $D_{TSO_t}$  approvals for the 2010-2015 price control as allowances will be used for Opex and Capex.

The Utility Regulator sent a Questionnaire to SONI which included both numerical requests and written questions that required detailed narrative answers. Responses were received from SONI along with additional written submissions on specific areas.

The Utility Regulator has assessed these submissions and taken into consideration information available from external consultants on some components of the price control.

**Question 1:** Do Respondents agree with the proposed approach for the SONI Price Control?

#### 4.4 Duration

The 2007 price control ran from 1 November 2007 to 31 March 2010. This shorter duration was to allow for the uncertainty regarding change in the Northern Ireland electricity sector.

The Utility Regulator has considered proposing that the duration of the 2010 SONI price control should be five-and-a-half years, from 1 April 2010 to 30 September 2015. This duration would provide the opportunity for incentive regulation to work effectively. The additional half year is to align the price control period to the SONI financial year and the tariff year (Oct to Sept).

Duration can have financing implications for regulated companies. Longer term controls generally give greater certainty and less perceived regulatory risk for investors, which in turn can impact on the ability to finance activities and the associated cost. A five-year duration has tended to be the norm for price controls across regulated electricity companies in the UK. As the changes to the electricity market and SONI divestment occurred relatively recently, the Utility Regulator feels that any longer duration than five-and-a-half years would be inappropriate.

From assessing the price control submission from SONI, the plans for the last 2 years of the price control are not as detailed and some of the costs (in Capex) have not been fully justified. Therefore there is an argument that the price control duration should be a shorter period and only include those costs that have detailed business plans to justify the requirements. Based on this, the Utility Regulator seeks views on whether a shorter duration would be more appropriate. An alternative option would be to have a price control period of three-and-a-half years, 1 April 2010 to 30 September 2013.

It should be noted that year one of the new price control period is nearing completion. This issue was caused by, amongst other things, delays associated with costs relating to the SONI Divestment process.

**Question 2:** What Duration to respondents deem appropriate for the SONI Price Control:

Five-and-a-half years, from 1 April 2010 to 30 September 2015

or

Three-and-a-half years 1 April 2010 to 30 September 2013?

## **5 SONI's Role and Responsibilities**

### **5.1 Business Description**

SONI consists of three main business areas:

- Grid Operations
- Commercial
- Finance.

Grid Operations contains three departments – Planning, Near Time operations and Real Time operations. The main functions and outputs of each area of business are described below.

#### **5.1.1 Grid Operations: Planning**

The Planning Department is responsible for a range of strategic transmission planning activities. Its key roles are:

- Managing access to the all-island transmission system (grid code, connection compliance, licence conditions);
- The production of annual technical reports required under SONI's licence;
- Monitoring of NIE Transmission system development;
- Setting Transmission Use of System (TUoS) tariffs;
- Managing the NI Grid code;
- Analysis of Network Capacity;
- Managing Joint EirGrid/ SONI projects;
- Emerging initiatives related to the transmission system; and
- SEM development projects.

The staff associated with new connections were funded via the  $B_{TSO_t}$  term during the 2007-2010 price control.

#### **5.1.2 Grid Operations: Near – Time**

The Near Time Department ensures that real – time operating staff have all the information they require to manage the power network. They also analyse operational incidents and generator and transmission plant performance. The duties of this department include:

- Managing the Reserve Constrained Unit Commitment software;
- Managing power system restoration plans and fuel switching arrangements;
- Business continuity planning;
- Long and short term transmission and generation outage planning; and
- Management and development of reports and forecasting tools.

#### **5.1.3 Grid Operations: Real – Time**

The Real Time department manages the operation of the NI Transmission network. The control room is continuously manned. They use an Energy Management System (EMS) and

information logging software to discharge their duties. The key responsibilities within this area include:

- Management of generation and dispatch in real time;
- System frequency, voltage & load flow control;
- Managing interconnector imports, exports and System Operator trading;
- Wind forecasting and demand profiling;
- Managing renewable outputs and special protection schemes;
- Safety Management; and
- Grid code compliance.

#### **5.1.4 Commercial Department**

This department is responsible for the interface with the Utility Regulator, the administration of the Moyle Interconnector, ancillary services and administration of invoices for tariffs. The key duties are:

- IT and telecommunications provision for all other departments;
- Processing and submission of data to the Market Operator;
- Interconnector administration;
- Operation of Harmonised Ancillary Services arrangements;
- Monitoring of compliance with licence obligations;
- Liaison with the Utility Regulator;
- Development of consultation responses; and
- Price control and tariff submissions.

#### **5.1.5 Finance Department**

Finance and Admin are responsible for accounting requirements on the SONI business including invoicing, purchasing, credit control, payments, taxation and project and asset management. This section also includes the Human Resources (HR) and legal functions.

## 6 SONI Price Control Submission

The Utility Regulator sent a Questionnaire to SONI for completion. The Questionnaire included both numerical requests and written questions which required detailed narrative answers. Initial data was received from SONI in August 2010 along with a written submission. Subsequent updates were also received.

In addition to the price control submission, SONI also submitted a six-month submission to the Utility Regulator covering Capex and Opex requirements for the period March 2010 to September 2010. The content of these submissions includes commercial information and therefore will not be published.

The price control submission for the period 2010-2015 contained:

- An Overview and Principles paper
- An Opportunity Cost of Capital paper
- A Resource Requirements paper
- A Capital Expenditure paper
- A paper containing responses to thirteen written questions.

In addition to the above, SONI also supplied the Utility Regulator with an Incentives paper (See Appendix 3).

SONI's 'Overview and Principles' paper outlines how the business has changed since the 2007 price control was introduced. Among the price control principles suggested by SONI are ensuring that sufficient resources are in place to deliver government objectives, implementing a RAB based approach, and introducing incentives.

The 'Opportunity Cost of Capital' paper sets out SONI's proposal for the opportunity cost of capital for which SONI should be remunerated for the capital it employs in carrying out its licensed functions. In conjunction with this, the Utility Regulator also employed external consultants to review SONI's submission and recommend an appropriate cost of capital for the price control. This is discussed further in section 9.

SONI's 'Capital Expenditure' paper outlines the company's Capex requirements for the 2010 price control period. The paper provides detail of the level of investment needed to ensure that the business is capable of managing connections in line with increased wind generation and increasing the use of technology to maximise business efficiency. The 'Capital Expenditure' paper also initiates the proposal for improvements to the building. This is discussed further in section 8.

The 'Resource Requirements' paper within SONI's submission profiles the additional resource requirement during the 2010 price control and includes detailed business cases for each resource required. The submission outlines how the changing role of the business, contribution to achieving government sustainability targets and ensuring a high level of safety have played a role in adding to SONI's projected resource costs between 2010 and



2015. SONI indicate that imminent retirements of key staff will ultimately entail recruitment of adequate replacements. This is discussed further in section 7.

## **6.1 Issues Emerging up to 2015**

The main changes and challenges that SONI will face over the next 5 years include:

- Adapting to any changes in SONI's role triggered by the application of the EU 3<sup>rd</sup> energy package;
- Providing offers for transmission connection requests that have been increasing due to incentives offered by government in relation to the 40% target for electricity production from renewable sources by 2020;
- Operating a system with increasing levels of wind generation including developing operational instructions, tools for wind and demand forecasting to ensure system security is maintained;
- The various codes and agreements that SONI are party to require the provision of data which is accurate, validated and delivered when required;
- A number of key post holders will retire within the next 5 years and this potential business risk must be offset with new recruitment in the context of a shortage of electrical engineering skills;
- There will be a requirement for the development of data storage and archiving to meet the demand for requests for detailed data analysis;
- Further harmonisation of the processes associated with operation and use of the transmission network due to of European and SEM developments;
- Development of the Grid Code, to keep pace with evolutions in the type of generation connecting to the system (e.g. CHP, biomass, etc.).

## 7 Opex

### 7.1 Overview of Opex

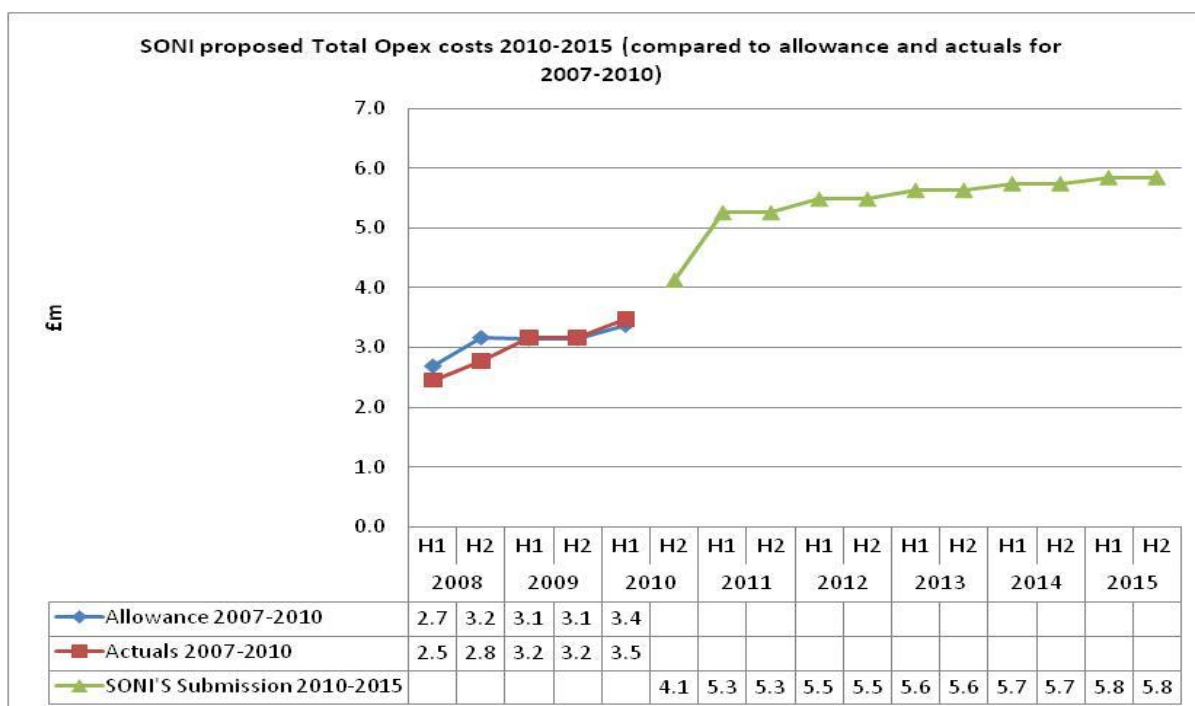
Opex is one of the elements which is covered by the  $B_{TSOT}$  term of SONI's revenue formula.

In order to determine a suitable Opex allowance for SONI for the period 2010-2015, the Utility Regulator analysed the company's allowed and actual Opex spend from 2007-2010 compared to its proposed future spend for 2010-2015. SONI experienced a change to their accounting year during the 2007-2010 price control. The Utility Regulator has made assumptions<sup>7</sup> to present the data when performing analysis to ensure that accounting periods are comparable. Where actual figures were provided for a half-year period, these have been used and analysed. All figures are in 2010 prices.

The Utility Regulator performed a bottom-up analysis of Opex and benchmarked payroll costs against corresponding data from other similar entities in Northern Ireland. The graph in Figure 1 depicts a forecast made by SONI for the price control period 2010-2015. SONI's submission for total Opex for the 2010-2015 price control period is £60.0m, plus an amount for pension deficit recovery.

It should be noted that in the graphs throughout this paper the revenues approved by the Utility Regulator under  $D_{TSOT}$  for the 2007-2010 price control have not been included. This was to allow a representation of how well SONI performed against the allowances. It also helps to explain why there is an apparent large increase in costs in the new price control period.

**Figure 1: SONI proposed Total Opex 2010-2015<sup>8</sup>**



<sup>7</sup> e.g. Costs for months 1-6 are equal to costs for months 7-12

<sup>8</sup>  $D_{TSOT}$  allowance is not included in the 'Allowance 2007-2010' figures (blue line)

A list of operating costs supplied in SONI's Questionnaire response and which are classed as being predictable and within SONI's control includes:

- Payroll;
- Ongoing pension costs<sup>9</sup>.
- IT & Communications;
- Other Opex
  - Facilities;
  - Grid Code (including Legal costs);
  - Other legal costs;
  - Other professional services;
  - Costs involved with scheduling and dispatch of wind;
  - Other statutory obligations;
  - Financing charges for Dispatch balancing costs;
  - Bank charges;
  - Other charges;
  - Central costs;
  - Insurance.

It should be noted that Rates have not been included in the above list as SONI have not yet received a Rates valuation. The Utility Regulator will work with SONI to determine a suitable allowance for Rates. This may be recovered under the  $D_{TSO}$  term.

In addition to the above, the Utility Regulator also assessed SONI's current pension deficit, details of which were supplied separately to their submission.

The costs illustrated in Figure 1 indicate a notable increase in controllable operating costs between 2009 and 2011. SONI has provided the following high level justifications:

- Growth of renewable generation which will entail an increased level of connections;
- Increasing European requirements;
- Retirement and succession planning; and
- Skills shortage.

These are discussed in more detail in the sections below.

## 7.2 Analysis of Opex

The Utility Regulator has performed a detailed analysis of those operating costs identified as making up a significant proportion of SONI's operating cost base for the 2010-2015 price control period. The costs which make up a significant proportion of Opex include:

- Payroll;
- IT & Communications;

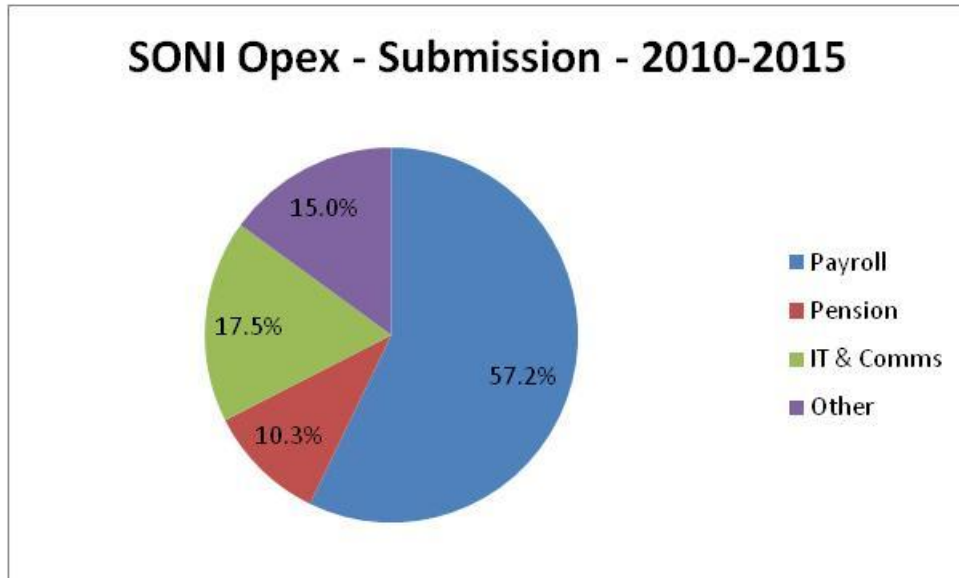
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<sup>9</sup> This excludes any deficit recovery payments.

- Ongoing pension costs.

These costs are showing in the figure below.

**Figure 2: SONI proposed breakdown of Payroll, IT & Communications, Ongoing pension costs and Other Opex 2010-2015**



The other operating costs provided by SONI were analysed collectively due to their relatively small value. A high level analysis of these costs was completed as discussed in Section 7.3.

### 7.2.1 Payroll

This section discusses the proposed payroll costs submitted by SONI and the Utility Regulator assessment of these costs.

#### 7.2.1.1 SONI Submission on Payroll

There are currently 66 staff in SONI approved by the Utility Regulator. In its price control submission, SONI have requested approval for 32 additional posts. Revenue associated with the requirement for additional staff has been requested for the following business areas:

- Grid Operations (Planning, Real-time operations and Near-time operations);
- Commercial (including IT & Communications);
- Finance (including Administration and Human Resources).

The number of staff proposed by SONI are shown in Table 1.

	Current staff level	Additional staff requested by SONI	Total staff proposed by SONI
General managers	2		2
Grid Ops – Planning	10	6	16
Grid Ops – Real Time	15	6	21
Grid Ops – Near Time	11	3	14
Commercial	19	14	33
Finance	9	3	12
	<b>66</b>	<b>32</b>	<b>98</b>

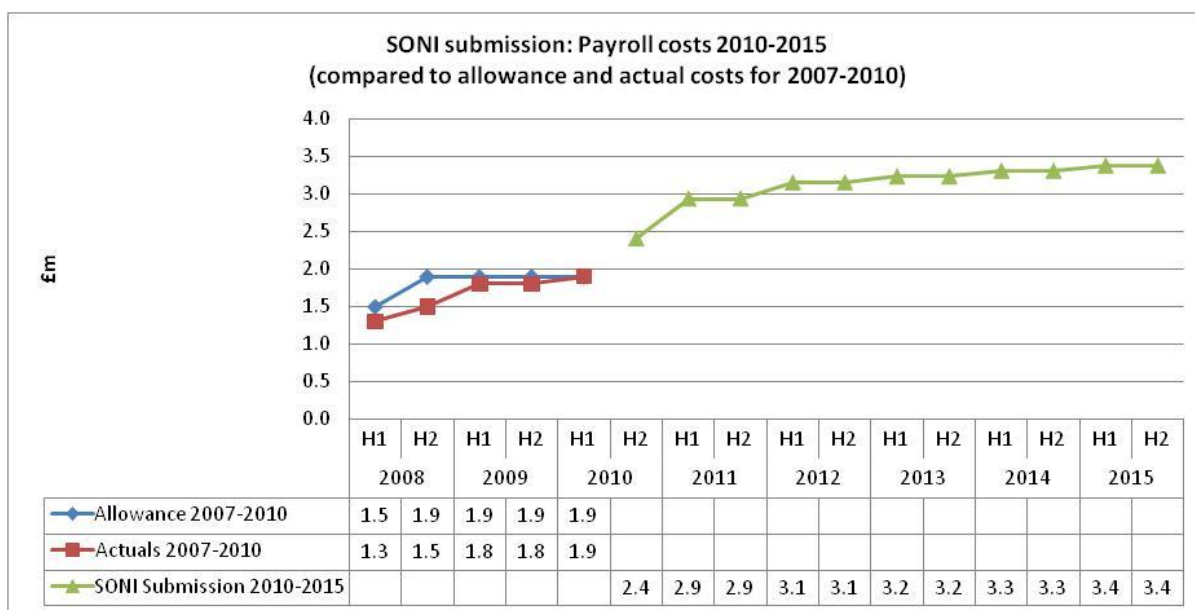
**Table 1: SONI proposed staff headcount 2010-2015**

Allowed revenue consistent with 98 staff has been proposed by SONI for the next price control period.

Business cases for each proposed additional post was provided by SONI, and each suggests which year the post will be recruited. This has been taken into account by the Utility Regulator to ensure that any additional revenue in respect of new staff is phased over the price control period. SONI have also indicated that a number of key 'Real-Time' staff will be retiring during the next price control period. The Utility Regulator has considered these retirements when analysing SONI's proposed payroll costs.

The payroll submission from SONI encompasses gross salary costs. This includes bonuses, overtime, employee pension contribution, and other benefits specific to certain levels of employee. SONI submitted payroll costs for the 2010-2015 price control period of £34.4m.

**Figure 3: SONI proposed payroll costs 2010-2015<sup>10</sup>**



The increase in SONI’s proposed total payroll revenue requirements for the 2010 price control reflects the additional thirty-two staff proposed. SONI employees who are hired under the terms and conditions of the SONI Company Agreement arrangements are eligible to receive a progress or incremental salary increase on the anniversary of their appointment to a salary band. Staff on personal contracts also have a legitimate expectation of remuneration increases and the company would encourage a more rapid progression within pay bands since it can take up to sixteen years for a ‘typical’ engineer to reach the top of the pay band.

In SONI’s submission, it states that the revenue requirement ramps up significantly in the early years of the price control because SONI intend to start recruitment immediately to employ replacements to ensure training of control room staff and backfill positions. SONI state that there will be an inevitable overlap while new recruits are in the process of up-skilling. SONI has also indicated that it is difficult to attract highly competent graduates since it is a highly specialised sector within the electricity industry.

#### 7.2.1.2 Utility Regulator Analysis of Payroll

The Utility Regulator received organisational charts from SONI which were reviewed to quantify how the business structure has changed since SONI was established as a separate organisation. The Utility Regulator is aware that SONI’s scope of work has increased with the introduction of SEM and an increase in renewable generation.

The Utility Regulator is considering an allowance for a revenue consistent with 15 additional staff. This is in addition to the 66 staff currently approved. The proposed headcount is detailed in the table below. The Utility Regulator assessed which positions are business critical and necessary to improve efficiency and customer service between 2011 and 2015. The Utility Regulator assessed which posts are necessary to ensure that licence obligations are met, and by reviewing organisational charts received from SONI.

<sup>10</sup> D<sub>T</sub>SOT allowance is not included in the ‘Allowance 2007-2010’ figures (blue line)

	<b>Current staff level</b>	<b>Additional staff requested by SONI</b>	<b>Total proposed staff by SONI</b>	<b><i>Additional staff proposed by UR</i></b>	<b><i>Total proposed staff by UR</i></b>
General managers	2		2		2
Grid Ops – Planning	10	6	16	3	13
Grid Ops – Real Time	15	6	21	1	16
Grid Ops – Near Time	11	3	14	2	13
Commercial	19	14	33	8	27
Finance	9	3	12	1	10
	<b>66</b>	<b>32</b>	<b>98</b>	<b>15</b>	<b>81</b>

**Table 2: SONI proposed staff headcount 2010-2015 compared to UR proposal**

The Utility Regulator recognises that payroll is a key area of the SONI price control and has therefore commissioned external consultants to compare the structure and headcount of SONI with other TSOs and similar businesses. Work is ongoing and the results of this report will be assessed and considered as part of the decision paper for the SONI price control. The high level analysis in this section shows the Utility Regulator’s initial position in relation to payroll costs.

It should be noted that the Planning Department currently employs 4 full time equivalent staff working exclusively on activities that are directly associated with connecting new generators to the system and ensuring that they comply with the relevant technical standards. Both the Distribution and Transmission Connection Charging Statements require connectees to fund all costs associated with compliance with the technical and commercial codes. Therefore, the Utility Regulator considers the cost of these staff to be outside the scope of the 2010-2015 price control.

SONI indicated the retirements of five key real time staff. These are likely to occur by August 2012. Replacement staff are likely to be paid a lower salary than retirees. Even if SONI have to offer competitive salaries to ensure a high standard of recruit, the reduced payroll cost realised due to these retirements can be offset against this.

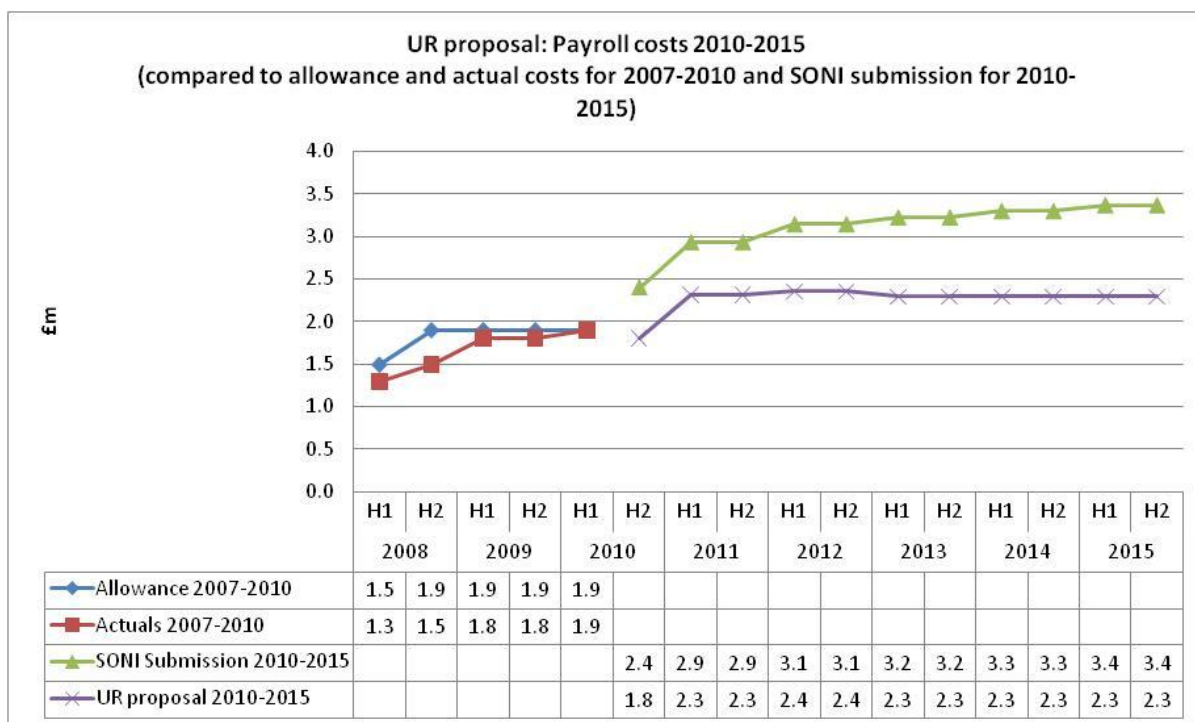
The Utility Regulator is of the view that, overall, proposed salaries are not unreasonable in comparison to other similar roles in industry.

Taking into account:

- actual payroll costs incurred during the last price control;
- unit cost per employee;
- benchmarking of salary bands;
- retirements in key real time positions during next price control (with comparably higher salary band);
- reduced proposed headcount for next price control from SONI's proposal of 32 to the current proposal of 15;
- requirement to offer competitive salaries to obtain highly competent recruits,

The Utility Regulator is considering a reduction in the SONI's proposed payroll cost from £34.4m to £24.9m for the next price control period. This is detailed in Figure 4 below. Note that the reduction in payroll costs between 2012 and 2013 is to take account of retirements which will be replaced by staff that are likely to incur lower salaries than retirees.

**Figure 4: SONI Payroll: Utility Regulator Proposal 2010-2015<sup>11</sup>**



**Question 3:** Do Respondents agree with the proposed headcount and payroll allowance for the SONI Price Control?

<sup>11</sup> D<sub>TSOT</sub> allowance is not included in the 'Allowance 2007-2010' figures (blue line)



## **7.2.2 Information Technology (IT) & Communications (Comms)**

This section discusses the proposed IT & Communication costs submitted by SONI and the Utility Regulator assessment of these costs.

### **7.2.2.1 SONI Submission on IT & Comms**

IT Opex for the SONI business is broadly split into software licence fees, maintenance and support contracts and infrastructure costs. The complexity of the issues associated with operation of the transmission system requires IT systems to assist SONI in achieving the optimum dispatch. SONI are required to provide an increasing amount of data to stakeholders. This function is underpinned by a secure and reliable telecommunications network.

On the IT side, new contracts in respect of 'IP' telephony, RCUC support, the new Energy Management System (EMS) and infrastructure support are in place. EMS was replaced during the last price control as the previous system had come to the end of its useful life. The EMS provides functionality to integrate with SEMO systems and with the EirGrid EMS.

On the Comms side, additional support is required for SONI's telecoms infrastructure post-divestment, for support of the fibre infrastructure and to cover a ten-year plan to upgrade single points of failure.

SONI has proposed an IT and Comms Opex spend over the price control period of £10.5m.

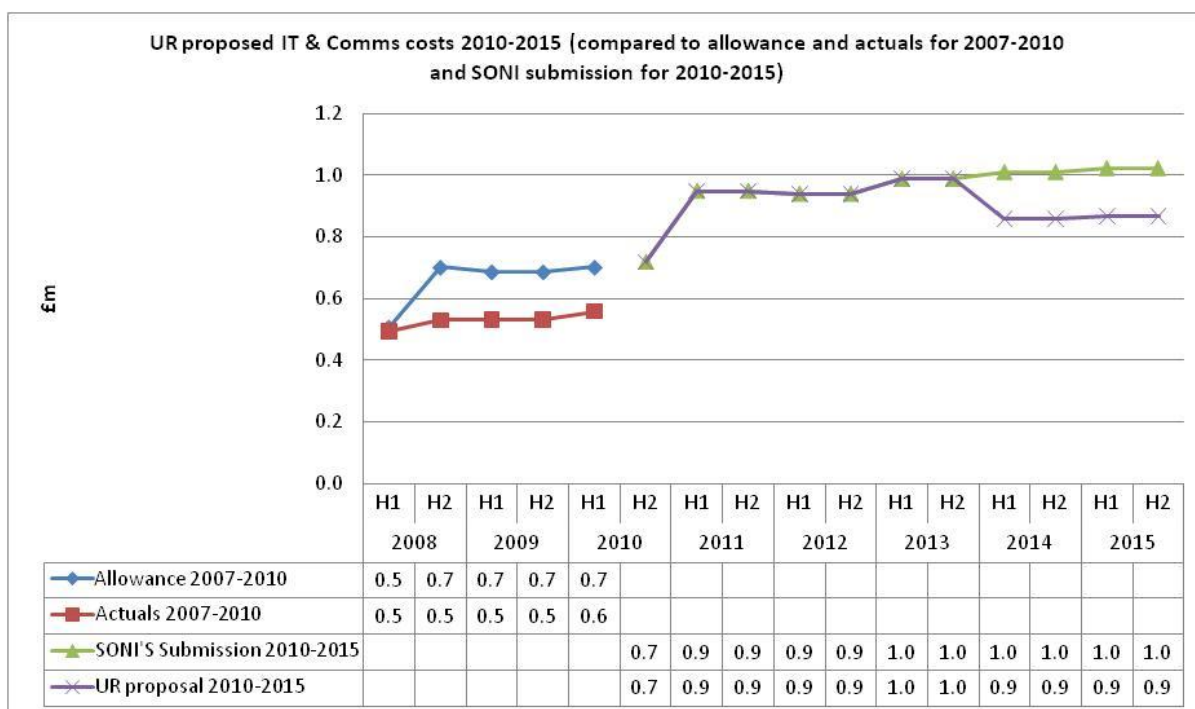
### **7.2.2.2 Utility Regulator Proposal on IT & Comms**

IT & Comms is an area which is critical to the market. SONI has provided details on this area of costs. While the Utility Regulator is satisfied with the level of detail from SONI's estimations, the current level of expenditure on IT & Comms has been considered. The Utility Regulator has liaised with SONI to understand their IT & Comms Opex requirements for 2010-2015 and it is viewed that there is little scope to reduce the IT & Comms Opex proposal.

The IT & Comms costs submitted by SONI include a number of areas of support where the costs are uniform across the price control period. Whilst the Utility Regulator do not have details of the contracts in place, it is assumed that they will be reviewed within a 3 year period. The Utility Regulator therefore proposes to apply a 15% challenge on these costs in year 4 of the price control. This therefore reduces the overall opex associated with IT & Comms.

The Utility Regulator proposes to allow £9.9m during the 2010-2015 price control period in respect of this element. This is depicted in Figure 5.

**Figure 5: SONI IT & Comms costs: Utility Regulator Proposal 2010-2015<sup>12</sup>**



**Question 4:** Do Respondents agree with the proposed IT & Comms allowance for the SONI Price Control?

### 7.2.3 Pensions

SONI's pension costs have three elements: past service liability, pension deficit and current service costs. Any past service liability for pensioners and deferred pensioners was retained by NIE at divestment. The deficit and current service costs are incurred by SONI and recovered through its Opex allowance.

SONI have indicated a total proposed spend for 2010-2015 of £6.1m in respect of ongoing pension costs. SONI has also included in their submission a provision for a pension deficit repair.

Prior to the purchase of SONI by EirGrid, SONI was an entity of the Viridian Group and SONI employees had membership of the Viridian Group Pension Scheme. SONI employees are now eligible to become members of the SONI Limited Pension Scheme which currently includes active members only. The first formal actuarial valuation report, as at 1 March

<sup>12</sup> D<sub>TOT</sub> allowance is not included in the 'Allowance 2007-2010' figures (blue line)

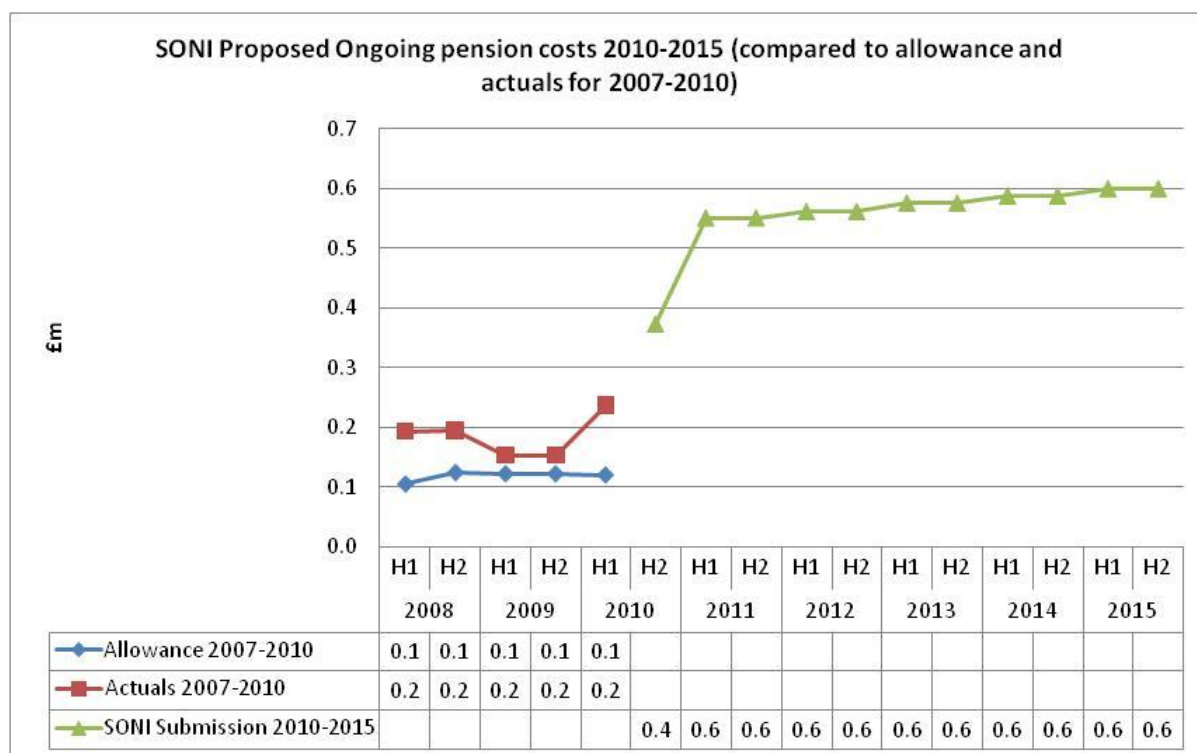
2010, has not yet been published<sup>13</sup>. Until then, SONI has provided the Utility Regulator with illustrative valuation results.

### 7.2.3.1 SONI's submission on Pensions

Currently, membership of the SONI Limited pension scheme is split between a defined benefit (DB) and a defined contribution (DC) section of the scheme. Membership comprises SONI employees along with the SEMO staff employed in SONI's licensed Market Operator activity by SONI.

An increase in SONI's submitted prospective pension costs for the 2010 price control is sizeable. The cost highlighted by SONI in their Opex submission includes the element of the pension cost in respect of ongoing costs and does not take into account any deficit repair which is required. The SONI Limited Pension Scheme has not received any benefit improvements. The increase in SONI's proposed costs in 2010 is to align with their proposed increased headcount. The ongoing proposed costs of funding the pension scheme are illustrated in figure 6:

**Figure 6: SONI proposed Ongoing pension costs 2010-2015<sup>14</sup>**



At the time of the purchase by EirGrid, it was decided by the Utility Regulator that SONI would retain the element of the Viridian Group Pension Scheme deficit which related to current active members who were SONI employees. SONI has indicated that the pension deficit as at October 2010 is c. £1.6m.

<sup>13</sup> SONI provided illustrative results, as at March 2010 from their actuary and also an updated deficit figure as at September 2010.

<sup>14</sup> D<sub>TSOT</sub> allowance is not included in the 'Allowance 2007-2010' figures (blue line)

### 7.2.3.2 Utility Regulator Proposal on Pensions

This is the first price control where pension costs of SONI are for a separate SONI pension scheme. The Utility Regulator agrees that ongoing pension costs form an integral part of SONI's labour costs so such costs will be treated under payroll costs and included in the company's Opex allowance. The Utility Regulator has reviewed benchmarking information available which indicates that SONI's proposed employer contribution is relatively high.

Any ongoing pension costs relating to SONI employees engaged in the Market Operator licensed activity that have membership of the defined contribution section is recovered by the SEMO price control to ensure cost reflectivity.

SONI have indicated that their pension deficit (at October 2010) is c. £1.6m. In the absence of a formal actuarial valuation report, the Utility Regulator has reviewed this figure. It was decided for the previous price control that any deficit attributable to SONI would be recovered via an Opex allowance and the Utility regulator has noted that the existing deficit is a relatively small amount therefore it is not proposing to change this treatment. The Utility Regulator proposes a 15 year deficit recovery period for the SONI Ltd Pension Scheme, in line with UK regulatory precedent<sup>15</sup>. It should be noted that a small number of SEMO employees are included in the Pension Deficit. This cost is regarded as not material and therefore is to be included in the SONI price control.

SONI have indicated that the 2010 valuation report will propose changes to the investment strategy for SONI's pension scheme. Contributions will be invested with a higher proportion in equities, to reflect the need for long-term investment, in line with the current membership make-up.

SONI will also lose key experienced staff in vital real time positions over the next twelve months. Such staff currently have membership of the defined benefit section of the pension scheme. The Utility Regulator assumes that any new recruits will be external, so will enter the defined contribution section of the pension scheme (since the defined benefit section is closed to new membership) which is less expensive to fund. This has been taken into consideration when assessing ongoing pension costs likely to be incurred.

Taking into account the information above, the Utility Regulator proposes to reduce SONI's proposed Pensions allowance (ongoing costs) from £6.1m to £2.4m and will allow 100% deficit recovery over a 15 year period. In line with the illustrative deficit figure supplied by SONI, the 2010-2015 price control period would allow deficit recovery of c. £0.5m. This figure will be reviewed once SONI's actuarial valuation report is received.

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<sup>15</sup> <http://www.competition-commission.org.uk/inquiries/ref2010/bristol/index.htm>

Figure 7: SONI Ongoing pension costs: UR proposal 2010-2015<sup>16</sup>

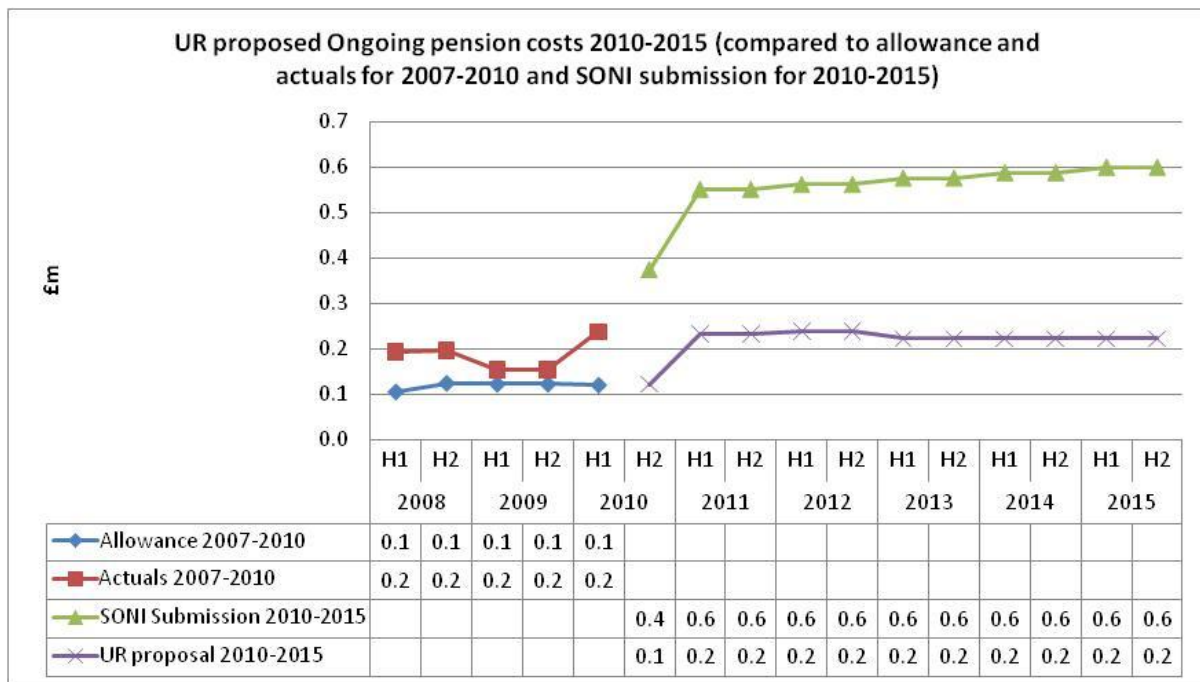
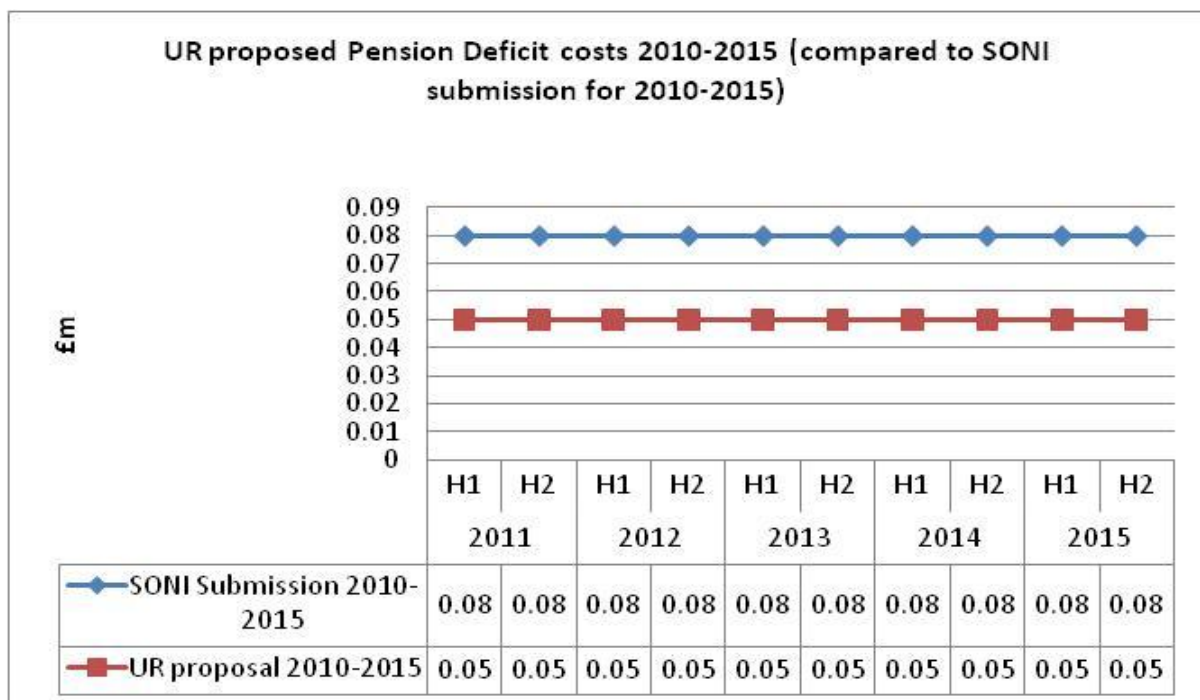


Figure 8: SONI pension deficit costs: UR proposal 2010-2015



**Question 5:** Do Respondents agree with the proposed pension allowance for the SONI Price Control?

**Question 6:** Do Respondents agree with the proposed pension deficit recovery period and treatment for the SONI Price Control?

<sup>16</sup> D<sub>TsOT</sub> allowance is not included in the blue 'Allowance 2007-2010' figures

### 7.3 Other Opex

Other Opex includes Facilities costs (which covers cleaning services, maintenance, security, mail service, switchboard, insurance and utilities)<sup>17</sup>, professional fees (which cover SONI requests for external professional services in respect of consultancy support, communications and recruitment), and general and admin costs (which include subscriptions, weather forecast, postage, printing & stationery and miscellaneous). See the list of areas in Section 7.1.

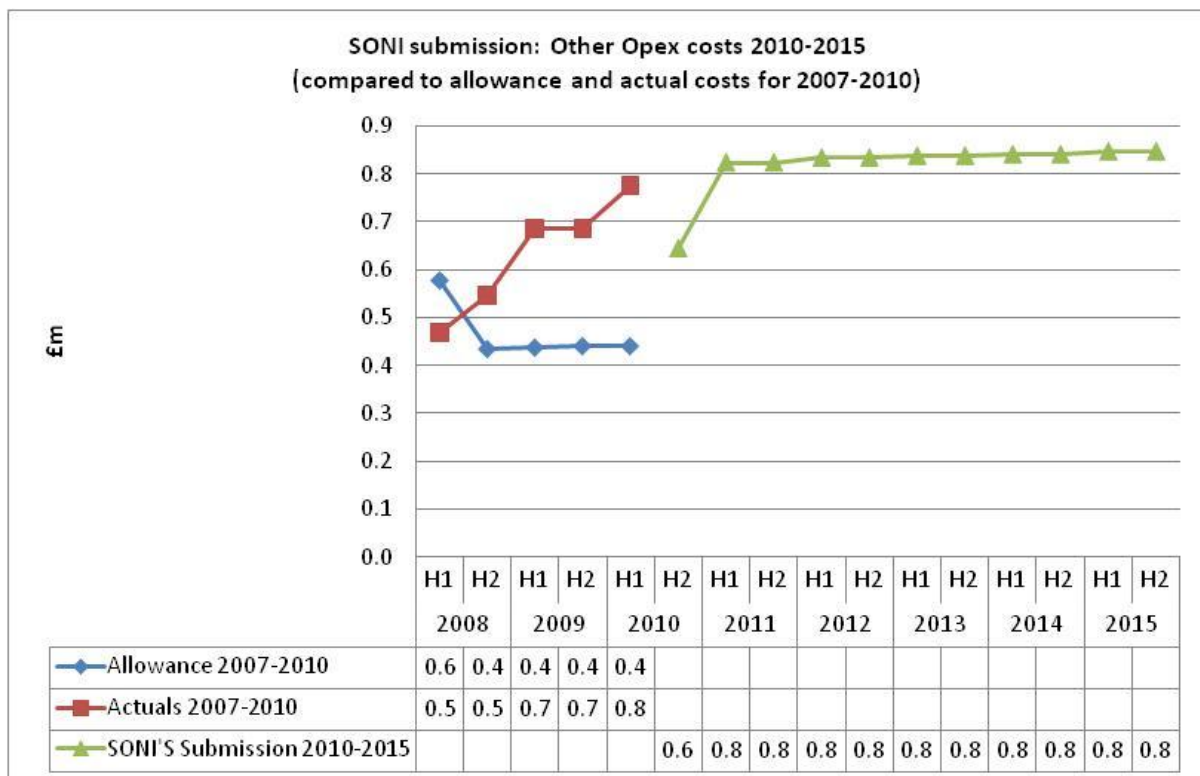
#### 7.3.1 SONI's Submission on Other Opex

SONI has submitted a Facilities cost which has increased, on average, by 30% per annum since the last price control period. SONI indicates that this is due to the separation from Viridian Group which previously supported SONI with group services.

Other professional services costs, including consultancy work and tax advice proposed by SONI, increase significantly for each year of the 2010-2015 price control period. However, such costs were previously classed as D<sub>T<sub>SOT</sub></sub> costs. This is why the actual expenditure exceeds the allowance in the period 2007 – 2010.

The total 'other Opex' spend proposed by SONI for the price control period is £9.0m.

**Figure 9: SONI proposed Other Opex costs 2010-2015<sup>18</sup>**



<sup>17</sup> These also cover NI SEMO employees, as agreed at last SEMO price control.

<sup>18</sup> D<sub>T<sub>SOT</sub></sub> allowance is not included in the 'Allowance 2007-2010' figures (blue line)

### 7.3.2 Utility Regulator Proposal on Other Opex

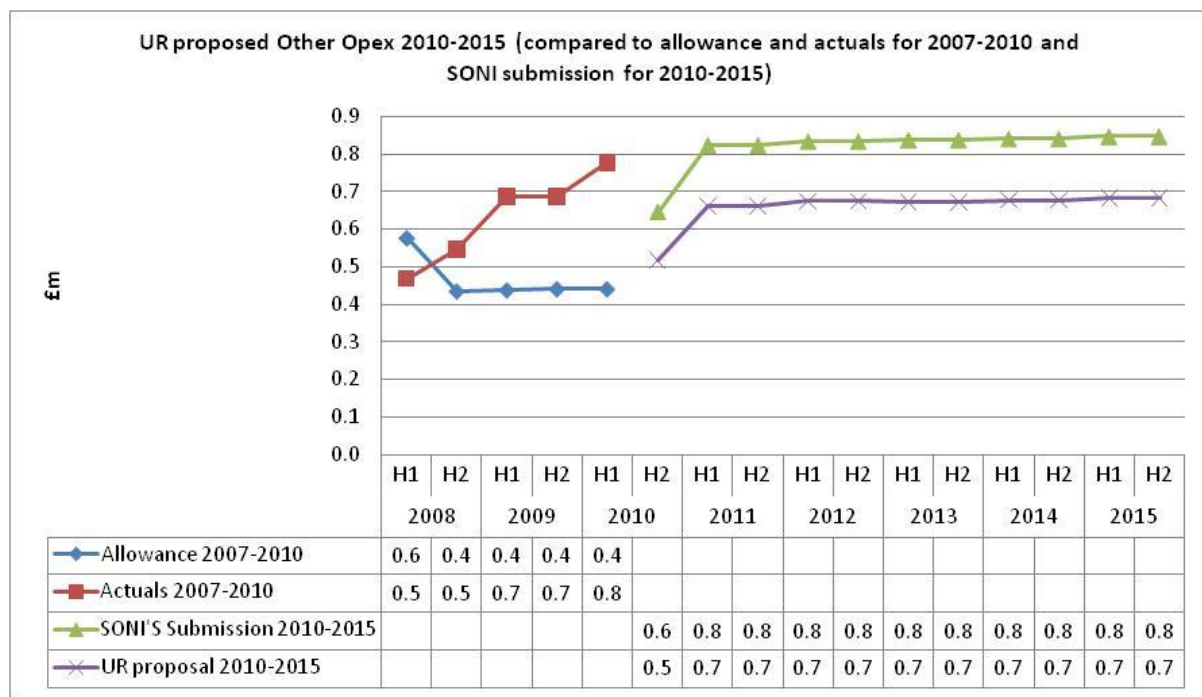
The Utility Regulator proposes to reduce the 'Other Opex' total to ensure that Facilities costs are in line with proposed headcount and Insurance costs are in line with proposed Capex, discussed in section 8. The Utility Regulator also took account of the decision in the most recent SEMO price control that it would be appropriate for SONI/ EirGrid to deal with their own facilities costs.

Other professional services costs have been re-categorised and were previously captured under the  $D_{TSOT}$  term. It is not the Utility Regulator's intention to reduce this element of SONI's submitted Opex costs. SONI needs some degree of freedom to contract external consultancy support without requiring an approval from the Utility Regulator for every project.

The last SONI price control was agreed before the System Operator and Market Operator licenses were granted and before SEM arrangements had been finalised. It was recognised that the  $D_{TSOT}$  term would be used to cover unforeseen items including divestment. The Utility Regulator is of the opinion that the use of  $D_{TSOT}$  term should be minimised for the 2010-2015 price control.

All other Opex presented by SONI for 2010-2015 are relatively stable compared to an historic trend from 2007-2010. The Utility Regulator proposes a total 'Other Opex' spend of £7.3m.

**Figure 10: SONI 'other' operating costs: UR proposal 2010-2015<sup>19</sup>**



**Question 7: Do Respondents agree with the proposed Other Opex allowance for the SONI Price Control?**

<sup>19</sup>  $D_{TSOT}$  allowance is not included in the blue 'Allowance 2007-2010' figures

## 7.4 Total Opex

The Utility Regulator is of the view that, given the proposed adjustments on payroll and other areas of Opex, SONI's allowance will be set at an efficiency level and there is no significant margin to SONI to outperform the efficiency gains of other sectors of the competitive economy. Therefore, the Utility Regulator proposes an X factor equal to zero. This is due to the detailed bottom up analysis carried out by the Utility Regulator in relation to the SONI submission ensuring efficiencies for customers are captured within the proposed allowance. It is important to note that an X of 0 assumes that SONI can improve their efficiency at the same rate as the rest of the economy, which will be challenging for SONI given that they are adapting to additional complexity within their sphere of operation.

The Utility Regulator proposes to give SONI autonomy to allocate the allowance for each category of Opex in the most efficient manner according to their business requirements. Efficiency gains can be retained by SONI and any over expenditure would conversely have to be absorbed by SONI.

The Utility Regulator proposed Opex allowance under the  $B_{TSO_t}$  term for SONI during the price control period is £44.9m<sup>20</sup>. This compares to a SONI submission of £60.8m<sup>21</sup>.

**Table 3: Total Opex proposal 2010-2015 from SONI and UR**

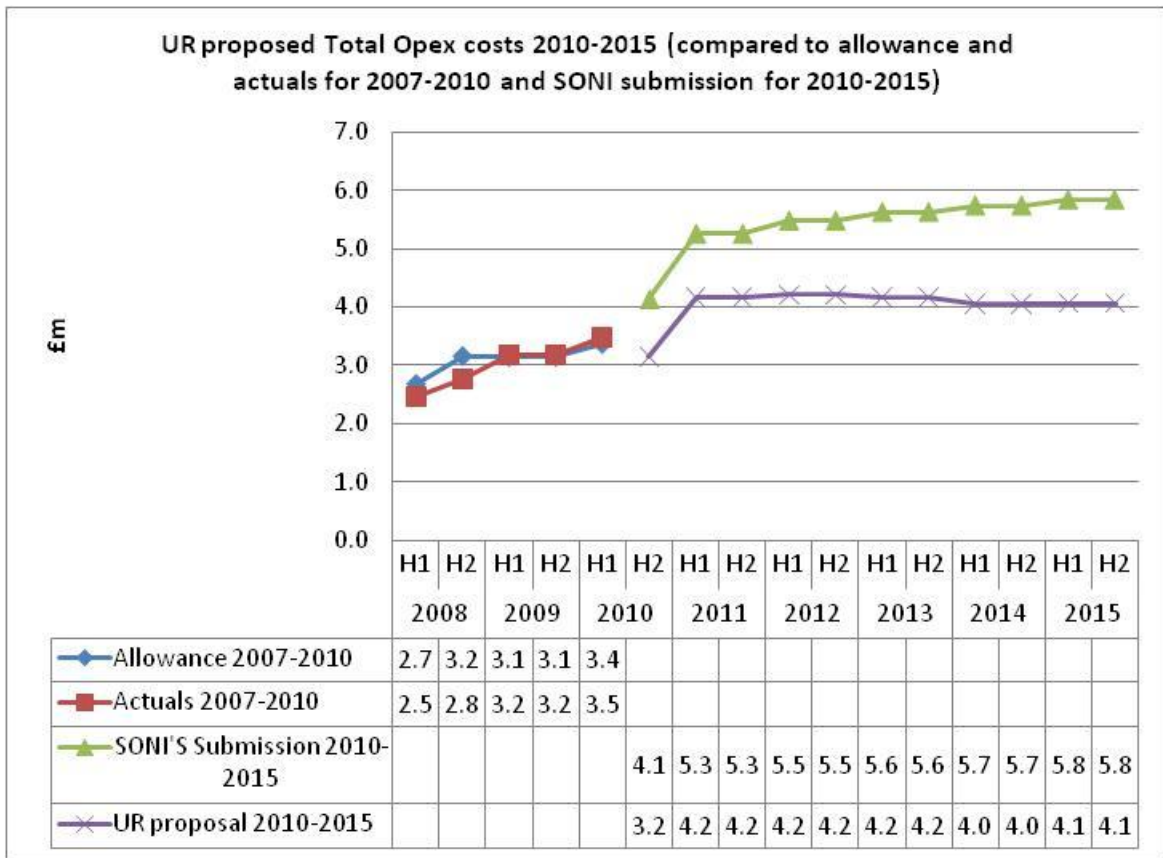
	<b>SONI submission</b>	<b>UR proposal</b>
	<b>2010-2015</b>	<b>2010-2015</b>
	<u>£m</u>	<u>£m</u>
Payroll	34.4	24.9
IT & Communications	10.5	9.9
Pension (Ongoing)	6.1	2.4
Other Opex	9.0	7.3
Total Opex	60.0	43.9
Pension (Deficit recovery)	0.8	0.5
<b>TOTAL</b>	<b>60.8</b>	<b>44.9</b>

<sup>20</sup> This includes £0.5m during the price control period in respect of pension deficit payments (over 15 years)

<sup>21</sup> This includes £0.8m during the price control period in respect of pension deficit payments (assumed over 9 years)



Figure 11: Total Opex proposal 2010-2015 from SONI and UR



## 8 Capex

### 8.1 SONI Submission on Capex

SONI submitted an outline of the capital expenditure requirements for the business, emphasising the fact that SONI is a very different business from that envisaged when preparing for the last price control. The Utility Regulator reviewed the submission and assessed the detailed proposals in terms of need and costs provided. Capex requested that was not supported with a statement of need or business case could not be assessed in this manner.

The SEM committee has recently published its decision paper on the SEMO price control. This included innovative methods for incentivising efficient capital spend. The Utility Regulator has carefully considered the possibility of applying these innovative approaches to the SONI capex also. However, it is considered prudent to continue with a traditional approach for this price control for three main reasons:

- The implementation of the EU 3rd energy package could result in significant changes to the current business;
- The approaches adopted for the SEMO price control are innovative and may be considered for subsequent price controls with a significant proportion of IT spend.

A Capex allowance enables SONI to recover from tariffs the necessary financial resources to finance their capital investments. The following Capex were identified in SONI's submission:

Capex Areas (£M)	SONI Submission
6 Month Submission	0.984
Building	3.200
EMS	1.385
IT	2.548
Telecoms	1.415
Other	0.500
Non-identified Capex	1.290
<b>Total</b>	<b>11.322</b>

**Table 4: SONI proposed Capex 2010-2015**

A table showing the 5 year distribution of the capex expenditure is detailed in Appendix 1.

SONI also included a Capex submission for the six month period of £0.984m. The Utility Regulator has already agreed a figure of £0.913m.

### 8.2 Utility Regulator Assessment of Capex

The Utility Regulator carried out an assessment of the Capex submission provided by SONI. For each business case provided, the Utility Regulator assessed the requirement, proposed

costs and justifications for the costs. The Utility Regulator have proposed to reduce costs in a number of areas. A summary of the Utility Regulator proposal is below. Details of the Utility Regulator assessment can be found in Appendix 2.

<b>Capex Summary £M</b>	<b>SONI Submission</b>	<b>Utility Regulator Proposal</b>	<b>% Reduction</b>
6 Month Submission	0.984	0.913	-7.2%
Building	3.200	0.400	-87.5%
EMS	1.385	1.065	-23.1%
IT	2.548	1.663	-34.7%
Telecoms	1.415	0.665	-53.0%
Other	0.500	0.100	-80.0%
Non-identified Capex	1.290	0.000	-100.0%
<b>Total</b>	<b>11.322</b>	<b>4.806</b>	<b>-57.6%</b>

**Table 5: SONI proposed Capex 2010-2015 compared to UR proposal**

As discussed above, the Utility Regulator has already approved costs in relation to the 6 month submission.

The costs associated with the Building are discussed in section 8.2.1 below.

The Energy Management System (EMS) was a key investment during the last price control. The Utility Regulator acknowledges the important and potential of this system and has therefore allowed a significant capex element to the continued enhancement of this system. There are a number of areas relating to the EMS that the Utility Regulator has proposed are not included in the allowance. These include the proposed annual investment and the use of a 'Wind Stability Assessment Tool'. Further details can be found in Appendix 2.

In the IT assessment, the Utility Regulator agreed that expenditure was required in the majority of areas. The Utility Regulator did not agree that capex was required for 'Training Records Systems' and 'Network Modelling'.

The Utility Regulator also proposed reduced allowances in relation to 'Document and Record Management Systems' (EDRMS), IT Standardisation and 'Data Exchange' (SDX). The most significant reduction was in relation to the SONI website, where a budget of £500K was proposed. The Utility Regulator does not feel that this level of cost has been justified and has proposed a lower allowance of £100K.

Under the Telecoms category the main area of concern related to the proposal to implement a satellite communication system for wind farms at a cost of £600K. The Utility Regulator considers the communication costs for wind farms should be charged to connection generators through the charging mechanism for both distribution and transmission connections. As the charging principles require developers to pay the costs associated with making their sites compliant with the relevant codes.

In relation to Other costs, only 2 areas of work were identified, with the majority of the submission acting as a place holder. The Utility Regulator therefore propose only to allow for specific business cases identified.

The Utility Regulator is aware that it is difficult to be precise about the capex requirements towards the end of price control period. SONI have included £1.29M of capex which is not mapped to any business cases. The Utility Regulator do not find it acceptable to allow such any amount without justification. The Utility Regulator will consider any innovative ideas submitted with a full Cost-Benefit Analysis (CBA) during the price control period.

Full details of the Utility Regulator analysis can be found in Appendix 2.

**Question 8:** Do Respondents agree with the proposed Capex allowance for the SONI Price Control?

### **8.2.1 SONI Submission for Building Requirements**

SONI is currently located at Castlereagh House. Due to the proposed increases in staff additional office accommodation will be required and SONI has indicated that there is no available space in the existing building. Castlereagh House is also about 40 years old. SONI has indicated that there are issues with the building concrete, there is no provision for disabled access, and additionally there are heating and ventilation issues and car parking problems. They reviewed a number of options including extending and refurbishing the existing building, constructing a new building within the site and moving to an alternative site. Their proposal recommends the extension and refurbishment of the existing building at an estimated cost of £3.2M.

### **8.2.2 Utility Regulator Submission for Building Requirements**

The Utility Regulator has requested the feasibility study for the proposed extension and refurbishment along with a detailed breakdown of the costs associated with the works required. This will be assessed prior to a decision on the price control. Approval has already been given for temporary arrangements and SONI has indicated that this is not sufficient and the capex submission for the building extension includes funds for repairs and improved disability access arrangements for the existing building.

SONI has considered movement of operations to an alternative site and deem this uneconomical and challenging logistically; however they have not included an alternative option of moving some of the functions to an alternative site. The Utility Regulator is aware that other regulated companies have sold their offices and rented locations to deliver savings. Although the Utility Regulator accepts that the movement of the control centre at this stage may not be economical we consider that SONI should review alternative options for other functions.

The Utility Regulator will continue to explore alternative options with SONI during the consultation period however for the purposes of this consultation the Utility regulator has proposed an allowance of £400k for refurbishment and temporary arrangements. The Utility

Regulator welcomes stakeholder opinions on the need for SONI to carry out all its functions at one location.

**Question 9:** What opinions do Respondents have regarding the future building requirements for SONI?

## 9 Cost of Capital

### 9.1 Introduction

The cost of capital that the Utility Regulator proposes in this price control is a forward-looking estimate of the return that SONI needs to provide to investors in order to attract and retain capital within the business over the duration of the price control. The Utility Regulator have deliberately sought to estimate this cost of capital independently from SONI's current ownership and financing arrangements so that the return on offer through the price control is capable of supporting any reasonable and efficient investor set. SONI is a ring-fenced company, therefore the allowed rate of return should be relevant to SONI and should not reflect the status of its parent company (ref: Competition Commission decision on Bristol Water<sup>22</sup>).

The Utility Regulator employed First Economics (FE) to undertake an independent estimate of the appropriate values a WACC for SONI. SONI also made a cost of capital submission to the Utility Regulator as part of their submission.

The cost of capital is a weighted average of two components: the cost of equity ( $K_e$ ); and the cost of debt ( $K_d$ ), where the weightings (gearing or  $g$ ) reflect the relative importance of each type of financing in a firm's capital structure.

$$WACC = K_d \cdot g + K_e \cdot (1 - g)$$

The cost of debt is directly measurable for many firms in the UK economy, and in the analysis that follows it is explained how empirical evidence can be used to benchmark the appropriate values for  $K_d$  for SONI. The cost of equity, by contrast, cannot be directly observed and therefore needs to be modelled to reflect the returns that a shareholder would expect to demand in exchange for holding shares in the company. The primary tool that is used in analysis of the required return is the CAPM, which relates the cost of equity to the risk-free rate ( $R_f$ ), the expected return on the market portfolio ( $R_m$ ), and a firm-specific measure of investors' exposure to systematic risk (beta or  $\beta_e$ ).

$$K_e = R_f + \beta_e \cdot (R_m - R_f)$$

The two equations together show that cost of capital calculations are based on estimates of five parameters:

- Gearing ( $g$ );
- Cost of Debt ( $K_d$ );
- Risk Free Rate ( $R_f$ );
- Expected return on market portfolio ( $R_m$ );

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<sup>22</sup> [http://www.competition-commission.org.uk/rep\\_pub/reports/2010/fulltext/558\\_final\\_report.pdf](http://www.competition-commission.org.uk/rep_pub/reports/2010/fulltext/558_final_report.pdf)

- Equity beta ( $\beta_e$ ).

The appropriate value for WACC varies over time as interest rates and investor expectations change. A value of 6.3% (pre tax real) was calculated for SONI's previous price control. This reflected both the underlying market conditions at the time and also SONI's status as a "small company". It therefore included a small company premium.

There has been a significant upheaval in the financial markets in the three years since the previous decision was made, therefore the WACC will be reviewed without reference to the previous value.

## **9.2 Consultant's Submissions**

The submissions received from First Economics and SONI were both of a very high quality and were broadly in agreement across the main parameters. Both drew on a similar range of references and recent regulatory precedence. The values for each variable proposed by First Economics and SONI are presented below.

## **9.3 WACC Building Blocks**

### **9.3.1 Gearing**

In order to combine the cost of debt and cost of equity in the right proportions for the calculation of the WACC, we need to make an assumption on gearing. Gearing here is defined as the proportion of the company's RAB that is financed by debt. A higher level of gearing is generally seen as reducing the overall WACC, at least initially, through substituting less expensive debt for more expensive equity, but after a certain point can start to reduce the company's financial robustness. The 'optimal' level of gearing that is generally adopted in regulators' WACC calculations is intended to reflect the appropriate trade-off between these two effects. The costs of debt and equity also applied in the WACC calculation need of course themselves to be consistent with this gearing assumption.

In formulating this optimal gearing assumption, we do not focus on SONI's actual gearing, since this arises in large part from the decisions of its current owners for the financial structure of their company, which should largely be their concern and the consequences of their financial structuring should be for them to bear rather than customers through being reflected in the WACC. Rather we consider what level of gearing for SONI, under any ownership, would seem appropriate given the risks and credit requirements of its business.

There is a difference in the values proposed for the gearing to be used in this calculation. SONI did state that

*"in assessing the likely opportunity cost of capital for SONI we are assuming the optimal gearing lies in the range 45%-57.5%"*

As the value proposed by First Economics of 55% lies within this range, it is proposed to use their value for this calculation.

**Table 6: Gearing**

Building Block	First Economics		SONI	Utility Regulator Proposal
	Low	High		
Gearing (g);	0.55	0.55	0.50	<b>0.55</b>

### 9.3.2 Cost of Debt

In coming up with an assumption for SONI's cost of debt we have looked to assess the average interest rate that a company in SONI's position would be paying to its lenders over the control period. This assessment should not consider the current position of the parent company, rather the value that applies in the financial market relevant to the company. The value proposed by First Economics is consistent with market conditions and recent decisions by other regulators, and is considered to be the most appropriate to be used in this context.

**Table 7: Cost of Debt**

Building Block	First Economics		SONI	Utility Regulator Proposal
	Low	High		
Cost of Debt (Kd);	3.5%	3.5%	4.05%	<b>3.5%</b>

### 9.3.3 Risk Free Rate

The approach used by regulators to assess the risk-free rate has in the past been to analyse yields on government issued index-linked gilts. However, in recent years the economic consultancy NERA has developed an alternative approach which they have argued is more appropriate. Specifically, NERA argues that index-linked gilt yields are an unreliable indicator of the risk-free rate because they could be significantly distorted by a mismatch in supply and demand, most notably through pension funds seeking to hold longer maturities of index-linked debt.

Given the recent volatility, we do not think it would be right to rely on current low yields as an indicator of the risk-free rate over the next five years. Further, in light of the concerns raised by NERA, we think that it is important to avoid reliance on rates that have prevailed only for a short period of time and that might be driven significantly by the dynamics of the specific market for that instrument. We would therefore put our emphasis on the ten-year average figure of 2.0%.

Both submissions were in agreement with a risk free rate of 2%, therefore it is proposed to use this in the calculation for SONI.



**Table 8: Risk Free Rate**

Building Block	First Economics		SONI	Utility Regulator Proposal
	Low	High		
Risk Free Rate (Rf);	2.0%	2.0%	2.0%	<b>2.0%</b>

### 9.3.4 Market Return

The two submissions have approached the calculation of the Market Return in different ways. SONI’s cost of capital study arrived at a value for Rm only indirectly by estimating an equity-risk premium and adding this figure to the risk-free rate. Like the Competition Commission, First Economics have estimated Rm directly so as to ensure that there is no inconsistency in the cost of equity calculation.

The value proposed by SONI is above the highest point in the range recommended by First Economics. This is not considered to be a reasonable expectation for a regulated company in the current economic climate. Instead we propose to use the mid-point of First Economics’ range for SONI.

**Table 9: Market Return**

Building Block	First Economics		SONI	Utility Regulator Proposal
	Low	High		
Market Return (Rm);	6.5%	7.0%	7.25%	<b>6.75%</b>

### 9.3.5 Asset Beta

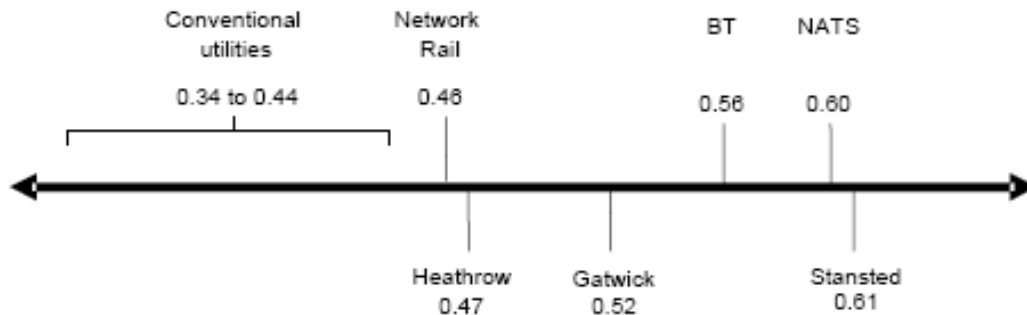
An asset beta is a hypothetical measure of the beta that a firm would have if it were financed entirely by equity. By comparing different firms’ asset betas it is possible to isolate shareholders’ perceptions of underlying systematic risk, and carry out an assessment of the relative riskiness of different companies after controlling for gearing

First Economics analysis of asset betas considered a comparison of both calculated betas for comparator firms with a stock market listing; and the beta estimates that regulators have made in recent periodic reviews.

There were a limited number of comparator firms with stock market listings. The closest comparator provided was for National Grid, with a beta of 0.35. First Economics also

assessed the betas for a number of regulated areas covering electricity, water, airports and telecoms amongst others. A summary of their analysis (provided in May 2010) is demonstrated in the diagram below.

**Figure 12: Asset Betas for UK Regulated Companies**



First Economics proposed that an appropriate asset beta for SONI would sit just above the beta for a Conventional Utility (Water & Energy Companies). They made the following comments:

- the conventional network businesses – i.e. the water and energy networks – all exhibit negligible revenue risk, relatively low cost risk, and have sizeable RABs. This largely explains why they sit at the left-hand side of the spectrum.
- all of the companies that sit to the right of the Conventional Utilities have fairly obvious characteristics that make them riskier in the eyes of investors. Exposure to demand and revenue risk, in particular, is an important part of what causes BT and airports to have a higher equity beta than the conventional network utilities;
- SONI's revenue cap and the nature of its costs make it look a lot like a low-risk utility, but its relatively high operational gearing imply that it would be viewed as a riskier proposition than the network businesses. All other things being equal, this implies that the Utility Regulator needs to allow for a beta which sits above the beta of a conventional utility; however it is difficult to argue that higher operational gearing alone puts SONI at the very right-hand edge of the comparator set. NATS looks to establish a very helpful marker in this regard insofar as it is a company with similar operational gearing to SONI but much greater demand and revenue risk. All other things being equal, this suggests to us that the Utility Regulator's estimate of SONI's beta should sit some way below the beta that the CAA deemed appropriate for NATS at its last price control review.

In its August 2010 Bristol Water decision, the Competition Commission notes that comparator asset betas have fallen recently and that the asset beta for a conventional regulated utility is now approx 0.27 to 0.36. As First Economics assumed that SONI's beta would sit slightly higher than such comparators they think it is appropriate to start from this

lower baseline when we are estimating SONI's asset beta and keeping all other things constant, this points to an asset beta of around 0.4 to 0.5

The Utility Regulator notes that First Economics provided a relatively large range for the Asset Beta. The Utility Regulator believes that the asset beta for SONI should be at the lower end of the range, as it deems SONI to be lower risk than airports and considering the continued use of a revenue cap. Therefore the value of 0.40 is proposed.

**Table 10: Asset Beta**

Building Block	First Economics		SONI	Utility Regulator Proposal
	Low	High		
Asset beta	0.40	0.50	0.45	<b>0.40</b>

### 9.3.6 Equity Beta

A firm's equity beta is a measure of the riskiness of a firm – or more specifically, a measure of the systematic risk that a firm presents – relative to the market portfolio. Firms that exhibit a beta of more than 1 can be considered more risky than the average firm in the portfolio and need to pay their investors a higher-than-average return; firms with a beta of less than 1 are less risky and warrant lower returns; and firms with a beta of exactly 1 are seen by investors as being of equal risk to the market portfolio and are expected to generate a return in line with  $R_m$ . The equity beta is related to both the asset and debt betas

The value of the equity beat also varies with the gearing of a firm. The formula above shows that the lower the gearing of a company, the lower the value of the equity beta, for a given value of debt beta. First Economics have assumed a debt beta of 0.1. The formula used to calculate the equity beta is:

$$\beta_a = (1 - g) \cdot \beta_e + g \cdot \beta_d$$

Based on the gearing and asset and debt betas presented above, the Equity beta is calculated as 0.77.

**Table 11: Equity Beta**

Building Block	First Economics		SONI	Utility Regulator Proposal
	Low	High		
Equity beta ( $\beta_e$ ).	0.77	0.99	0.9	<b>0.77</b>

### 9.3.7 Taxation

The Utility Regulator proposes to apply a pre-tax rate of return in its calculation of SONI's price control. This requires us to gross up our proposed cost of equity for the impact of taxation. There are two possible approaches we could take to adopting a tax rate for this 'grossing up':

- we could assess SONI's effective tax rate based on its recent and projected tax payments; or
- we could apply the statutory tax rate.

The benefits of applying an effective tax rate are that through taking into account the specific factors that determine the tax payable by SONI, for example its depreciation profile relative to its capital allowances, the level and profile of its interest payments and any expenditure which may not be offset against tax, a 'tax wedge' based on the effective rate can reflect as accurately as possible the taxation payable by SONI over the period. The disadvantage of this approach is that the calculations are complicated, based on projections only and prone to error. Also, since any timing effects in SONI's effective tax rate may unwind over time, e.g. between the profiles of depreciation and capital allowances, the effective tax rate will change between control periods, resulting in a seemingly arbitrary change in prices for customers.

Applying the statutory tax rate would not seek to reflect SONI's projected tax payments within the control period. This means that it could either over-fund or under-fund SONI tax's payments in the short term. However, it would have the advantage of offering a simple and comprehensible approach that was likely to fund SONI's tax payments appropriately over the long term.

Both submissions received proposed the use of the statutory tax rate of 28% for the calculation of SONI's pre-tax WACC. It is therefore proposed that this rate of 28% is used. The Utility Regulator is considering the option where if the statutory tax rate changes during the price control period that the appropriate change may be made to the WACC. The Utility Regulator welcomes comments on this approach.

**Table 12: Taxation Rates**

Building Block	First Economics		SONI	Utility Regulator Proposal
	Low	High		
Taxation	28%	28%	28%	<b>28%</b>

### 9.3.8 Pre-tax Cost of Equity

Based on the input parameters described above, the pre-tax cost of equity has been calculated. This gives a result of 8.57%

**Table 13: Pre-tax cost of equity**

<b>Building Block</b>	<b>First Economics</b>		<b>SONI</b>	<b>Utility Regulator Proposal</b>
	Low	High		
Pre-tax cost of equity	7.57%	9.65%	9.34%	<b>7.84%</b>

#### 9.4 Pre-tax Weighted Average Cost of Capital

Based on the gearing, cost of debt and the pre-tax cost of equity described above, the pre-tax cost of capital proposed for SONI for the period from 1 April 2010 to 30 September 2015 is 5.45%.

**Table 14: Summary of Submissions and Proposal**

Building Block	First Economics		SONI	Utility Regulator Proposal
	Low	High		
Gearing (g);	0.55	0.55	0.5	<b>0.55</b>
Cost of Debt (Kd);	3.5%	3.5%	4.05%	<b>3.5%</b>
Risk Free Rate (Rf);	2.0%	2.0%	2.0%	<b>2.0%</b>
Market Return (Rm);	6.5%	7.0%	7.25%	<b>6.75%</b>
Asset beta	0.40	0.50	0.45	<b>0.40</b>
Equity beta ( $\beta_e$ ).	0.77	0.99	0.9	<b>0.77</b>
Post tax cost of equity	5.45%	6.94%	6.725%	<b>5.64%</b>
Taxation	28%	28%	28%	<b>28%</b>
Pre-tax cost of equity	7.57%	9.65%	9.34%	<b>7.84%</b>
Pre-tax cost of capital	5.33%	6.27%	6.70%	<b>5.45%</b>

**Question 10:** Do Respondents agree with the proposed WACC for the SONI Price Control?

## 10 RAB & Depreciation

### 10.1 SONI Submission of RAB & Depreciation

SONI submitted their RAB, with the additions included as per their Capex plan. Under the 2007 to 2010 price control, a depreciation of 10 years (straight line) was used. SONI have continued with this approach for the new price control period. The depreciation in the SONI Submission was £16.9M. The table below shows a summary of the RAB and depreciation as submitted by SONI.

SONI RAB Submission	30/09/2010	30/09/2011	30/09/2012	30/09/2013	30/09/2014	30/09/2015	Price Control Total
<b>£M</b>	<b>6 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	
Opening Value	18.546	18.320	18.325	18.840	16.822	15.288	
Additions	0.984	2.693	3.560	1.140	1.805	1.140	
<b>Depreciation 10 ys S.L.</b>	<b>1.210</b>	<b>2.689</b>	<b>3.045</b>	<b>3.159</b>	<b>3.339</b>	<b>3.453</b>	<b>16.893</b>
Closing Value	18.320	18.325	18.840	16.822	15.288	12.975	

Table 15: SONI proposed RAB and depreciation 2010-2015

### 10.2 Utility Regulator Proposal for RAB & Depreciation

The Utility Regulator does not propose to change the current depreciation period used for the SONI RAB. The Utility Regulator has updated the RAB to reflect the proposed Capex additions as detailed in section 8. This is demonstrated in the table below.

SONI RAB - Utility Regulator Proposal	30/09/2010	30/09/2011	30/09/2012	30/09/2013	30/09/2014	30/09/2015	Price Control Total
<b>£M</b>	<b>6 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	
Opening Value	18.546	18.253	16.793	15.076	12.645	11.265	
Additions	0.913	1.058	0.890	0.195	1.385	0.365	
<b>Depreciation 10 ys S.L.</b>	<b>1.206</b>	<b>2.518</b>	<b>2.607</b>	<b>2.626</b>	<b>2.765</b>	<b>2.801</b>	<b>14.524</b>
Closing Value	18.253	16.793	15.076	12.645	11.265	8.828	

Table 16: UR proposed RAB and depreciation 2010-2015 for SONI

The depreciation proposed by the Utility Regulator is £14.5M. This reduction corresponds to the reduced capex proposed in section 8.

**Question 11:** Do Respondents agree with the proposed Depreciation period of 10 years (straight line) should be used for the price control period?

## 11 Rate of Return

Based on the submitted RAB and Capex Additions from SONI, and their proposed WACC of 6.7%, the Rate of Return requested from SONI is detailed in the table below.

SONI RAB Submission	30/09/2010	30/09/2011	30/09/2012	30/09/2013	30/09/2014	30/09/2015	Price Control Total
<b>£M</b>	<b>6 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	
Average RAB	18.433	18.323	18.583	17.831	16.055	14.131	
WACC	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%	
<b>Rate of Return</b>	<b>1.235</b>	<b>1.228</b>	<b>1.245</b>	<b>1.195</b>	<b>1.076</b>	<b>0.947</b>	<b>6.925</b>

**Table 17: SONI proposed rate of return 2010-2015**

Based on the Adjusted RAB and Capex Additions as proposed by the Utility Regulator , and the proposed WACC of 5.45%, the Rate of Return proposed for SONI is detailed in the table below.

SONI RAB - Utility Regulator Proposal	30/09/2010	30/09/2011	30/09/2012	30/09/2013	30/09/2014	30/09/2015	Price Control Total
<b>£M</b>	<b>6 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	
Average RAB	18.399	17.523	15.935	13.860	11.955	10.047	
WACC	5.45%	5.45%	5.45%	5.45%	5.45%	5.45%	
<b>Rate of Return</b>	<b>1.003</b>	<b>0.955</b>	<b>0.869</b>	<b>0.756</b>	<b>0.652</b>	<b>0.548</b>	<b>4.782</b>

**Table 18: UR proposed rate of return 2010-2015 for SONI**



## **12 Incentivisation**

### **12.1 Introduction**

Financial and reputation incentives exist, as with all regulated companies, within the current SONI price control. As part of the process to develop the current price control it was proposed to introduce an additional incentive scheme but this was when not included in the final decision. The reason given for incentives not to be included was that this was considered an issue that would be addressed under the Single Electricity Market.

Now that the next price control is being considered it is appropriate that incentivisation is considered given the benefit and value for money which incentives could potentially deliver to electricity consumers. Incentives should enhance the performance of SONI's key activities operating the Northern Ireland transmission system safely, securely, reliably and economically.

There is concern that the costs of constraints and congestion management are increasing due to increasing interconnector trade, security of supply concerns, connection of wind generation and network congestion. Therefore, the benefits customers would receive from incentives to control the costs associated with dispatch balancing are increasing.

The Utility Regulator believes effective incentivisation is an essential part of this price control. However, it should be noted that national regulators in other jurisdictions have only recently put in place sophisticated output based incentive mechanisms and a review of international incentives in place for TSO has indicated that many are relatively low impact.

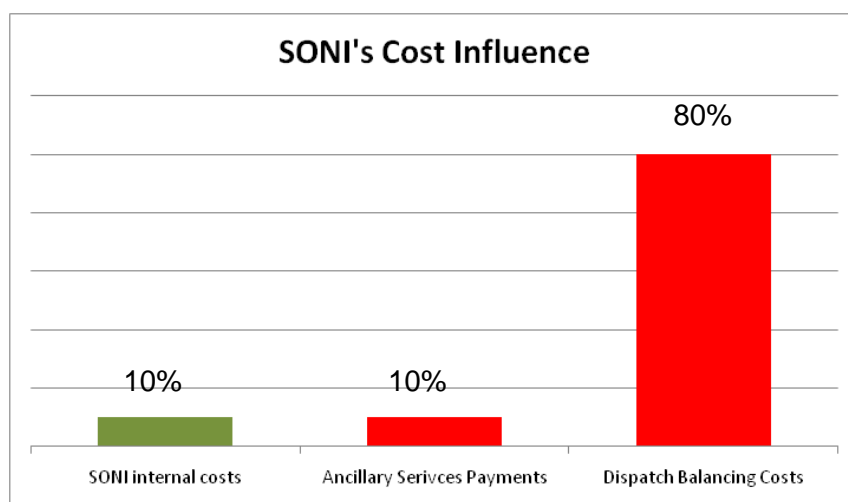
### **12.2 SONI Incentivisation**

SONI's role changed with the start of SEM in November 2007. They have now had three years to adapt to these ways of working. The costs to customers that they can influence are significantly greater than the costs of their own organisation.

Their licence requires them to provide information to generators who are considering entering or leaving the market on an annual basis. If these generators make the correct decisions, customers should benefit over the medium to long term.

The RPI – X approach to this price control incentivises SONI to identify savings in their own costs, which can be passed on the customers in the subsequent control periods. As SONI receive no benefit from reductions in the other costs, the Utility Regulator considers it important that they are given explicit incentives to manage these in the optimum manner.

**Figure 13: SONI's Cost Influence**



For an item to be incentivised, it must:

- be of benefit to customers (short term or long term)
- be measurable
- be controllable by SONI (irrespective of the outcome of changes due to pending legislation)
- be in an area which requires improvement

SONI submitted performance incentives proposals covering the areas of system operator, network delivery and innovation. The SONI submission can be reviewed in Appendix 3. Some of the proposals do not meet that principles stated above and a number of separate incentives would have added detrimental complexity to SONI's business.

Within the proposals for System operation there was a proposal relating to the system minutes lost and system frequency management. There is no evidence that there are concerns in relation to performance in these areas and therefore these are not considered further. It is assumed that SONI will continue to deliver a high level of service in these areas.

SONI also proposed incentivisation in relation to demand forecasting and this was considered worth developing further. Within Network Delivery SONI proposed incentivisation in relation to delivery of connection offers and use of system offers. These two areas are a licence requirement and it is not considered appropriate to put in place additional incentivisation. The final area proposed by SONI for incentivisation is a reward of intellectual capital or innovation. It is accepted that with the increasing amount of renewable generation connection and lack of interconnection with other networks that innovation may be required and we will continue to engage with SONI to further develop possible incentivisation in this area.

Therefore the Utility Regulator proposes two main areas for SONI to focus on over this five-year period. It is proposed that the incentive mechanism will start from October 2011 to allow time for the Utility Regulator and SONI to put in place the necessary processes and reporting requirements.

### 12.3 Incentive 1: Delivery of Key Industry Documents

SONI has proposed incentives based on the delivery of the key industry documents that were the subject of new ways of working during the last price control. SONI is required to publish these under their licence and the price control proposed by the Utility Regulator provides the resources required to deliver them.

Rather than in incentive that rewards SONI, the Utility Regulator proposes a rebate to be paid to customers for each month that a document is late, capped at six months. Once a document is six months late, it may be beneficial to generators and customers for SONI to deliver the subsequent publication early, therefore a fixed charge is proposed for any documents that are more than six months late.

The proposed incentive is summarised in Table 8.1 below.

The documents included within this incentive are:

**The Generation Adequacy Report:** this document informs stakeholders about any potential shortfall in generation in the next seven years. It contains information essential for the Government and the Utility Regulator to discharge their statutory duties and it provides generators with some of the information required to make decisions to enter or leave the power market in Northern Ireland.

**The Transmission Seven Year Statement:** This document provides information about the plans to develop the Transmission System in Northern Ireland over the following seven years. Due to developments in Europe there will be a requirement to increase the timeframe of this statement to 10 years. The importance of this document is increasing as wind farm developers consider connecting to the system. The timely publication of the document will facilitate their decision making process.

**The Transmission System Performance Report:** The format of this report is agreed between SONI and the Utility Regulator. It provides information about the availability of the network and measures of performance. The Utility Regulator is considering expanding the scope of this to include information about energy losses on the transmission system and reviewing its accessibility to a wider audience. It will allow a range of stakeholders to reach an informed opinion on the state of the network.

**Grid Code Development Plan:** The Grid Code is the primary document in the NI electricity market. All licensees are required to comply with it, and the physical and commercial inputs into the market are defined within it. At a European level, there is pressure to review and harmonise grid codes across synchronous areas. SONI are responsible for ensuring the Grid Code is fit for purpose. As a condition for providing the full amount requested for Grid Code development, the Utility Regulator will request an annual plan and progress report identifying the areas that will be developed in the Grid Code and the timescale for delivery of these developments.

**Table 19: Summary of Incentive 1 – Delivery of Key Industry Documents**

Incentive:	<p>Delivery of documents on an annual basis, on a timetable agreed with the Utility Regulator</p> <p>The Generation Adequacy Report</p> <p>The Transmission System Seven Year Statement</p> <p>The Transmission System Performance Report</p> <p>Grid Code Development Plan</p>
Measurement:	Publication date (SONI's Website) v timetable.
Benefit to customers	Customers will be funding SONI to deliver these on an annual basis. Generators make investment decisions based on these documents. It is in customers long term benefit that the Generators make their decisions based on up to date information.
Controllable	SONI require information from NIE and EirGrid to complete these documents. The requirement to provide this information is contained within the TIA and SOA respectively. These ways of working have now been established and SONI can propose a timetable for delivery that fits in with the provision of information under these agreements.
Current performance	It has taken time for the ways of working required for the SEM to be established, which has resulted in SONI requiring licence derogations related to the late publication of some documents.
Payments	A rebate will be paid by SONI to customers for each month that each document is late up to 6 months, with an additional charge for any document that is more than 6 months late.

	<p>The scheme will run from 1<sup>st</sup> April 2011, covering four publication years.</p> <p>The first rebates will be recovered by adjustments to the SSS tariff approved in the Summer of 2012.</p> <p>Proposed charges:</p> <p>£2500 / document per month, capped at 6 months</p> <p>£1000 for each document that is more than 6 months late</p> <p>Maximum amount that can be charged is £100,000 per year (based on four key documents)</p>
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#### 12.4 Incentive 2: World Class Forecasting

The Dispatch Balancing Costs in SEM are approximately €110 million per year. These are charged across all consumers on the island of Ireland. There are a large number of factors that influence the size of these costs and the Utility Regulator acknowledges that these are a complex mix of many factors. SONI has the ability to influence however many of these costs are outside the direct control of SONI.

One area that SONI control and that has a direct impact on the magnitude of the costs is the forecasting of both demand and wind generation. The demand and wind power forecasts that are input to the dispatch algorithms are therefore seen as a key area to consider. The Utility Regulator believes that accurate forecasting of demand wind power will reduce overall costs to customers and will also increase the utilisation of renewable energy resulting in lower carbon emissions.

The incentive will be in the form of an additional payment to SONI for increases in accuracy (up to a cap), with a rebate paid for any deterioration in forecasting.

It is proposed to take spot measurements 8 hours apart of four parameters:

Forecast demand (t + 8 hours)

Forecast wind power (t + 8 hours)

Actual demand

Actual wind power.

Net demand = total demand – wind power

The absolute deviation between forecast and actual net demand for these 3 spot measurements will then feed into the incentive mechanism. It is proposed that the calculation is done on a calendar month basis. The maximum payment or rebate would be set per month.

Under this incentive, the maximum amount that SONI could receive per year is £480k and the maximum amount that they could pay out in a rebate to customers is £240k.

The incentive mechanism would start on 1 October 2011. This will allow SONI 4 years to obtain benefits for improvements under this mechanism.

**Table 20: Incentive 2 – World Class Forecasting**

Incentive:	Monthly average absolute deviation between forecast and actual net demand.
Measurement:	Three measurements per day, 8 hours apart. Absolute deviation is used in the calculation, so that over and under estimates do not cancel each other out.
Benefit to customers	Better decision making in the real time dispatch, resulting in lower dispatch balancing costs.
Controllable	SONI calculate both of these variables that are critical for achieving the most economic dispatch.
Current performance	To be measured during the consultation period.
Payments	Maximum payment to SONI per month = £40,000 Maximum rebate per month from SONI = £20,000 Quarterly report to be published on SONI's website. Incentive starts on 1 October 2011, with 4 reporting years during this price control.

The overall constraints tariff is approved by SEMC on an annual basis and the Utility Regulator is keen to increase transparency in this area. The Utility Regulator welcomes any other proposals stakeholders feel would incentivise SONI in relation to this and will continue to work with SONI during this consultation period to identify further areas going forward. The costs of constraints and congestion management are increasing due to increasing interconnector trade, security of supply concerns, connection of wind generation and network congestion and these are included within the Imperfections Tariff. The Utility Regulator will work closely with CER to investigate further options for incentivisation, ensuring that all parties that influence the magnitude of the Dispatch Balancing Costs are

incentivised to manage the aspects within their control, for the benefit of all consumers on the island.



## 13 Allowed Revenue

This consultation paper presents a Utility Regulator proposed allowed revenue for the SONI price control 2010-2015 of £64.2m, compared to SONI's submission of £84.6m.

Allowances for depreciation and return are based on a Utility Regulator proposed Capex spend of £4.8m. This compares to SONI's Capex submission of £11.3m.

A summary of the proposed allowed revenue is shown in Table 21 below.

£M	SONI Submission	Utility Regulator Proposal	% Reduction
Payroll	34.4	24.9	-28%
Pension (ongoing)	6.1	2.4	-61%
IT & Communications	10.5	9.9	-6%
Other Opex	9.0	7.3	-19%
<b>Total Opex</b>	<b>60.0</b>	<b>44.4</b>	<b>-26%</b>
Pension (deficit)	0.8	0.5	-37%
<b>Total Opex incl Pension deficit</b>	<b>60.8</b>	<b>44.9</b>	<b>-26%</b>
Depreciation	16.9	14.5	-14%
Return	6.9	4.8	-31%
<b>ALLOWED REVENUE</b>	<b>84.6</b>	<b>64.2</b>	<b>-24%</b>

**Table 21: Proposed Allowed Revenue for SONI 2010-2015**

Additional allowed revenue may be available to the company for a four year period, dependant on performance with regard to incentives. The maximum additional allowed revenue relating to incentives for the price control period is £1.92M. This information is shown in Table 22.

	<b>Payment</b>	<b>Rebate</b>
Efficient Dispatch	£40K per month	£20K per month
Customer interaction	0	<p>£2.5K per document per month (up to 6 months)</p> <p>£10K per document which is &gt; 6 months late</p> <p>Max. charge £100K per year, based on four key documents</p>

**Table 22: SONI's proposed incentives 2010-2015**

## 14 Next Steps

The Utility Regulator welcomes comments from all interested parties on its proposals for SONI's revenue for the 5 ½ years to 1 October 2015. Comments should be sent to Billy Walker and Kevin O'Neill at the address in Section 2 of this paper.

During the consultation period:

- SONI will be providing data on their current forecasting accuracy, to allow the details of the incentive mechanism to be developed;
- The Utility Regulator will be further assessing alternative options for accommodation for their staff, including reducing the number of people accessing the secure site at Castlereagh House.
- The Utility Regulator will further assess the appropriate headcount for SONI.
- The Utility Regulator will further assess the Actuarial Report for SONI.
- The Utility Regulator will assess (and consult if necessary) on the licence changes required to support the proposed price control

The Utility Regulator proposes to publish the decision paper before the end of April 2011.

## 15 Appendices

### 15.1 Appendix 1 – SONI Capex Submission

Summary	30/09/2010	30/09/2011	30/09/2012	30/09/2013	30/09/2014	30/09/2015	Total
<b>£M</b>	<b>6 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	
<b>6 Month Submission</b>	0.984						0.984
<b>Building</b>		1.500	1.700				3.200
<b>EMS</b>		0.360	0.240	0.040	0.705	0.040	1.385
<b>IT</b>		0.288	0.950	0.330	0.670	0.310	2.548
<b>Telecoms</b>		0.415	0.450	0.020	0.195	0.335	1.415
<b>Other</b>		0.100	0.100	0.100	0.100	0.100	0.500
<b>Non-identified Capex</b>		0.030	0.120	0.650	0.135	0.355	1.290
<b>Total</b>	<b>0.984</b>	<b>2.693</b>	<b>3.560</b>	<b>1.140</b>	<b>1.805</b>	<b>1.140</b>	<b>11.322</b>

EMS	30/09/2010	30/09/2011	30/09/2012	30/09/2013	30/09/2014	30/09/2015	Total
<b>£M</b>	<b>6 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	<b>12 Mths</b>	
Annual Investment		0.040	0.040	0.040	0.040	0.040	0.200
EMS Upgrades			0.200		0.300		0.500
EMS System Hardware Replacement					0.250		0.250
Network Hardware Replacement					0.115		0.115
Wind Curtailment Block Load Tool		0.200					0.200
Wind Stability Assessment Tool		0.120					0.120
<b>Total</b>	<b>0.000</b>	<b>0.360</b>	<b>0.240</b>	<b>0.040</b>	<b>0.705</b>	<b>0.040</b>	<b>1.385</b>

IT Hardware & Software	30/09/2010	30/09/2011	30/09/2012	30/09/2013	30/09/2014	30/09/2015	Total
£M	6 Mths	12 Mths	12 Mths	12 Mths	12 Mths	12 Mths	
Air Conditioning		0.050				0.060	0.110
Desktop PC Refresh					0.085		0.085
System Hardware Replacement		0.008	0.110		0.180	0.125	0.423
SAN Upgrade			0.060	0.060	0.250		0.370
Desktop Software Refresh					0.060		0.060
Sharepoint Upgrade		0.045		0.025		0.025	0.095
Virtualisation Upgrade			0.035			0.035	0.070
EDRMS				0.150			0.150
Data Warehouse Tools			0.170	0.030	0.030		0.230
IT Standardisation		0.045	0.045	0.035	0.035	0.035	0.195
EDIL		0.045					0.045
SDX		0.030	0.030	0.030	0.030	0.030	0.150
SONI Website		0.000	0.500	0.000	0.000	0.000	0.500
Training Records System		0.015					0.015
Network Modelling		0.050					0.050
<b>Total</b>		<b>0.288</b>	<b>0.950</b>	<b>0.330</b>	<b>0.670</b>	<b>0.310</b>	<b>2.548</b>

Telecoms	30/09/2010	30/09/2011	30/09/2012	30/09/2013	30/09/2014	30/09/2015	Total
£M	6 Mths	12 Mths	12 Mths	12 Mths	12 Mths	12 Mths	
Telecoms Infrastructure		0.065	0.050	0.020	0.145	0.295	0.575
WAN		0.050					0.050
UPS		0.000	0.100	0.000	0.050	0.040	0.190
Satellite Comms to Wind farms		0.300	0.300				0.600
<b>Total</b>		<b>0.415</b>	<b>0.450</b>	<b>0.020</b>	<b>0.195</b>	<b>0.335</b>	<b>1.415</b>

## 15.2 Appendix 2 –Utility Regulator Analysis of Capex

Summary	30/09/2010	30/09/2011	30/09/2012	30/09/2013	30/09/2014	30/09/2015	Total	Utility Regulator Comments
£M	6 Mths	12 Mths	12 Mths	12 Mths	12 Mths	12 Mths		
<b>6 Month Submission</b>	0.913						0.913	Allowance reduced to reflect approved allowance from Utility Regulator
<b>Building</b>		0.400	0.000				0.400	Costs reduced to reflect allowance for refurbishment. Further assessment of Building costs required
<b>EMS</b>	0.000	0.220	0.220	0.020	0.585	0.020	1.065	See Comments Below
<b>IT</b>	0.000	0.223	0.520	0.155	0.605	0.160	1.663	See Comments Below
<b>Telecoms</b>	0.000	0.115	0.150	0.020	0.195	0.185	0.665	See Comments Below
<b>Other</b>		0.100	0.000	0.000	0.000	0.000	0.100	Justification of costs was only provided for 2011. Therefore costs have been allowed in relation to TETRA licencing and Security
<b>Non-identified Capex</b>		0.000	0.000	0.000	0.000	0.000	0.000	Non identified Capex cannot be assessed by the Utility Regulator. The Utility Regulator will consider any innovation ideas with a full CBA during the price control period.
<b>Total</b>	<b>0.913</b>	<b>1.058</b>	<b>0.890</b>	<b>0.195</b>	<b>1.385</b>	<b>0.365</b>	<b>4.806</b>	

EMS	30/09/2010	30/09/2011	30/09/2012	30/09/2013	30/09/2014	30/09/2015	Total	Utility Regulator Comments
£M	6 Mths	12 Mths	12 Mths	12 Mths	12 Mths	12 Mths		
Annual Investment		0.020	0.020	0.020	0.020	0.020	0.100	Annual Investment not fully justified. The Utility Regulator recognise that some level of ongoing investment required but propose a lower value
EMS Upgrades			0.200		0.200		0.400	Second upgrade at end of 5 years has been reduced. The Utility Regulator believe SONI will be in a position to negotiate better terms for upgrade as it is part of hardware delivery.
EMS System Hardware Replacement					0.250		0.250	The Utility Regulator accept that this investment is necessary as equipment nears end of life.
Network Hardware Replacement					0.115		0.115	The Utility Regulator accept that this investment is necessary as equipment nears end of life.
Wind Curtailment Block Load Tool		0.200					0.200	The Utility Regulator accepts that investment will reduce costs to consumers (reduced constraints) and expect to see a VFM assessment of this investment
Wind Stability Assessment Tool		0.000					0.000	The Utility Regulator do not agree that this investment is necessary. If SONI wish to invest in this area to improve their performance they may gain from the proposed incentive mechanisms
<b>Total</b>	<b>0.000</b>	<b>0.220</b>	<b>0.220</b>	<b>0.020</b>	<b>0.585</b>	<b>0.020</b>	<b>1.065</b>	

IT Hardware & Software	30/09/2010	30/09/2011	30/09/2012	30/09/2013	30/09/2014	30/09/2015	Total	Utility Regulator Comments
£M	6 Mths	12 Mths	12 Mths	12 Mths	12 Mths	12 Mths		
Air Conditioning		0.050				0.000	0.050	The Utility Regulator accepts that the investment in 2011 is required, but have disallowed the 2015 cost. It is expected that a hardware swapout in 2014 will result in more efficient equipment so Air Con requirements should be sufficient or reduced.
Desktop PC Refresh					0.085		0.085	The Utility Regulator accepts that the investment is required
System Hardware Replacement		0.008	0.110		0.180	0.125	0.423	The Utility Regulator accepts that the investment is required to replace end of life equipment
SAN Upgrade			0.060	0.000	0.250		0.310	The Utility Regulator accepts that additional SAN may be needed and an upgrade in 2013. However, the Utility Regulator is disallowing the costs in 2012 as it expects SONI to phase the introduction of the upgrade to ensure storage needs are met efficiently
Desktop Software Refresh					0.060		0.060	As this investment is related to the Desktop PC Refresh, the Utility Regulator accepts that this investment is required
Sharepoint Upgrade		0.045		0.025		0.000	0.070	The Utility Regulator has disallowed the 2015 cost as it is not clear if this upgrade will be necessary
Virtualisation Upgrade			0.035			0.035	0.070	The Utility Regulator accepts that the investment is required
EDRMS				0.100			0.100	The Utility Regulator agrees that SONI need to have good document and record management systems in place. However, is is not clear how this system will interface with the existing Sharepoint. therefore a smaller allowance has been allocated  The Utility Regulator would expect to see efficiencies within the company as a result of this investment. This will be considered in the opex assessment
Data Warehouse Tools			0.170	0.000	0.030		0.200	The Utility Regulator accepts that this investment is necessary, however disallows one of the costs relating to customising the system within a year of deployment.
IT Standardisation		0.045	0.045	0.000	0.000	0.000	0.090	The Utility Regulator agrees that SONI should be considering IT standards and best practice. However it is not clear why there is an ongoing investment required. Therefore the Utility Regulator proposed to allow costs for 2 years to ensure the necessary systems are in place
EDIL		0.045					0.045	The Utility Regulator acknowledge that this investment would generate an efficiency in terms of resources. The Utility Regulator has considered this allowance in the assesment of opex
SDX		0.030	0.000	0.030	0.000	0.000	0.060	As this Data Exchange is linked to Sharepoint, the Utility Regulator has made an allowance in the same time frames as the Sharepoint allowances above
SONI Website		0.000	0.100	0.000	0.000	0.000	0.100	The Utility Regulator is concerned about the proposed costs in this area. The Utility Regulator do not agree with the proposed cost and have proposed a much lower cost. The Utility Regulator would require a much more detaile submission to consider a higher cost for a website.
Training Records System		0.000					0.000	The Utility Regulator do not agree that SONI need a Training Records System for a relatively small company. Therefore this allowance has not been allowed
Network Modelling		0.000					0.000	The Utility Regulator propose that as this tool is in Eirgrid, SONI could avail of that expertise. Therefore no allowance has been included
<b>Total</b>		<b>0.223</b>	<b>0.520</b>	<b>0.155</b>	<b>0.605</b>	<b>0.160</b>	<b>1.663</b>	



Telecoms	30/09/2010	30/09/2011	30/09/2012	30/09/2013	30/09/2014	30/09/2015	Total	Utility Regulator Comments
£M	6 Mths	12 Mths	12 Mths	12 Mths	12 Mths	12 Mths		
Telecoms Infrastructure		0.065	0.050	0.020	0.145	0.145	0.425	The Utility Regulator have made one disallowance in this area in relation to IP Telephony. There is a concern over why the hardware has a 4 year life time. The Utility Regulator proposes that this is an area to consider for the next price control.
WAN		0.050					0.050	The Utility Regulator accepts that the investment is required
UPS		0.000	0.100	0.000	0.050	0.040	0.190	The Utility Regulator accepts that the investment is required
Satellite Comms to Wind farms		0.000	0.000				0.000	The Utility Regulator disagrees with this cost as it should be covered via connection costs.
<b>Total</b>		<b>0.115</b>	<b>0.150</b>	<b>0.020</b>	<b>0.195</b>	<b>0.185</b>	<b>0.665</b>	

### **15.3 Appendix 3 – SONI Submission on Incentives**

SONI's submitted Incentives Paper is published separately but alongside this paper on the Utility Regulator website.

## 15.4 Appendix 4 – Questions

**Question 1:** Do Respondents agree with the proposed approach for the SONI Price Control?

**Question 2:** What Duration to respondents deem appropriate for the SONI Price Control: Five-and-a-half years from 1 April 2010 to 30 September 2015 or three-and-a-half years 1 April 2010 to 30 September 2013?

**Question 3:** Do Respondents agree with the proposed headcount and payroll allowance for the SONI Price Control?

**Question 4:** Do Respondents agree with the proposed IT & Comms allowance for the SONI Price Control?

**Question 5:** Do Respondents agree with the proposed pension allowance for the SONI Price Control?

**Question 6:** Do Respondents agree with the proposed pension deficit recovery period and treatment for the SONI Price Control?

**Question 7:** Do Respondents agree with the proposed Other Opex allowance for the SONI Price Control?

**Question 8:** Do Respondents agree with the proposed Capex allowance for the SONI Price Control?

**Question 9:** What opinions do Respondents have regarding the future building requirements for SONI?

**Question 10:** Do Respondents agree with the proposed WACC for the SONI Price Control?

**Question 11:** Do Respondents agree with the proposed Depreciation period of 10 years (straight line) should be used for the price control period?