Single Electricity Market Operator (SEMO) Revenue Requirement

Price control commencing 1 October 2016

Consultation Paper

11 May 2016

SEM-16-023

1. EXECUTIVE SUMMARY

1.1 BACKGROUND

The current SEMO Price Control[1] covers the period from 1 October 2013 to 30 September 2016. This consultation paper details SEMO's price control submission for the period beginning 1 October 2016 through to SEM decommissioning. As the All Island Market prepares for the introduction of the Integrated Single Electricity Market (I-SEM) arrangements, the existing SEM will move from a design and build market to an operate and maintain market model, as advocated by the Regulatory Authorities (RAs), through to the SEM resettlement and decommissioning periods. SEMO's price control submission reflects the winding down of SEM operations.

1.2 FORM, SCOPE AND DURATION OF PRICE CONTROL

A combined RA price control approach is proposed, consistent with previous price controls and SEMO's submission. The 2016-19 Price Control proposals are based on three distinct periods:

- Period 1 - the remainder of the SEM (currently due to end on 31 October 2017)
- Period 2 - the SEM resettlement period (currently M+13 from 1 November 2017 to 30 November 2018)
- Period 3 – the SEM decommissioning period (SEMO have assumed one year from 1 December 2018 to 30 November 2019)

The 2016-19 Price Control is designed to be flexible and will be adjusted, on a proportionate basis, to take account of any movements in the I-SEM commencement date. A proposal to reduce the length of the SEM resettlement period to M+4 is being brought to the June Modifications committee. If the modification proposal is successful, any deviation from simply reducing M+13 costs, on a proportionate basis, will have to be justified to the RAs and RA approval gained, to enable SEMO to recover any additional costs.[2] In their submission SEMO have assumed that the SEM decommissioning period will last one year. The RAs require that SEMO provide a proposal on how they will carry out the necessary

[1] SEM-13-054 SEMO 2013-2016 Price Control Decision Paper

[2] As SEMO have not made a price control submission, based on this shorter M+4 resettlement period, in time for the publication of this consultation paper

decommissioning activities, including how SEM data will be archived to enable it to be accessible to interested stakeholders on demand, until the RAs deem it is no longer required. Furthermore, the RAs also require that SEMO maintain their website for the duration of the two year dispute period post cessation of the SEM. The RAs are minded to provide a decommissioning incentive, of c. €100k, in order to help ensure decommissioning activities are executed in an efficient manner. This incentive amount and process can be finalised once SEMO provide a proposal on the matter.

This submission does not cover any requirements for I-SEM operation, including any initial market registration or training. I-SEM operational requirements and revenues will be subject to separate engagements with the RAs as required.

1.3 SEMO'S SUBMISSION AND RAS PROPOSAL

	SEMO's Submission	**RAs Proposal**
€ million		
OPEX		
Total Payroll	4.79	3.68
Total IT & Communications	5.62	5.62
Total Facilities and Insurance	1.02	-
Total Professional Fees	0.56	0.56
Total General and Administrative	0.35	0.35
Total Corporate Services	0.94	0.94
Total	**13.28**	**11.15**
Cost of Capital		
Depreciation*	TBC	5.46
WACC*	TBC	0.47
Total		**17.08**
Parent Company Guarantee	0.3	**0.3**
Total Revenue Requirement	TBC	**17.38**
CAPEX Submission (incorporated in Depreciation Charge above)	**1.64**	**1.08**

Table 1: Summary of SEMO's submission and RAs proposals

*SEMO have yet to make a submission for these amounts

All figures are in March 2015 prices, unless stated otherwise

1.4 OPERATING EXPENDITURE (OPEX)

For Period 1 of the 2016-19 Price Control the operating expenditure (OPEX) incentivisation framework will continue to operate as it does currently, with SEMO retaining any efficiencies on an RPI-0.3 basis. OPEX within Period 2 and 3 of the 2016-19 Price Control will be treated on a Cost Pass-Through basis, as required spend in this period is uncertain at this point.

1.5 CAPITAL EXPENDITURE (CAPEX)

Capital Expenditure (CAPEX) will be provided for on a Cost Pass-Through basis for all three periods of the 2016-19 Price Control. The RAs believe that due to the small amount of CAPEX, included in SEMO's submission, it may not be proportionate to use a menu regulation or other incentivisation approach to SEMO's CAPEX.

1.6 KEY PERFORMANCE INDICATORS (KPI)

The RAs are of the view that it will be important to continue to provide SEMO with the right incentives to maintain performance levels. The RAs propose that SEMO should continue to be incentivised on their KPIs targets within Period 1 and 2 of the 2016-19 Price Control.

1.7 PROVISION OF COMMENTS

Comments are invited from industry and stakeholders, on the proposals within this consultation paper. All responses should be directed to Bronagh McKeown at Bronagh.McKeown@uregni.gov.uk, by 17:00 on Thursday 9th June 2016.

2. CONTENTS

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All figures are in March 2015 prices, unless stated otherwise

3. INTRODUCTION

3.1 THE SINGLE ELECTRICITY MARKET

The all-island wholesale electricity market was established as the Single Electricity Market (SEM) in November 2007. The SEM is a centralised gross mandatory pool market, with electricity being bought and sold through the pool under a market clearing mechanism.

Generators receive the System Marginal Price (SMP) for their scheduled dispatch quantities, Capacity Payments for their actual availability and Constraint Payments for dispatches outside the market schedule due to system constraints and other specific factors.

Suppliers purchasing energy from the pool will pay the SMP for each trading period, Capacity Charges, and System Support Charges. The SEM market rules are set out in the Trading and Settlement Code (TSC)[3]. The SEM is governed by the SEM Committee (SEMC) which was set up by the Governments in the Republic of Ireland and Northern Ireland. This Committee has representatives from both RAs, the Utility Regulator (UR) in Northern Ireland and the Commission for Energy Regulation (CER) in the Republic of Ireland, together with an Independent Member.

3.2 ROLE OF SEMO

The development of the SEM led to the requirement for a Single Electricity Market Operator (SEMO), to administer the market. The RAs approved the creation of a cross jurisdictional joint venture between Eirgrid and SONI, the Transmission System Operators in ROI and NI respectively, to from SEMO to administer the SEM.

SEMO's role in the market is explicitly defined in the SEM TSC, which sets out the rules, procedures and terms and conditions, which all parties, including SEMO, must adhere to in order to participate in the SEM. Additionally, both EirGrid and SONI must comply with the conditions imposed on this activity by their respective Market Operator (MO) Licences.

As defined in section 1.3 of the TSC, SEMO's role is to 'facilitate the efficient, economic and coordinated operation, administration and development of the Single Electricity Market in a financially secure manner'.

[3] http://www.sem-o.com/MarketDevelopment/MarketRules/TSC.docx

3.3 SEMO REVENUE & CHARGES

SEMO's operational and capital costs are recovered through Market Operator tariffs and fees, which are levied on market participants.

As part of the 2016-19 Price Control process, the RAs issued a price control questionnaire to SEMO, and SEMO completed the questionnaire by submitting proposals for their revenue requirement, on a combined basis, for the two Market Operator licensees. In line with previous price controls, SEMO's price control allowance will be recovered by SONI and Eirgrid, per the agreed specified proportions. The agreed current apportionment between EirGrid and SONI is 75% and 25% respectively and this is based on comparative levels of energy consumption in the Republic of Ireland and Northern Ireland. This current apportionment is also detailed in the Market Operator Agreement between Eirgrid and SONI. EirGrid plc. and SONI Ltd. entered into this Market Operator Agreement in 2007, in accordance with the requirements of their respective Market Operator licences.

3.4 SEMOS PERFORMANCE TO DATE

SEMO has successfully operated and maintained the SEM since November 2007. During the current price control SEMO has delivered market solutions to address such issues as REMIT, energy storage and demand side participation.

Both the SEM and SEMO have reached a level of maturity and this has aided SEMO's ability to outperform on the current price control allowance. SEMO have outperformed on their OPEX allowance by approximately €2.7m in the first two years of the current price control and are on course to make another €2.8m worth of OPEX savings in the current 2015/16 tariff year. CAPEX efficiencies have also been delivered to date, with an under spend of circa €3.4m expected by the end of September 2016. SEMO's outperformance of their capital allowance will generate a reward based on their final outturn capital spend, in line with the menu regulation methodology set out in the 2013 – 16 Price Control decision paper[4].

Key Performance Indicators (KPI) help measure the quality of service received by stakeholders. The RAs acknowledge SEMO's good achievement against targets, and feel the KPIs have been a useful tool for ensuring that efficiencies are not being delivered at the expense of service.

[4] SEM-13-054

3.5 REGULATORY APPROVAL PROCESS

A detailed review and analysis of SEMO's submission and associated supporting information has been carried out. Based on the information provided and ongoing discussions with SEMO, the RAs now publish this consultation paper, which details proposals on SEMO's price control allowance, for the three year period between 1 October 2016 to 30 September 2019.

3.6 EU POLICY

Currently, the RAs are involved in implementing European policy, in the context of creating the Integrated Single Electricity Market (I-SEM), on the island of Ireland. This European Target Model will most likely be significantly different from the current SEM and any costs associated with its implementation are not included in this price control. SEMO have made their price control submission on a 'business as usual' basis, with any I-SEM implementation costs being accounted for as part of a different work stream. Further detail on scope of SEMO's 2016-19 SEMO Price Control is provided in section 5.

4. REGULATORY PRINCIPLES

The principle objective of the SEM Committee is to protect the interests of consumers of electricity on the island of Ireland and, where possible, to do so by promoting effective competition.

The SEM Committee, in carrying out their functions, shall have regard to the principles underpinning regulatory activities[5]:

- Transparent
- Accountable
- Proportionate
- Consistent
- Targeted.

5. FORM, SCOPE & DURATION

5.1 FORM

SEMO exists as a contractual joint venture between the system operator in the Republic of Ireland (EirGrid) and the system operator for Northern Ireland (SONI) and is not a separate legal entity in its own right. Therefore, in finalising a SEMO price control, consideration needs to be given to factors affecting each of the companies making up the joint venture e.g. financeability (Parent Company Guarantee), Weighted Average Cost of Capital (WACC) and recharges. Further difficulty arises as SEMO operates on a cross-jurisdictional basis and is governed by two Market Operator licences, issued by the two RAs on the island.

In light of the above, a combined RA price control is proposed for the SEMO business as a whole. This is consistent with the approach taken for previous SEMO controls.

[5] The Electricity (Single Wholesale Market) (Northern Ireland) Order 2007

5.2 OPEX & CAPEX REGULATION

OPEX

The RAs are minded to continue to incentivise OPEX under Revenue Cap (RPI-X) regulation in Period 1 of the 2016-19 Price Control. Revenue Cap regulation incentivises the regulated company to reduce costs by increased efficiency of processes and lower input prices. Any efficiency and price savings are retained by the regulated company while overspends must be absorbed by the regulated company. In the current price control the RAs applied RPI-0.3[6] to SEMO's price control allowance.

As the required OPEX under Period 2 and 3 of the 2016-19 Price Control is uncertain at this stage, with no comparables, the RAs are minded to allow for OPEX on a Cost Pass-Through basis. Under this approach any underspend on OPEX would be returned to consumers through the k-factor mechanism. Additionally, any overspend on OPEX in Period 2 and 3 would have to be absorbed by SEMO or approved by the RAs.

CAPEX

For the 2016-19 Price Control, the RAs are minded to continue with rate of return regulation. This method of regulation provides a return to SEMO based on their Regulatory Asset Base (RAB). SEMO's RAB is calculated based on the actual historical costs, of their RAB, depreciated on a straight line basis over 5 years and increased each year for any RAB additions, which are then subject to the same depreciation policy. The RAB value is indexed each year, to account for inflation, and a rate of return (representing compensation for risk and the opportunity cost of the capital) is provided. This rate of return is referred to as the Weighted Average Cost of Capital (WACC) and is directly derived from a combination of the WACC applicable to EirGrid and SONI.

As SEMO moves from a design and build model to an operate and maintain approach its CAPEX requirements will reduce significantly. The RAs are minded to treat CAPEX in all periods of the 2016-19 Price Control on a Cost Pass-Through basis. The RAs propose that the menu regulation approach, used in the current price control, is discontinued for the 2016-19 Price Control, due to the small amount of CAPEX expected in the next price control period. Under this approach any underspend on CAPEX is returned to consumers via the k-factor

[6] The deducted 0.3% is seen as a dead band and this incentivises SEMO to make efficiencies over and above inflation.

mechanism and any overspend would have to be absorbed by SEMO or approved by the RAs.

The table below details the RAs proposals for the forms of regulation in each of the 2016-19 Price Control periods.

	OPEX			CAPEX (New Investments	CAPEX (Investments in depreciation)
	Period 1	**Period 2**	**Period 3**	**All Periods**	**All Periods**
RAs Proposal for 2016-2019	Revenue Cap RPI-X	Cost Pass-Through	Cost Pass-Through	Rate of Return Regulation + Cost Pass-Through	Rate of Return Regulation
Current Form in Regulation 2013-2016	Revenue Cap RPI-X			Rate of Return Regulation + Incentivisation	Rate of Return Regulation

Table 2: Price Control Framework Design

The RAs welcome comments from respondents on the above proposals.

5.3 TARIFFS

Tariffs will be calculated to enable SEMO to recover its allowance based on forecasted market demand. Any difference between forecasted and actual market demand will necessitate a balancing of the resultant over or under recovery experienced by SEMO, when finalising tariffs for the following year. This truing up figure forms part of the k-factor applied to the following year's tariffs.

SEMO have raised concerns, as to how this truing up exercise will be facilitated once the SEM ceases and I-SEM commences (31 October 2017). SEMO argue that the Imperfection k-factor/tariff process and Market Operator k-factor/Market Operator Charges arrangements will not be applicable and consequently SEMO may not be able to recover costs.

The RAs recognise this as a key concern and propose that the Imperfection k-factor/tariff process and Market Operator k-factor/Market Operator Charges arrangements, be recovered through a tariff in the I-SEM. The RAs propose that this be included as part of the price control determination for the periods in question which continue into the I-SEM period and in a licence requirement as appropriate.

The RAs welcome any comments on this proposal.

5.4 SCOPE

The SEM has provided a platform for the wholesale trade of electricity in the Republic of Ireland and Northern Ireland since go-live in 2007. However, development towards European electricity Market Integration and compliance with the European 'target model' has the potential to significantly change the current SEM design. This represents the next major development of the trading arrangements on the island of Ireland.

When the price control questionnaire was issued to SEMO, in February 2016, the RAs requested that SEMO assume a 'Business as Usual' approach to maintaining the current structure of the SEM. Any expenditure associated with Market Integration is considered outside the scope of the 2016-19 Price Control.

5.5 DURATION

The current price control duration is 3 years, with the next price control due to commence on 1 October 2016. The RAs seek to implement a price control to cover the following periods:

- Period 1 - the remainder of the SEM (currently due to end on 31 October 2017)
- Period 2 - the SEM resettlement period (currently M+13 from 1 November 2017 to 30 November 2018)
- Period 3 – the SEM decommissioning period (SEMO have assumed one year from 1 December 2018 to 30 November 2019)

Both the RAs and SEMO agree that the 2016-19 Price Control needs to be flexible enough to account for any shift in the above dates. The below paragraphs detail the RAs proposals for dealing with any movements in each of the periods.

Period 1

The 2016-19 Price Control should be rolled forward in the event that there is any slippage on the I-SEM go live date. The allowance for Period 1 is to be rolled forward on a proportionate basis to allow for any amendment to the proposed I-SEM commencement date.

Period 2

A proposal to reduce the length of the SEM resettlement period to M+4 is tabled to be discussed at the June Modifications Committee meeting and a SEMC decision on the issue should be made over the summer months. The outcome of this will impact SEMO's revenue requirements and SEMO have advised that the revenue requirements for M+13 cannot simply be proportionately reduced to arrive at an appropriate M+4 allowance, as some costs are absolute and not dependent on the length of the period. The RAs have requested that SEMO make a submission, based on the modification proposal being successful and the SEM resettlement period being reset to M+4. As SEMO have not provided us with a submission, based on a resettlement period length of M+4, any deviation from simply reducing M+13 costs, on a proportionate basis, will have to be justified to the RAs and RA approval gained, to enable SEMO to recover any additional costs.

Period 3

SEMO have advised that their proposed decommissioning costs are based on the decommissioning period lasting one year. Again SEMO have asserted that the allowance for the decommissioning period cannot simply be reduced on a proportionate basis, to allow for any change in length of the decommissioning period. The RAs require that SEMO provide a proposal on how they will carry out the necessary decommissioning activities, including how SEM data will be archived to enable it to be accessible to interested stakeholders on demand, until the RAs deem it is no longer required. Furthermore, the RAs also require that SEMO maintain their website for the duration of the two year dispute period, post cessation of the SEM.

The RAs are minded to provide a decommissioning incentive, of c. €100k, in order to help ensure decommissioning activities are executed in an efficient manner. This incentive amount and process can be finalised once SEMO provide a proposal on the matter.

6. INDEXATION

At the request of the RAs, SEMO has made their price control submission using a mid tariff (March 2015) price base. The RA's proposals for a revenue allowance also use a March 2015 price base. The tariff process will continue to adjust the relevant allowance to account for out-turn inflation.

Market Operator tariffs will be adjusted for out-turn inflation up to March of each year and any further adjustment will be recognised in the k-factor adjustment mechanism.

The indexation rate applicable to the current price control is a blended rate of the Consumer Price Index[7], in ROI (75%) and the Retail Price Index[8], in NI (25%). The RAs are minded to continue with the existing blended indexation approach for the duration of this 2016-19 Price Control.

The RAs welcome comments on any of the above proposals.

[7] Based on publication by the Central Statistics Office, Ireland

8 The Office for National Statistics, UK

7. SEMO'S SUBMISSION

A summary of SEMO's 2016 Price Control submission is provided in Table 3 below.

SEMO's submission reflects the winding down of the current SEM and the movement from the design and build approach to Central Market Systems (CMS), in the current price control, to an operate and maintain approach to CMS, in the 2016-19 Price Control. This change in approach was advocated by the RAs and outlined in SEMO's Central Market Systems Roadmap Options and Recommendations' report[9]. In this report SEMO describe how the CAPEX required under the operate and maintain approach will decline compared to current levels, but that an increase in OPEX support costs will be needed to extend the life cycle of SEMO's hardware.

The OPEX allowance sought by SEMO, for the 2016-19 Price Control period, is €13.28m, compared to the €29.98, allowed for the current price control. The CAPEX requirement proposed by SEMO, as part of the 2016-19 Price Control, is €1.64m, compared to €8.81 for the current price control.

SEMO note that the length of the 2016-19 Price Control is subject to decisions that have yet to be made, including the required SEM resettlement period length. The RAs have asked SEMO to provide a submission based on a M+4 resettlement period, in addition to the current M+13 framework. Details of how any movements in transitional dates, between each of the periods within the 2016-19 Price Control, are to be dealt with, is discussed in section 5 above.

The continuation of incentives including Key Performance Indicators (KPIs) is favoured by SEMO for all periods of the next price control. SEMO have also made a new proposal on how KPI amounts should be calculated, rather than adhering to the 4% of annual OPEX currently applied. This is discussed further in the section 12 below.

The RAs have assessed all areas of SEMO's submission and supporting information. Priority has been given to the most significant cost categories and any cost areas where SEMO's proposed allowance is higher than expected.

[9] Approved by the RAs in December 2015

€ million	2013-16 Price Control				SEMO's Submission			
	Actuals 2013-14	**Actuals 2014-15**	**SEMO's Estimates 2015-16**	**Total**	**2016-2017**	**2017-2018**	**2018-2019**	**Total**
OPEX								
Total Payroll	4.53	3.32	2.92	10.77	2.92	1.19	0.68	4.79
Total IT & Communications	2.39	2.61	2.53	7.53	2.92	2.70	-	5.62
Total Facilities and Insurance	1.11	0.80	0.65	2.56	0.65	0.26	0.11	1.02
Total Professional Fees	0.34	0.27	0.31	0.92	0.31	0.15	0.10	0.56
Total General and Administrative	0.15	(0.06)	0.22	0.31	0.22	0.09	0.04	0.35
Total Corporate Services	0.84	1.00	0.52	2.36	0.45	0.39	0.10	0.94
Total	**9.37**	**7.95**	**7.15**	**24.46**	**7.47**	**4.78**	**1.03**	**13.28**
Cost of Capital								
Depreciation*	5.03	TBC	TBC	TBC	TBC	TBC	TBC	TBC
WACC*	0.70	TBC	TBC	TBC	TBC	TBC	TBC	TBC
Total	**15.10**	**TBC**	**TBC**	**TBC**	**TBC**	**TBC**	**TBC**	**TBC**
Licence Requirement Allowance (PCG)	**0.30**	**0.30**	**0.30**	**0.90**	**0.30**	**-**	**-**	**0.30**
Total Revenue Requirement	**15.40**	**TBC**	**TBC**	**TBC**	**TBC**	**TBC**	**TBC**	**TBC**
CAPEX Submission (incorporated in Depreciation Charge above)	**3.05**	**1.02**	**1.31**	**5.38**	**1.01**	**0.49**	**0.14**	**1.64**

Table 3: Summary of SEMO Actuals and 2016 Price Control Submission in March 2015 prices

*SEMO have yet to provide these amounts, actual for 2013-14 have been taken from SEMO's Ex-post review for 2013-14 and indexed to March 2015 prices. The RAs request that SEMO provide these figures.

8. OPERATIONAL EXPENDITURE (OPEX)

In this section, SEMO's OPEX proposals, as detailed in Table 4 below, are discussed.

SEMO have requested a total of €13.28m of OPEX for the 2016-19 Price Control period.

	2013-16 Price Control				SEMO's Submission			
€ million	**Actuals**	**Actuals**	**Estimate**		**Forecast**	**Forecast**	**Forecast**	
	2013-14	**2014-15**	**2015-16**	**Total**	**2016-17**	**2017-18**	**2018-19**	**Total**
No. Of FTEs	58	45	42		42	15	7	
OPEX								
Total Payroll	4.53	3.32	2.92	10.77	2.92	1.19	0.68	4.79
Total IT & Communications	2.39	2.61	2.53	7.53	2.92	2.70	-	5.62
Total Facilities and Insurance	1.11	0.80	0.65	2.56	0.65	0.26	0.11	1.02
Total Professional Fees	0.34	0.27	0.31	0.92	0.31	0.15	0.10	0.56
Total General and Administrative	0.15	(0.06)	0.22	0.31	0.22	0.09	0.04	0.35
Total Corporate Services	0.84	1.00	0.52	2.36	0.45	0.39	0.10	0.94
Total	**9.37**	**7.95**	**7.15**	**24.46**	**7.47**	**4.78**	**1.03**	**13.28**

Table 4: Summary of OPEX

In order to determine a suitable OPEX allowance for SEMO, the RA's analysed SEMO's allowed and actual OPEX spend from 1 October 2013 to 30 September 2016, compared to its proposed future spend.

SEMO have provided detail of actual costs incurred for 2013-14 and 2014-15 and estimates for 2015-16. All figures quoted in this chapter are in March 2015 prices.

8.1 OVERVIEW OF OPEX

Proposed OPEX includes Payroll, IT & Communications, Facilities and Insurance, Professional fees, General and Administrative costs and costs associated with Corporate Services. SEMO took a 'business as usual' approach to its OPEX submission, as required by the RAs.

SEMO's actual outturn OPEX outturn for the current price control (with estimates for the 2015-16 year) is €24.46 million. This compares to an allowance of €29.98 million and represents an outperformance of 18.4%.

Period 1 – 2016/17

The figures in table 4 illustrate that OPEX requirements, in Period 1, largely follow those in the current tariff year, as SEMO continues to fulfill its license functions, carry out daily market operational activities and maintain market systems.

Period 2 – 2017/18

In the period post I-SEM go-live the SEM operational requirements will change substantially as the market winds down. As a number of obligations for the existing SEM will extend beyond the cutover date to I-SEM, there is a requirement to continue the operation and maintenance of the majority of the SEM CMS systems until the resettlement period is completed.

Period 3 – 2018/19

Following the final resettlement, the SEM decommissioning phase will commence and will require a mixture of Market Operations, Information Systems, Legal and Finance resources, along with some specialist Professional Services.

The graph below reflects the dwindling costs associated with these changing operational requirements. Please note 2015/16 costs are based on a best estimate provided by SEMO for the current year.

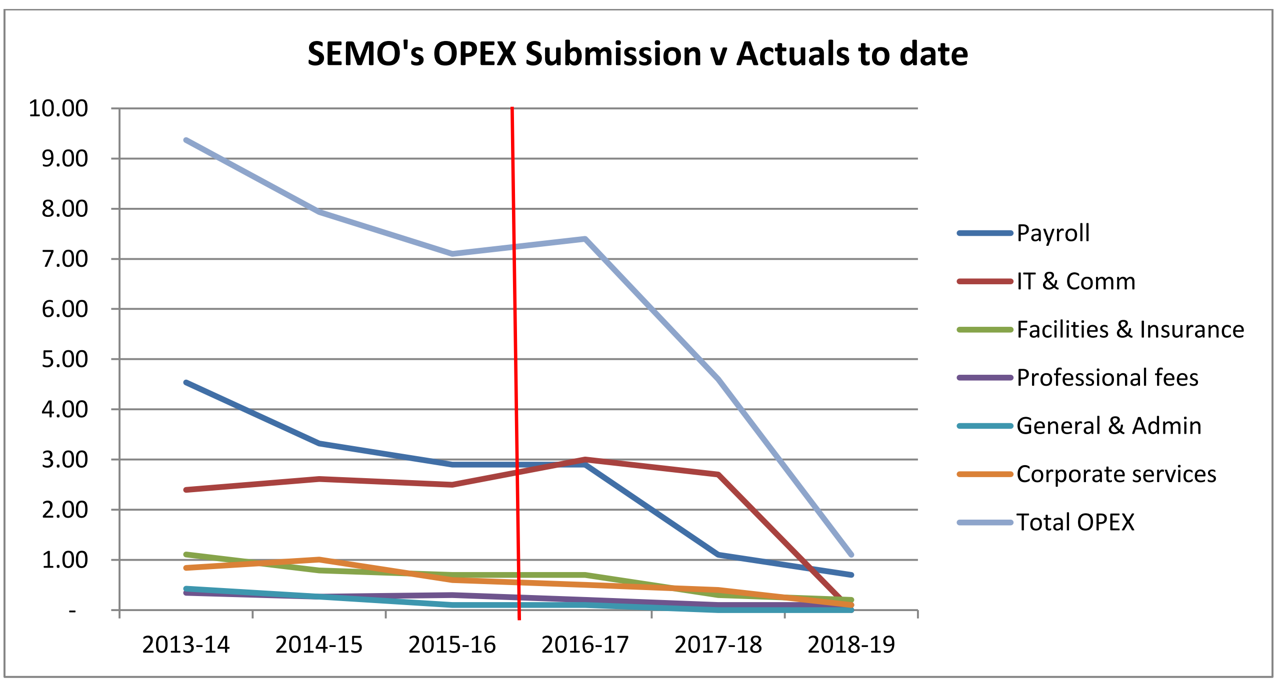

Figure 1: SEMO actual OPEX for 2013-16 and submitted OPEX for 2016-19

8.2 PAYROLL

This section discusses SEMO's proposed payroll costs and the RAs assessment of these costs.

SEMO submission

For the 2016-19 Price Control, SEMO have requested a three year allowance totaling €4.79 million for payroll. Payroll is the second largest cost item in the OPEX submission, making up 36% of OPEX over the three year price control period.

SEMO's payroll consists of:

- Salaries;
- Bonus
- Employer's PRSI
- Employer's pension contribution
- On call/Shift/Overtime
- Car Other Benefits
- Contractors/Agency costs

SEMO's payroll submission, compared to actual payroll expenditure incurred in the 2013-16 price control, is summarised in Table 5 below.

	2013-16 Price Control				SEMO Submission			
€ million	**Actual**	**Actual**	**Estimate**		**Forecast**	**Forecast**	**Forecast**	
	2013-14	**2014-15**	**2015-16**	**Total**	**2016-17**	**2017-18**	**2018-19**	**Total**
No. of FTEs	58	45	42		42	15	7	
Salaries	3.25	2.28	2.00	7.53	2.00	0.83	0.45	3.28
Bonus	0.36	0.28	0.14	0.78	0.14	0.07	0.04	0.25
Employer's PRSI	0.38	0.24	0.29	0.91	0.29	0.10	0.05	0.44
Employer's Pension Contribution	0.42	0.34	0.32	1.08	0.32	0.12	0.07	0.51
Overtime	-	-	-	-	-	-	-	-
Car Other Benefits	(0.03)	0.05	0.07	0.09	0.07	0.02	0.01	0.10
Contractors/Agency costs	0.11	0.06	0.09	0.26	0.09	0.05	0.06	0.20
Other	0.04	0.07	0.01	0.12	0.01	-	-	0.01
Total Payroll	**4.53**	**3.32**	**2.92**	**10.77**	**2.92**	**1.19**	**0.68**	**4.79**

Table 5: SEMO's Payroll Submission

All figures are in March 2015 prices, unless stated otherwise

Period 1 – 2016/17

Payroll for Period 1 of the 2016-19 Price Control remains consistent with SEMO's expectations for the current tariff year outturn, with all elements of payroll remaining at 2015/16 levels.

The RAs question the inclusion of 42 FTEs in 2016/17 as SEMO themselves, in their SEMO Revenue Control 2016-19 submission, state, *'As we move into this Operate and Maintain arrangement the requirement for Market Systems Analysis and Design (Impact Assessments, Modification Requests, etc.) will decrease, in line with the level of development expected (System Defects, SEM Design Service Requests etc.) over the 2016-2017 period. Under these arrangements SEMO is moving away from the Biannual Release strategy with the last major market release due in June 2016. There will however be a need for ad hoc releases'.*

As discussed in the CAPEX section below, the RAs are not minded to provide for these ad hoc releases, as part of the price control. Based on the statement above and the continual efficiency trend in SEMO's operations, the RAs would expect the number of FTEs to decrease relative to current levels. The RAs propose that the headcount in Period 1 be reduced to an average of 35 FTEs. The RAs have not been provided with sufficient evidence to justify the inclusion of 42 FTEs in this period and based on SEMO's efficiency gains and the winding down of operations feel 35 is a reasonable estimate of the headcount required. The RAs question the requirement for the same headcount in relation to the level of training, market analysis, change management, modifications secretariat and support and formal and ad-hoc queries, that exist in the current tariff year.

The RAs are aware that SEMO are incentivised on their OPEX within this period and ask that SEMO provide further evidence to justify the inclusion of 42 FTEs, on top of their allowance of €90k for contractor costs.

Period 2 – 2017/18

SEMO have proposed that there will be a need for 15 FTEs in Period 2 of 2016-19 Price Control. The RAs agree with SEMO that there is significant uncertainty surrounding this period but ask that SEMO provide further evidence to justify the inclusion of 15 FTEs for this period. As part of their submission, SEMO provide an organisational chart showing the activities that will have to be carried out once the SEM ceases. The RAs agree that significant activities have to be conducted within the resettlement period but feel that the headcount requirement in each of the remaining functional areas should be significantly reduced from current levels. The RAs feel that the level of staffing in areas such as credit risk management, funds transfer, customer service, stakeholder management, formal and adhoc queries, market reporting, security cover and change management should be minimal.

For this reason, and given SEMO's continued efficiency gains, the RAs propose reducing the average number of FTE's from 15 to 10 in this period. The RAs ask that SEMO provide a more detailed description of headcount for each functional area in order to justify the inclusion of 15 FTEs in the SEM resettlement period. The RAs note that OPEX costs in this period are recovered on a Cost Pass-Through basis and ask that SEMO are not overly conservative in their assumptions as, if necessary, SEMO can seek RA approval for additional funding. Furthermore, the RAs also note that an amount for contractor costs has been included within SEMO's submission and ask for detail on how this will be utilised.

Period 3 – 2018/19

At the time of their submission SEMO were unaware of the RAs requirements for the decommissioning period. In order to approve SEMO's payroll submission, for this period, the RAs would need to know the assumptions underlying SEMO's estimated payroll amounts i.e. what functions have SEMO assumed they will carry out in this period? The RAs require that SEMO make a proposal on how they will conduct data archiving activities within the decommissioning period. The RAs require that SEM data is available to interested stakeholders on request, until the RAs advise it is no longer required. Additionally, the RAs require that SEMO keep the SEMO website fully functional until the end of the two year dispute window, following the cessation of the SEM. Once this proposal is provided the RAs will be better placed to approve SEMO's OPEX submission for the decommissioning period.

Again, without provision of more detailed evidence behind SEMO's submission, the RAs are minded to reduce the number of FTE's in Period 3 of the Price Control. The RAs propose reducing the number of FTEs in the decommissioning period from 7 to 4. This reduction to FTEs is based on the RAs estimate of the headcount required to conduct the necessary decommissioning activities. SEMO have included an allowance of €60k for contractors in this period and the RAs feel that 4 FTE's on top of this should be sufficient to finalise the decommissioning of the SEM. The RAs ask that SEMO, as part of their proposal, provide detail and evidence on the required amount of FTEs to carry out the RAs required decommissioning activities.

All of the reductions in FTEs should have an effect on the allowance provided for bonuses, employer's PRSI, and employer's pension contribution amounts and any other payroll related amounts. The RAs have assumed that these payroll costs, in addition to salaries, will fall proportionately with the respective reductions in FTEs in each of the periods.

The RAs welcome any responses in relation to their payroll proposals.

8.3 CONCLUSION ON PAYROLL

The RAs propose to allow a total payroll allowance of €3.68 million for payroll in the 2016-19 Price Control. The allowance is 23% lower than that requested by SEMO. The difference is explained by a reduction in proposed headcount, in each of the price control periods.

	SEMO Submission				**RAs Proposal**			
€ million	**Forecast**	**Forecast**	**Forecast**		**Forecast**	**Forecast**	**Forecast**	
	2016-17	**2017-18**	**2018-19**	**Total**	**2016-17**	**2017-18**	**2018-19**	**Total**
No. of FTEs	42	15	7		35	10	4	
Salaries	2.00	0.83	0.45	3.28	1.67	0.55	0.26	2.48
Bonus	0.14	0.07	0.04	0.25	0.12	0.05	0.02	0.19
Employer's PRSI	0.29	0.10	0.05	0.44	0.24	0.07	0.03	0.34
Employer's Pension Contribution	0.32	0.12	0.07	0.51	0.27	0.08	0.04	0.39
On Call / Shift / Overtime	-	-	-	-	-	-	-	-
Car Other Benefits	0.07	0.02	0.01	0.10	0.06	0.01	0.01	0.08
Contractors/Agency costs	0.09	0.05	0.06	0.20	0.09	0.05	0.05	0.19
Other	0.01	-	-	0.01	0.01	-	-	0.01
Total Payroll	**2.92**	**1.19**	**0.68**	**4.79**	**2.46**	**0.81**	**0.41**	**3.68**

Table 6: RAs Payroll Proposal

The RAs welcome any comments on these payroll proposals.

8.4 IT & TELECOMMUNICATIONS

IT & Telecommunications represents the largest category of OPEX for the 2016-19 Price Control, accounting for 44% of SEMO's total OPEX submission. The RAs appreciate the changing landscape for this area and the criticality of it to the market.

SEMO's submission proposes an allowance of €5.62 million for IT & Communications, broken down as follows:

	2013-16 Price Control				SEMO's Submission			
€ million	**Actual**	**Actual**	**Estimate**		**Forecast**	**Forecast**	**Forecast**	
	2013-14	**2014-15**	**2015-16**	**Total**	**2016-17**	**2017-18**	**2018-19**	**Total**
Telecommunications	0.19	0.25	0.14	0.58	0.17	0.17	-	0.34
IT Support & Maintenance	2.20	2.36	2.39	6.95	2.75	2.53	-	5.28
IT Opex Support for Capex	-	-	-	-	-	-	-	-
Total IT & Communications	**2.39**	**2.61**	**2.53**	**7.53**	**2.92**	**2.70**	**-**	**5.62**

Table 7: Summary of IT & Communications proposed by SEMO

The table above shows how SEMO predict that total IT & Communications costs will increase by €0.39m between the current tariff year and Period 1 of the next price control. The majority of this cost increase is accounted for by the increase in IT Support & Maintenance. This increase in costs accounts for the spike in total OPEX shown in figure 1 above.

SEMO submitted their CMS Roadmap approach paper to the RAs in December 2015. Based on this, the RAs approved a CMS maintenance approach over a CMS upgrade, that ordinarily would be necessary given that some of the CMS assets are approaching the end of their useful economic lives. This maintenance mode avoids the significant CAPEX requirement associated with an upgrade mode but it will incur additional OPEX costs to provide for the additional support requirements to ensure the life of the system can be extended effectively. The maintenance mode approach will take the operational lifetime of the SEMO Central Market and Corporate systems beyond standard/recommended operational timeframes. SEMO have advised that due to this, additional risk management measures to provide greater protection against system outages and/or failure are required, leading to additional IT & Communication costs. SEMO have stated that as warranties expire and usage timeframes extend, that additional costs will be incurred.

SEMO's CMS Roadmap submission advised that there would be an expected increase in operating costs of approximately €250k, specifically related to the adoption of the maintenance mode option. SEMO have advised that the remainder of the increase in costs, relative to the current year, relates to the structure of the extended Brady contract, which was approved by the SEMC in December 2015. For these reasons the RAs are minded to endorse SEMO's IT and communications submission, per the table overleaf.

	SEMO's Submission				RAs Proposal			
€ million	**Forecast**	**Forecast**	**Forecast**		**Forecast**	**Forecast**	**Forecast**	
	2016-17	**2017-18**	**2018-19**	**Total**	**2016-17**	**2017-18**	**2018-19**	**Total**
Telecommunications	0.17	0.17	-	0.34	0.17	0.17	-	0.34
IT Support & Maintenance	2.75	2.53	-	5.28	2.75	2.53	-	5.28
IT support for CAPEX	-	-	-	-	-	-	-	-
Total IT & Communications	**2.92**	**2.70**	**-**	**5.62**	**2.92**	**2.70**	**-**	**5.62**

Table 8: Summary of RAs IT & Communications Proposals

8.5 FACILITIES & INSURANCE

SEMO has office space in both jurisdictions and will continue to co-locate on property provided by both parent organisations. Facilities costs cover rent, rates, insurance, utilities and also includes cleaning services, maintenance, car parking, security, mail service, copy bureau, switch board and catering and canteen services.

The RAs recognise these costs are predominantly a recharge from both SONI and Eirgrid's parent companies and have therefore reviewed the EirGrid TSO and SONI TSO price controls regarding decisions in place for facilities costs. The current SONI TSO price control, for the period from 2015 – 2020, contains an allowance for all of SONI's facility costs and SEMO's submission correctly does not include a value in relation to SONI facility costs. SEMO's submission however does contain a request for €1.2m in relation to Eirgird facilities and insurance costs. SEMO have stated that the current Eirgrid TSO price control relates to the Eirgrid TSO requirements only and that premises costs are allocated on a FTE basis across the licences.

In the previous Eirgrid TSO price control[10] a specific amount of facility costs were apportioned to Eirgrid, in its capacity as Market Operator. In the current Eirgrid TSO Price control[11] there has been no reductions specified in relation to SEMO and premises costs were not provided on a FTE basis.

The RAs are therefore minded to make no allowance for facilities and insurance within the SEMO 2016-19 Price Control.

8.6 CONCLUSION ON FACILITIES & INSURANCE

As stated above, the RAs are minded to remove any allowance for facilities and insurance from the SEMO 2016-19 Price Control. The RAs are minded to do this as both Eirgrid and SONI's current TSO price controls contain allowances for Eirgrid's and SONI's facilities and insurance costs.

8.7 OPEX CONCLUSIONS

The RAs analysed the following cost categories within SEMO's OPEX submission:

- Payroll
- IT & Communications
- Facilities and Insurance
- Other OPEX (including professional fees, general and administrative costs, corporate services)

Compared to SEMO's submission for a total of €13.28 million of OPEX, the RAs are minded to approve an allowance of €11.15 million (a 16% reduction).

The table overleaf summarises the RAs proposals for OPEX.

[10] http://www.cer.ie/docs/000085/cer10206.pdf pg 123

[11] http://www.cer.ie/docs/001043/CER15296%20Decision%20on%20TSO%20and%20TAO%20Transmission%20Revenue%20for%202016%20to%202020%20(1).pdf

	SEMO's Submission				RAs Proposal			
€ million	**Forecast**	**Forecast**	**Forecast**		**Forecast**	**Forecast**	**Forecast**	
	2016-17	**2017-18**	**2018-19**	**Total**	**2016-17**	**2017-18**	**2018-19**	**Total**
No. Of FTEs	42	15	7		35	10	4	
OPEX								
Total Payroll	2.92	1.19	0.68	4.79	2.46	0.81	0.41	3.68
Total IT & Communications	2.92	2.70	-	5.62	2.92	2.70	-	5.62
Total Facilities and Insurance	0.65	0.26	0.11	1.02	-	-	-	-
Total Professional Fees	0.31	0.15	0.10	0.56	0.31	0.15	0.10	0.56
Total General and Administrative	0.22	0.09	0.03	0.35	0.22	0.09	0.03	0.35
Total Corporate Services	0.45	0.39	0.10	0.94	0.45	0.39	0.10	0.94
Total	**7.47**	**4.78**	**1.01**	**13.28**	**6.36**	**4.14**	**0.64**	**11.15**

Table 9: RAs Proposed OPEX Summary

8.8 OPEX SAVINGS

A well-established regulatory tool to incentivise OPEX efficiency is Revenue Cap (RPI-X) regulation. Revenue Cap RPI-X regulation can provide strong incentives for efficiency, as any savings above the predicted rate 'X' can be kept by the firm, and it is therefore in the interest of the firm to out-perform.

The RAs are of the view that there is scope for SEMO to operate more efficiently and benefit from reduced costs below the out-turn inflation rate in Period 1 of the 2016 Price Control. Therefore the RAs recommend a 'X' factor of 0.3 be applied to SEMOs operational expenditure, in line with current practice.

Respondents' views are welcome on all aspects of the OPEX proposals.

9. CAPITAL EXPENDITURE (CAPEX)

SEMO's CAPEX allowance enables SEMO to finance their capital investments from tariffs.

The CAPEX requirement proposed by SEMO for the 3 year period is €1.64 million. This compares to an estimated outturn CAPEX spend of €5.38 million in the current price control.

Four categories of CAPEX have been identified as part of SEMO's submission:

1. Biannual IT Market Release CAPEX;
2. Biannual IT Market Release Support CAPEX;
3. Predictable Business CAPEX;
4. Unpredictable Business CAPEX.

Table 10 shows a breakdown of SEMO's CAPEX submission for each category for the 2016-19 Price Control and SEMO's expected outturn for the current price control period.

	2013–16 Price Control				SEMO's Submission			
€ million	**Actual**	**Actual**	**Estimate**	**Total**	**Forecast**	**Forecast**	**Forecast**	**Total**
	2013-14	**2014-15**	**2015-16**		**2016-17**	**2017-18**	**2018-19**	
Biannual Release Capex	1.28	0.55	0.71	2.53	0.25	0.15	-	0.4
Biannual IT Market Release Support Capex	0.13	0.08	0.21	0.42	0.02	-	-	0.02
Predictable business Capex	0.69	0.40	0.31	1.40	0.59	0.19	0.06	0.84
Additional Business Capex	0.95	-	-	0.95	-	-	-	-
Unpredictable business capex	-	-	0.08	0.08	0.15	0.15	0.08	0.38
Total CAPEX	**3.05**	**1.02**	**1.31**	**5.38**	**1.01**	**0.49**	**0.14**	**1.64**

Table 10: Summary of SEMO's CAPEX submission

As part of the menu regulation approach to CAPEX, within the current price control, SEMO chose a CAPEX allowance of €8.807m. SEMO's outperformance against this CAPEX budget entitles SEMO to an incentive payment. This incentive payment will be issued to SEMO via the k-factor mechanism. As stated previously, the RAs are not minded to include this menu regulation incentivisation approach in the 2016-19 Price Control, due to the low levels of CAPEX involved.

9.1 BIANNUAL IT MARKET RELEASE CAPEX

Biannual IT Market Release CAPEX allows SEMO to deliver market modifications, non Trading and Settlement Code changes, system defects and operational efficiencies to their Central Market Systems.

The biannual release process will come to an end in the current price control period and will no longer run in the next price control period. Despite this, SEMO have included an allowance in relation to a single adhoc release in both Period 1 and 2 of the 2016-19 Price Control. SEMO's current assumption is that there will be no further releases to the Central Market Systems however their provision caters for adhoc releases including any emerging functional requirements that may be obligatory (e.g. Revenue, REMIT etc) or urgent technical requirements (security updates) that need to be provided for. A small amount of €0.02 million is included to support any adhoc releases.

The RAs are minded to disallow the amounts in relation to these adhoc releases, as currently there is no requirement for such releases. If the need for an adhoc release does arise then SEMO can seek RA approval for the additional costs associated with the release.

9.2 PREDICTABLE CAPITAL EXPENDITURE

A predictable CAPEX allowance enables SEMO to plan for hardware and software upgrades and the implementation of additional operational support systems.

Predictable CAPEX makes up the majority of SEMO's submission, in relation to CAPEX, totalling €0.84 million over the 2016-19 Price Control period. The predictable CAPEX is made up of the following components:

- CMS and Corporate Infrastructure (€0.55m)
- Network Equipment (€0.08m)
- Non CMS applications (€0.15m)
- Decommissioning (€0.06m)

The costs for the CMS and corporate infrastructure relate to SEMO's Central Market Systems maintenance mode approach, as advocated by the RAs. These costs are included to allow for the replacement of hardware assets should they become unmaintainable. SEMO have advised that every effort will be made to prolong the operational life of assets (by repairs etc) but that this may not be practical or cost-effective. The provision for predictable CAPEX will fund replacement hardware for both the Central Market Systems and Corporate systems, if required.

SEMO have advised that the network equipment allowance is included to cover the cost of a set of spare switches should some have to be replaced if they cannot be repaired. The network equipment allowance is also in place to cover the Central Market Systems internal firewalls, incase repair is no longer cost effective and replacement is required.

The non Central Market Systems applications provision covers upgrades to corporate systems required by SEMO for operational purposes. This includes Microsoft applications such as MS office and Sharepoint in addition to bespoke applications such as the SEMO website, MIUNs and Axapta.

Lastly, SEMO have included a provision for decommissioning in the 2018/19 tariff year. SEMO propose that this cost should cover the proper disposal and recycling of all equipment related to the current SEM. Backups will be taken of all environments after which hard drives and other storage devices will be wiped and shredded. This cost is based on a €25/device charge (based on current Dell pricing), for 400 devices (total €10K), across all environments (including test etc). In addition ancillary equipment such as obsolete UPS, server racks, cabling etc will be disposed of for which SEMO have included a provision of €10K. Furthermore, SEMO have included a provision of €30K for third-party oversight / verification as it is assumed this will be a requirement of a future Market Audit. Finally, a €10K contingency has been included for incidentals that may arise from the de-commissioning plan and/or price increase per unit disposal.

SEMO and the RAs agree that estimating CAPEX requirements for the 2016-19 Price Control is difficult and for this reason the RAs propose treating all costs on a Cost Pass-Through basis. Given the current uncertainty and the supporting arguments provided by SEMO for these predictable CAPEX items, the RAs are minded to endorse SEMO’s predictable CAPEX submission.

9.3 UNPREDICTABLE BUSINESS CAPEX

The unpredictable business CAPEX is a discretionary fund requested by SEMO to cover the costs of unexpected business CAPEX.

SEMO proposes an allowance of €0.150 million per annum for unpredictable CAPEX in Period 1 and 2, and €0.08 million in Period 3 of the 2016 Price Control. The RAs are minded to reduce the unpredictable CAPEX allowance, to bring it in line with the estimate for the current tariff year and provide SEMO with an unpredictable CAPEX allowance of €0.08 million in each of the periods. Most of SEMO's CAPEX submission has been calculated on a prudent, 'if required' basis and the RAs feel that an extra buffer of €0.08 million per annum in the form of unpredictable CAPEX should be sufficient.

9.4 CAPEX CONCLUSIONS

Table 11 below summarises SEMO's submission and the RAs proposal for SEMO's CAPEX allowance for the 2016-19 Price Control. The RAs welcome any comments on this proposal.

	SEMO Submission				RAs Proposal			
€ million	**Forecast**	**Forecast**	**Forecast**		**Forecast**	**Forecast**	**Forecast**	
	2016-17	**2017-18**	**2018-19**	**Total**	**2016-17**	**2017-18**	**2018-19**	**Total**
Biannual Release Capex	0.25	0.15	-	0.4	-	-	-	-
Biannual IT Market Release Support Capex	0.02	-	-	0.02	-	-	-	-
Predictable business Capex	0.59	0.19	0.06	0.84	0.59	0.19	0.06	0.84
Additional Business Capex	-	-	-	-	-	-	-	-
Unpredictable business capex	0.15	0.15	0.08	0.38	0.08	0.08	0.08	0.24
Total CAPEX	**1.01**	**0.49**	**0.14**	**1.64**	**0.67**	**0.27**	**0.14**	**1.08**

Table 11: Summary of RAs CAPEX Proposal

The RAs must continue to receive an annual capital update in the form of an End of Year Capital Report, already produced by SEMO.

10. REGULATED ASSET BASE (RAB)

SEMO did not submit a predicted opening RAB value as part of their price control submission.

The RAs have calculated the estimated opening RAB for October 2016 by taking the opening RAB value for 1 October 2015, adding the estimated additions in the 2015/16 tariff year and depreciating the total RAB on a straight line basis, based on a 5 year term[12].

The RAs projected value of the SEMO opening RAB for 1 October 2016 is €5.8 million. Once the actual RAB is known, any divergence between the forecast return and depreciation and the actual return and depreciation, will be accounted for as part of the k-factor adjustment process.

The provisional value of the Regulatory Asset Base for October 2016 is outlined in Table 12 below:

	RAB Value at 01 October 2016
€ million	
RAB value at Sept 15*	8.107
Additions in 2015/16	1.300
Depreciation in 2015/16	(3.578)
Opening RAB Value October 2016	**5.830**

Table 12: RAs Estimated Opening RAB

*Taken from SEMO's Register of Assets for year end September 2015

SEMO have raised concerns as to the suitability of a RAB based approach to the 2016-19 Price Control. SEMO are concerned as to how they will recover the depreciation on their RAB when the SEM and the SEM market operator tariff process ceases to exist in October 2017. As noted above, the RAs are minded to incorporate the market operator tariff process into a tariff within the I-SEM. This will ensure SEMO can recover depreciation on their RAB for the duration of the 2016-19 Price Control and also ensure that any under or over recovery can be captured as part of the k-factor mechanism in the new tariff process.

The RAs estimate that SEMO will have a residual RAB of c. €1.3m.[13] The RAs propose that SEMO receive depreciation on their RAB for the period in which they are carrying out SEM related

[12] The RAs calculation assumes all CAPEX additions in 2015/16 occurred half way through the year on 1 April 2015 and that depreciation is calculated on an annual rather than monthly basis

[13] Residual RAB is based on annual depreciation calculation and the RAs proposed CAPEX additions

activities i.e. to the 30 November 2019. SEMO can reuse their residual RAB or dispose of it as they see fit.

The RAs welcome any responses in relation to this proposal.

11. WEIGHTED AVERAGE COST OF CAPITAL & DEPRECIATION

11.1 WACC

The application of a Weighted Average Cost of Capital (WACC) to a Regulated Asset Base (RAB) is a form of remuneration for the exposure to systematic risk.

The RAs propose to continue with the current WACC mechanism, which blends the two System Operator WACCs in accordance with the specified proportions, currently 75% for EirGrid and 25% for SONI[14]. Table 13 below shows the WACC applied, in the current price controls, for both SONI and EirGrid in their capacity as system operators for NI and ROI respectively. SONI's TSO price control runs from October 2015 to September 2020 and Eirgrid's is applicable between January 2016 and December 2020.

WACC Rate	**Specified Proportion**	**2016-17**	**2017-18**	**2018-19**
EirGrid Transmission System Operator	75%	4.95%[15]	4.95%	4.95%
SONI Transmission System Operator	25%	5.90%[16]	5.90%	5.90%
Blended Rate for SEMO WACC		**5.19%**	**5.19%**	**5.19%**

Table 13: RAs Proposed WACC Rate

While SEMO's activities may involve a different set of systematic risk factors compared to the TSOs, the RAs do not see any convincing basis for concluding that SEMO's overall exposure to systematic risk is materially different from that of the system operators.

SEMO have not submitted an estimated WACC allowance as part of their 2016-19 Price Control submission. The table below shows an indicative value of SEMO's WACC allowance based on the blended WACC rate shown above and the RAs estimated RAB values in each period[17]. Once

[14] Per the Market Operator Agreement between SONI and Eirgrid

[15] Pre-tax WACC as defined in Decision on EirGrid TSO transmission revenue for 2016 to 2020

[16] Pre-tax WACC as defined in SONI Price Control 2015 – 2020 Decision Paper

[17] The WACC allowance has been calculated on an annual basis. Actual WACC will be calculated on a more accurate monthly basis.

the actual WACC amount is known, any divergence between the estimated and actual WACC allowance will be accounted for as part of the k-factor adjustment process.

WACC Amount	2016-17	2017-18	2018-19	Total
€ million				
Estimated RAB*	4.537	2.749	1.851	9.139
Blended WACC Rate	5.19%	5.19%	5.19%	5.19%
RAs Estimated WACC amount	0.235	0.142	0.096	0.474

Table 14: RAs Estimated WACC Allowance

*Based on average of opening and closing RAB and assuming CAPEX additions in 2017/18 and 2018/19 are made at beginning of the year, as advised in SEMO's CAPEX submission

11.2 DEPRECIATION

SEMO have not submitted a depreciation value as part of their price control submission.

The RAs propose to continue to depreciate SEMO's assets, on a straight-line basis, over a five year period. The RAs proposed depreciation allowance includes amounts both for depreciation on SEMO's existing RAB and for depreciation associated with the RAs proposed CAPEX allowances in each of the price control periods[18].

The table below shows the RAs proposed depreciation figures:

€ million	2016-17	2017-18	2018-19	Total
Depreciation Charge	**3.254**	**1.260**	**0.945**	**5.460**

Table 15: RAs Estimated Depreciation

The RAs proposed depreciation charge is based on a revised CAPEX allowance of €1.08m over the 3 year 2016-19 Price Control period.

Once the actual depreciation amount is known, any divergence between estimated and actual depreciation will be accounted for as part of the k-factor adjustment process.

[18] As stated previously the RAs have calculated depreciation on an annual basis and assumed all CAPEX additions occur half way through 15/16 and at the beginning of the remaining years, as advised in SEMO's CAPEX submission

12. KEY PERFORMANCE INDICATORS

As part of the current price control framework SEMO are incentivised to manage performance through Key Performance Indicators (KPIs). The KPIs currently in place are aimed at improving performance, promoting customer service, increasing efficiencies and delivering value to customers. The KPI incentive pot is currently set at a maximum of 4% of total OPEX revenue for each year. SEMO are assessed on the following KPIs, on a quarterly basis:

	Weightings	Target	Upper Bound
Ex-ante pricing report	0.15	99%	100%
Ex-post initial pricing report	0.1	99%	100%
Invoicing	0.2	97%	100%
Credit Cover Increase Notices	0.1	99%	100%
SEMO related resettlement queries	0.2	<9[19]	<5[20]
General Queries	0.15	97%[21]	99%[22]
System Availability (7am to 5pm Mon-Sun)	0.1	99.5%[23]	99.9%[24]

Table 16: Current KPIs

The RAs recommend maintaining the quarterly assessment, based on an average value of each KPI over that period. The RAs believe this incentivises SEMO to maintain good performance over a longer period to the benefit of participants in the form of a consistent good service.

[19] 9 or less upheld queries incidents per quarter

[20] 5 upheld queries incidents per quarter

[21] 97% of Queries answered within 20 business days

[22] 99% of Queries answered within 20 business days

[23] 99.5% System availability between 7am and 5pm Monday to Sunday excluding planned outages

[24] 99.9% System availability between 7am and 5pm Monday to Sunday excluding planned outages

12.1 SEMO'S PROPOSALS FOR THE NEXT PRICE CONTROL

In SEMO's submission for the 2016-19 Price Control, SEMO state that, given the reduced level of operating costs in the next price control period, that if left unaltered, the current KPI incentive mechanism will be less likely to deliver on or incentivise the desired outcome. SEMO also argue that as the risks of operating and maintaining the market are now higher, the targets will need to be readjusted to align with the operate and maintain market model.

Period 1 – 2016/17

For the remainder of the SEM SEMO proposes retaining the seven KPIs detailed above but slightly amending the target for System Availability. SEMO also recommend fixing the KPI incentive allowance pot to a total amount of €400k. SEMO argue that given the reduced operating costs it would, if left unaltered, be less likely to deliver on or incentivise the desired outcome. Similarly as the risks of operating and maintaining the market are now higher, the targets will need to be readjusted to align with the operate and maintain market model.

SEMO's proposal for Period 1 of the 2016-19 Price Control is summarised in table 17 below:

	Weightings	Target	Upper Bound
Ex-ante pricing report	0.15	99%	100%
Ex-post initial pricing report	0.1	99%	100%
Invoicing	0.2	97%	100%
Credit Cover Increase Notices	0.1	99%	100%
SEMO related resettlement queries	0.2	<9	<5
General Queries	0.15	97%	99%
System Availability (7am to 5pm Mon-Sun)	0.1	99.4%	99.8%

Table 17: SEMO's proposed KPIs for Period 1

The RAs are not minded to fix the allowance incentive at €400k, and feel the current arrangements, of 4% of annual OPEX, should be carried forward into Period 1 of the 2016-19 Price Control.

The only KPI that SEMO have proposed changing in Period 1 of the next price control is the System Availability KPI. SEMO argue that as the systems age under the maintenance mode there is an increased risk of issues occurring under break/fix conditions. While SEMO has included a provision in its submission to assist with fixes (call outs, spare parts etc), they are aiming to extend the life of assets (servers etc) in so far as possible. This approach inevitably may result in more frequent outages for repairs. While SEMO does have redundancy across sites they feel it prudent to suggest a minor adjustment to the Systems Availability KPI from "99.5% to 99.9% availability" to "99.4% to 99.8% availability" for Period 1 of the 2016-19 Price Control.

The RAs are minded to agree with SEMO's proposal in relation to the slight amendment to the System Availability KPI.

Period 2 – 2017/18

SEMO have advised that the ex-ante and ex-post initial pricing KPI will cease to be relevant once the SEM ceases. SEMO made the following submission in relation to KPIs post SEM.

	Weightings	Target	Upper Bound	Time (months)	Comment
Invoicing	0.2	97%	100%	13	Decreased weighting to reflect diminished activity
Credit Cover Increase Notices	0.1	99%	100%	13	Increased weighting to reflect addition of credit report publication and increased importance for Participants due to need for I-SEM collateral in parallel with SEM
SEMO related resettlement queries	0.2	<9	<5	13	Decreased weighting and more stringent target to reflect diminished activity
General Queries	0.15	97%	99%	16	Decreased weighting to reflect diminished activity
System Availability (7am to 5pm Mon-Sun)	0.1	99.4%*	99.8%*	13	Relaxed target to reflect additional difficulty associated with 'maintenance mode'
SEM Decommissioning[25]	0.4	Discrete deliverable	Discrete deliverable	Discrete deliverable	New metric to incentivise critical market transition activities

Table 18: SEMO's proposed KPIs post SEM

[25] Metric relates to all SEM decommissioning activities including, but not limited to, shortening of resettlement timelines, archiving of data, decommissioning of systems, closure of bank accounts etc.

SEMO have informed the RAs that the first five KPIs in table 18 above are applicable in Period 2 of the 2016-19 Price Control and that the SEM Decommissioning KPI should be applied in Period 3 only. Again the only change from current practice for the remaining KPIs is the amendment to the System Availability KPI, which the RAs are minded to agree with. As the remaining weightings do not add up to a total of one, the RAs make the following proposals in relation to the weightings of each KPI in Period 2.

	RAs Proposed Weightings
Invoicing	0.2
Credit Cover Increase Notices	0.2
SEMO related resettlement queries	0.2
General Queries	0.2
System Availability (7am to 5pm Mon-Sun)	0.2

Table 19: RAs proposed KPI weightings in Period 2

Again the RAs propose that the total KPI fund available for meeting KPIs in Period 2 is fixed at 4% of the allowable OPEX in the corresponding period. If the SEM resettlement period is modified to be M+4 rather than M+13, then the OPEX amount will have to be adjusted accordingly.

Period 3 – 2018/19

SEMO have suggested the inclusion of a KPI in the SEM decommissioning period. SEMO propose that this KPI relates to all SEM decommissioning activities including, but not limited to, shortening of resettlement timelines, archiving of data, decommissioning of systems, closure of bank accounts etc.

As stated previously, the RAs require that SEMO submit a proposal to detail decommissioning activities within the SEM necessary to archive all data and maintain the current SEMO website for the two year dispute window, post cessation of the SEM. Once this proposal has been approved by the RAs, the RAs are minded to incentivise SEMO to the value of c. €100k to encourage an efficient decommissioning of the SEM.

13. K FACTOR

An annual adjustment to SEMO's revenue allowance is necessary when setting the market operator tariffs for the forthcoming tariff year. Such an adjustment is referred to as a 'k factor adjustment'. K-factor adjustments manage specific areas of SEMO's business which are exposed to risk and outside of SEMO's control. Use of a k-factor adjustment mechanism reduces SEMO's overall risk profile.

In general, the management of costs is largely a matter for SEMO, unless specifically identified as an appropriate k-factor adjusting item. The RAs are minded to largely follow, with the exception of the k-factors in relation to the menu package outturn, the allowable k-factor adjustment items present in the current price control. The RAs are minded to allow the following as k-factor adjustments within the 2016-19 Price Control:

- Uncertain costs that cannot be reasonably foreseen by SEMO should be dealt on a Cost Pass-Through basis via 'k' factor adjustment. These costs could include:
    - Changes in legislation or regulation that impose unforeseen costs to SEMO's operations and capital investments;
    - Restructuring costs driven by changes in legislation.

In addition, the k-factor adjustment should cater for the following:

- Adjustment to allowed revenues to reflect any over or under recovery of revenue in comparison with the revenue allowance (i.e. adjust for market demand);
- Foreign exchange gains or losses catered on a Cost Pass-Through basis;
- Interest on funding from the parent company, EirGrid Group;
- Interest received on surplus funds;
- Market audit adjustment to reflect actual expense;
- Depreciation and WACC will require a separate k-factor adjustment. This specific treatment is required given that the timing of the capital expenditure could deviate from the initial expectations and therefore will have a resulting impact on the depreciation and WACC costs;

- KPI reward will be recovered through an adjustment of the k-factor;
- Any actual net outturn tax loss relating to accelerated recovery of CAPEX and any other adjustments necessary, specific to accelerated CAPEX recovery applied in the 2010-2013 price control.

The RAs would continue to expect an ex-post review report, outlining separately the market operator tariff adjustments, with detail provided on a line-by-line basis. The RAs request that the ex-post review report is submitted by SEMO in May each year, to facilitate the annual tariff process. In line with current practice, this report will detail the k-factor for the most recent full tariff year.

On receipt of this report the RAs will carry out a review of the figures and engage with SEMO to discuss any areas requiring clarification. Once all issues are closed, the RAs will seek approval from the SEM Committee for the k-factor adjustments, as part of the overall market operator tariff approval process.

In their submission SEMO have raised concerns as to the applicability of the k-factor model once the SEM ceases to operate in October 2017. As stated above, the RAs are minded to allow for any under or over recovery via I-SEM tariffs. The RAs welcome any responses on this proposal.

13.1 MANAGING UNCERTAINTY AND RISK

As with any business there is an element of inherent business risk within SEMO. The SEMO business is unique in that it is a contractual joint venture between the system operator in Ireland (EirGrid) and the system operator for Northern Ireland (SONI). Some aspects of the current SEMO price control are designed to reflect this risk e.g. SONI's parent company guarantee and the inclusion of an allowance for SEMO's WACC.

The SONI Market Operator licence contains a requirement on SONI to have in place a parent company guarantee from EirGrid Plc (the legal and beneficial owner), which includes a requirement to ensure at all times the licencee shall have adequate financial and non financial resources in order that it may perform its obligations.

SONI's parent company guarantee is directly linked to their exposure to risk and is in place to cover any working capital deficits that may arise. As SEM operations will significantly reduce, once the SEM ceases, this working capital risk will reduce to an immaterial level. For this reason the RAs are minded to include an allowance for €300k for Period 1 of the 2016-19 Price Control, as requested by SEMO and as provided for in the current price control. The RAs are also however minded to remove this parent company guarantee allowance for Periods 2 and 3 of the 2016-19 Price Control. The RAs welcome any comments on this proposal.

As a regulated business, SEMO's exposure to risk is mitigated through use of the k-factor adjustment mechanism. The k-factor mechanism proposed for the 2016-19 Price Control is consistent with that applied in the current price control and mitigates SEMO's risk by allowing for an adjustment for under recovery of revenues; foreign exchange rate losses; and interest on funding from the parent company. Other measures are also included in the k-factor adjustment mechanism, detailed in section 13 above.

The RAs do not perceive that SEMO's risk profile will increase for the duration of the 2016-2019 price control. The RAs recognise that there is uncertainty regarding the timing of the implementation of the I-SEM, and the length the SEM resettlement period. The RAs have outlined how the price control includes flexibility to allow for any movement in key dates, in section 5 above. This will ensure that SEMO is financeable during any transitional period.

14. FORM AND MAGNITUDE OF CHARGES

As part of its role in the administration of the market there are charges which SEMO must levy in order to recover its allowed costs. These charges consist of:

- energy and capacity charges
- the accession fee
- the participation fee
- the Imperfections charge
- market operator charges

The TSC allows for allocation of SEMO's costs to a number of fees and charges. In respect of this allocation, the RAs are minded to continue with the current mechanism for calculating each of the fees and charges. As stated previously, once the SEM ceases, these charges will have to be recovered via an I-SEM tariff.

14.1 ENERGY AND CAPACITY CHARGES

The structure and detail of charges for energy purchased from the 'pool' is defined in the TSC. Energy is charged on a per MWh basis, the amount of which will be set for each half hour. This paper does not make any new decisions in relation to the form and magnitude of energy charges.

14.2 ACCESSION FEES

The TSC states that the accession fee will be a fee paid to SEMO by each applicant for accession to the TSC, to cover SEMO's costs incurred in assessing the application. Currently these fees are simply netted off overall SEMO costs.

14.3 PARTICIPATION FEES

In the TSC the participation fee is defined as "the fee payable with an application to register and become a participant in respect of any unit. Currently these fees are simply netted off overall SEMO costs.

14.4 MARKET OPERATOR CHARGES

The TSC states that the Market Operator Charge shall comprise of:

- a Fixed Market Operator Generator Charge, which may be different for each Generator Unit;
- a Fixed Market Operator Supplier Charge, which may be different for each Supplier Unit; and
- a Variable Market Operator Charge applicable to all Participants in respect of their Supplier Units, expressed in €/MWh.

During the new tariff period, these charges will recover SEMO's operational costs, the appropriate amount of depreciation associated with the SEM related capital costs, incurred by EirGrid Market Operator and SONI Market Operator, and the appropriate blended WACC.

The RAs propose that the majority of costs, 95%, be recovered through the Variable Charge. It is proposed that the fixed charges to Generators and Suppliers will recover the remaining 5% of all costs.

The final values of the 2016-17 Market Operator tariffs will be published following the price control determination in August 2016. Licence modifications will be consulted on and finalised for implementation as soon as possible thereafter.

15. PROVISION OF COMMENTS

The RAs welcome any comments on the proposals set out in this consultation paper. All comments received will be published, unless the author specifically requests otherwise. Accordingly, respondents should submit any sections that they do not wish to be published in an appendix that is clearly marked "confidential".

Comments on this paper should be forwarded, in electronic form, to Bronagh McKeown at Bronagh.McKeown@uregni.gov.uk by 17:00 on Thursday 9th June.