Single Electricity Market

SEMO Revenue and Tariffs

for

October 2009 – September 2010

Decision Paper

28 August 2009

SEM-09-089

1 EXECUTIVE SUMMARY

Background

The All-Island Single Electricity Market (SEM), commenced operation on 1 November 2007, and is administered by the Single Electricity Market Operator (SEMO), formed through a contractual joint venture between EirGrid and SONI. SEMO needs to recover their operational and capital costs from market participants, as well as the imperfection (constraint) costs associated with the balancing of the transmission systems.

This paper by the Regulatory Authorities (RAs) includes decisions by the SEM Committee on the form of SEMO regulation, the allowed revenue for SEMO, the cost of constraints, and all associated tariffs.

Form of Regulation

The SEM Committee has decided that the new tariff period will run for 12 months, from 1 October 2009 to 30 September 2010. Due to the short period of the new tariff period and in keeping with the initial tariff period, the SEM Committee has decided that SEMO will continue for the duration of this price control to be subject to rate-of-return regulation, with the energy and capacity cash-flows being regarded as a cost pass-through (in respect of which, SEMO is not a principle).

All costs allowed for the new tariff period will be subject to an *ex-post* review and determination by the Regulatory Authorities. This determination may result in an over or under-recovery of revenue being fed through to the subsequent tariff period.

Approach to determination of allowable revenue

The economy in both jurisdictions, Northern Ireland and Republic of Ireland, is facing extremely challenging times. The exceptional nature of the recession which the world is currently experiencing inevitably has serious consequences for companies and individuals. Most businesses are currently optimising their operations in order to find opportunities for more cost-effective processes and organizational structures. Therefore, in order to ensure cost-effectiveness and sustainability over the forthcoming tariff period, the RAs undertook a rigorous analysis of each cost component from SEMO’s submission.

SEMO Allowed Revenue

The total revenue sought by SEMO to cover its costs for the tariff period is **€24,952,000**. The RAs have carried out an analysis of the various cost categories and have consulted with the industry. The SEM Committee have decided that SEMO's revenue should be fixed at **€ 22,181,519** for the next tariff period. A comparison between the costs sought by SEMO and those decided by the SEM Committee is shown in the table below.

Summary of proposed revenue	Allowed 08-09 Price Control (€)			09-10 Price Control (€)		
	March 2008 Prices	March 2009 Prices	March 2009 Prices	March 2009 Prices	March 2009 Prices	March 2010 Prices
OPEX	**Approved Revenue**	**Approved Revenue (Indexed by Inflation Forecasted in March 2008)**	**Approved Revenue (Indexed by Inflation verified March 2008 - March 2009)**	**SEMO Submission**	**RAs Decision**	**RAs Decision**
Payroll	4,032,000	4,228,358	3,948,538	4,741,000	4,373,609	4,264,268
IT & Communications	2,268,000	2,378,452	2,221,052	2,194,000	2,194,000	2,139,150
Facilities	1,365,856	1,432,373	1,337,583	1,406,000	1,337,583	1,304,143
Professional Fees	761,000	798,061	745,247	925,000	690,000	672,750
General & Administrative	358,000	375,435	350,589	446,000	350,589	341,825
Corporate Services	100,000	104,870	97,930	100,000	50,000	48,750
Total Opex Cost	**8,884,856**	**9,317,548**	**8,700,939**	**9,812,000**	**8,995,781**	**8,770,886**
	March 2008 Prices	March 2009 Prices	March 2009 Prices	March 2009 Prices	March 2009 Prices	March 2010 Prices
Cost of Capital	**Approved Revenue**	**Approved Revenue**	**Approved Revenue**	**SEMO Submission**	**RAs Decision**	**RAs Decision**
Depreciation	11,201,215	11,746,714	10,969,350	12,980,000	11,789,671	11,494,930
WACC	2,392,545	2,509,062	2,343,019	2,160,000	1,964,824	1,915,703
Total Cost of Capital	**13,593,760**	**14,255,776**	**13,312,369**	**15,140,000**	**13,754,495**	**13,410,633**
Total Operational Cost	**22,478,616**	**23,573,325**	**22,013,309**	**24,952,000**	**22,750,276**	**22,181,519**
	March 2008 Prices	March 2009 Prices	March 2009 Prices	March 2009 Prices	March 2009 Prices	March 2010 Prices
Imperfections Charge	**Approved Revenue**	**Approved Revenue**	**Approved Revenue**	**SEMO Submission**	**RAs Decision**	**RAs Decision**
DBC Cost (Constraints)	116,378,642	122,046,282	113,969,604	106,000,000	106,000,000	106,000,000
Energy Imbalance	1,900,000	1,992,530	1,860,670	-	-	-
Make whole payments	500,000	524,350	489,650	311,652	311,652	311,652
Total Imperfections Charge	**118,778,642**	**124,563,162**	**116,319,924**	**106,311,652**	**106,311,652**	**106,311,652**
				March 2009 Prices	March 2009 Prices	March 2010 Prices
Business CAPEX Allowance				**SEMO Submission**	**RAs Decision**	**RAs Decision**
SEMO IT Release + Business Predictible CAPEX				2,000,000	2,000,000	1,950,000
				March 2009 Prices	March 2009 Prices	March 2010 Prices
K Factor (Over Recover within 07/08 Price Control)				**SEMO Submission**	**RAs Decision**	**RAs Decision**
k factor adjustment to be applied to the SEMO's next revenue allowance				1,926,376	1,926,376	1,926,376
k factor (2007 - 2008) to be applied to the imperfection allowance is a downward adjustment of				3,678,938	3,678,938	3,678,938
k factor (2008 - 2009) to be applied to the imperfection allowance is a downward adjustment of				8,900,000	8,900,000	8,900,000
Total k factor				**14,505,314**	**14,505,314**	**14,505,314**
Total Costs to be recovered	**141,257,258**	**148,136,486**	**138,333,233**	**116,758,338**	**116,556,614**	**115,937,857**
				March 2009 Prices	March 2009 Prices	March 2010 Prices
Incentivisation				**SEMO Submission**	**RAs Decision**	**RAs Decision**
KPI Incentivisation (Pot = 210k)				245,300	224,895	219,272
Major Capex Projects (10% of the eventual savings will be retained by SEMO)						

Table 1 – Summary of SEMO Allowed Revenue

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2 INTRODUCTION

2.1 THE SINGLE ELECTRICITY MARKET

The Northern Ireland and Republic of Ireland Governments together with the energy regulators - the Northern Ireland Authority for Utility Regulation and the Commission for Energy Regulation ("the RAs") - and industry worked together to create an All-Island Energy Market, as outlined in the All-Island Energy Market Development Framework Paper.[1]

The first step in this process was the implementation of an All-Island wholesale electricity market. The Single Electricity Market (SEM) was completed on 1st November 2007 when the market went live.

The SEM is a centralised or 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 changes in the market schedule due to system constraints. Suppliers purchasing energy from the pool will pay the SMP for each trading period, capacity costs, and system support charges. The SEM market rules are set out in the Trading and Settlement Code (TSC).

2.2 ROLE OF SEMO

The development of the SEM led to the requirement for a Single Electricity Market Operator (SEMO) to administer the market. With this in mind the RAs approved the plans of EirGrid and SONI, the transmission system operators for the Ireland and Northern Ireland respectively, to establish SEMO on a contractual Joint Venture basis.

SEMO's role in the market is explicitly defined in the SEM Trading and Settlement Code (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. In addition, both EirGrid and SONI must comply with the conditions imposed on this activity by their respective Market Operator (MO) Licences

[1] All-Island Energy Market: A Development Framework, Nov 2004, www.allislandproject.org
http://www.dcmnr.gov.ie/NR/rdonlyres/BCF98EC4-7321-4E3F8685BFFCA2BF2DF4/0/All_island_Energy_Market_Development_Framework.pdf

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

2.3 SEMO REVENUE & CHARGES

SEMO incurs operational costs while carrying out the above functions and recovers these costs, as well as capital related costs and a rate of return, through Market Operator tariffs and fees, which are levied on market participants. To facilitate this recovery of costs, the Market Operator Licence requires SEMO to submit proposals on its allowed revenue and the charges required to recover this revenue to the RAs. Furthermore, SEMO must also present proposals on tariffs to recover costs associated with imperfections.

The current tariff period is due to end on 30 September 2009 i.e. it covers a 12 month period from 1 October 2008 to 30 September 2009. Therefore, the revenue and tariffs need to be determined for the next tariff period.

2.4 IMPERFECTIONS CHARGE & DISPATCH BALANCING COSTS

In addition to SEMO's proposed operational costs, the TSOs (EirGrid and SONI) submitted a paper to the RAs on 30 April 2009 detailing the costs relating to Imperfections Costs. Imperfections Costs refers to the sum of Dispatch Balancing Costs, Energy Imbalances and Make Whole Payments. Dispatch Balancing Costs are the sum of Constraint Costs, Uninstructed Imbalance Payments and Generator Testing Charges. The details relating to these are covered in Section 8 of this Consultation Paper

2.5 REGULATORY APPROVAL PROCESS

The Regulatory Authorities have carried out an analysis and review of SEMO's submission and associated supporting information. The Regulatory Authorities published a consultation paper on the basis of that review on 21th July 2009, the objective of which was to solicit comments from interested parties (including both members of the public and industry participants) on a range of proposals associated with the allowed revenue for SEMO, the cost of Dispatch Balancing Costs and other components of imperfections and all associated tariffs.

These proposals covered:

- The appropriate length of the initial tariff period
- The form of regulation
- The allowable revenue for SEMO
- The recovery of Dispatch Balancing costs, Energy Imbalances & Make Whole Payments
- The form and magnitude of each charge though which the revenue will be recovered.
- Incentivisation

Eight sets of comments were received and these have been published in full by the Regulatory Authorities. Comments were received from:

- Airtricity
- ESB
- NIE Energy
- SEMO
- Viridian
- IWEA
- PPB
- Endesa

2.6 DECISION PAPER

The Regulatory Authorities are now publishing this decision paper in relation to the SEMO revenue and tariffs. This is based on the associated consultation paper and takes comments received during the consultation process into account. Where no comment or response has been received on elements of the consultation it has been assumed that this reflects general acceptance and that no further discussion or analysis is required.

This paper outlines the Regulatory Authorities decisions related to the proposals set out in the consultation paper. These decisions are detailed in the following sections, and will only apply to the specified tariff period.

3 REGULATORY PRINCIPLES

This section outlines the principles that were adhered to while evaluating the regulatory decisions contained in this paper.

Best practice regulation of the so-called natural monopolies should be characterised as seeking to ensure that tariffs are:

- Sustainable
- Stable
- Transparent
- Predictable
- Cost-effective

The Regulatory Authorities 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 including an appropriate rate-of-return on investments made and the recovery of capital invested.

Sustainability

The regulated business must be able to finance its operations, plus any necessary capital expenditure so that it can continue to operate in the future to the ultimate benefit of customers. Sustainability in the context of market operations also involves the sustainability of market arrangements and thus also entails avoiding barriers to market entry or market exit and avoiding any inconsistency or unfairness in the treatment of any participant or class of participant.

Stability

To be stable the framework must also provide some certainty to all the parties affected by it. These are customers, the Governments and Regulatory Authorities (acting on behalf of customers), SEMO itself, the TSOs and generators and suppliers. Frequent complaints and disputes would lead to the regime being continually adjusted by the Regulatory Authorities. This could create uncertainty in the industry and discourage investment and long-term planning. The stability of the regime is particularly important to privately owned businesses if investors are to be encouraged to make long-term investments in the sector.

Transparency & Predictability

The rules that govern the regulatory regime should also be transparent and unambiguous in their interpretation and predictable in the way they are applied. In particular, it should be clear how costs relate to prices. Regulations that are unclear will cause disputes that will also create instability in the regulatory regime and add to the costs of regulation. This would be likely to raise the cost of capital, ultimately to the detriment of customers in the form of higher prices. An important corollary is that there should be “no surprises” for participants. This does not imply that the Regulatory Authorities cannot change their view on issues, or revise the regulatory framework as necessary and in response to unforeseen developments, but it does mean that the Regulatory Authorities will endeavour to:

- Avoid changes that apply retrospectively with adverse consequences for the regulated businesses.
- Take decisions following a due process of consultation and consideration of the relevant issues.
- Publish a full account of the reasoning behind those decisions.

Cost-effectiveness

The costs of monitoring and enforcing compliance need to be low relative to the benefits of regulation. Ideally, the regulatory framework will involve minimum costs of data collection and analysis. The procedure for processing disputes should also be simple, although the more transparent and stable the regulatory system, the less often disputes will arise.

4 FORM OF REGULATION

The current price control is based on rate of return regulation. Energy and capacity cash-flows and the imperfections charge are treated on a pass-through basis. The current rate of return regulation provides limited incentive for SEMO to reduce its costs. The main incentive for cost control is regulatory oversight and the possibility of costs being disallowed in the *ex post* review carried out by the RAs – a mechanism which suffers from a lack of predictability from the perspective of SEMO. There also is little or no financial incentive on SEMO to improve the service it provides to market participants.

In its submission to the RAs, SEMO suggests that the next price control period should be set for 3 years and should be based on incentive regulation (i.e. it should incentivise SEMO to achieve efficiencies by allowing it to retain a proportion of the savings), rather than on rate of return regulation.

While the RAs are open to a longer-term price control based on incentive regulation being applied in the future, the SEM Committee has decided that a further one-year price control should apply for the next 12 months from 1 October 2009 to 30 September 2010. This reflects a number of factors, including: the fact that SEMO is still a relatively new organisation with an evolving work programme; the current economic and financial turmoil, which makes it difficult to project SEMO's future costs; and the need for better cost reporting procedures to be put in place to underpin a longer term revenue-setting process.

Due to the short length of the new tariff period and in keeping with the previous tariff period, the SEM Committee has decided that SEMO continues to be subject to rate-of-return regulation, with the energy and capacity cash-flows being regarded as a cost pass-through. However, as discussed below, the SEM Committee decided to include a form of incentivisation for CAPEX (Major Market Changes) and Key Performance Indicators (KPI).

In the last decision paper on the current price control, the RAs stated that in setting future tariffs, some form of incentivisation would be considered. In the Consultation Paper on the next price control the RAs consider three types of incentive:

- Incentives for OPEX efficiency.
- Incentives for cost efficiency in relation to Major Market Change CAPEX
- Incentives for good performance as measured by Key Performance Indicators (KPI)

In its submission, based on the assumption of a three year price control, SEMO proposed that it should retain OPEX savings on a rolling five-year basis. However, the RAs do not consider that this would be practicable or appropriate in the context of a one-year price control. The SEM Committee decided to retain the current rate of return approach in which any over- or under-spending by SEMO relative to its cost allowances is passed back to market participants through the k factor, subject to the findings from the RAs' *ex post* review.

SEMO's submission also proposes that for Major Market Changes it should be rewarded for the delivery of a project on time and within the regulatory allowance. The incentive scheme proposed by SEMO would involve the RAs approving an amount of CAPEX on a project by project basis, with SEMO retaining 25% of savings if the project is delivered on time and within the regulatory allowance.

The SEM Committee agree that an incentive scheme along these lines should be included for Major Market Change CAPEX, but decided that only 10% of savings should be retained by SEMO given that cost efficiency incentives are not being proposed in the next tariff period for other areas of cost. The details of SEM Committee decision on incentivisation can be seen in Section 7.

Finally, in its submission SEMO has suggested the introduction of incentives to reward the achievement of pre-established performance targets. These targets would be based on Key Performance Indicators agreed with the RAs. The RAs support this initiative and the details of its decided implementation are outlined in Section Incentivisation.

All SEMO costs are subject to an *ex post* review and determination by the RAs, with any over- or under-recovery of revenue being fed through to subsequent tariff periods (k Factor).

The RAs consider that the k-factor should have the following purpose: To adjust allowed revenues for each price control account of any over- or under-recovery of revenue in the previous price control compared to the revenue allowance set by the RAs. Such over- or under-recoveries would arise when market volumes differed from expectations, such that the agreed set of tariffs did not yield the anticipated level of revenues. To make it clear, it is not a retrospective evaluation of the cost of the activity, but of the difference between the established regulated cost and the actual revenues when the tariff is applied.

In relation to the operating costs for SEMO, the SEM Committee has determined the basis of the operating costs by scrutinizing the individual cost categories proposed. SEMO is therefore expected to keep its expenditure within the limits established for each Category of the OPEX allowed expenses.

Any exceptional unforeseen over expenditure in OPEX or CAPEX will be subject to RAs approval. Following ex post review all costs that the RAs accept as reasonable would be provided for.

5 DETERMINATION OF ALLOWABLE REVENUE FOR SEMO

This section makes decisions on SEMO's allowed revenue, and covers the operating costs of SEMO during the new 12 month tariff period, the capital costs involved with the establishment of the market, any new capital costs and the Weighted Average Cost of Capital (WACC) that is decided as remuneration for the parent companies.

In addition, all decided costs/revenues apply to the new tariff period only and will be separately reviewed for the subsequent tariff period(s).

5.1 INDEXATION

In its consultation paper, the RAs applied an inflation figure of -3.1 per cent to cost allowances in April 2008 prices in order to produce cost figures in May 2009 prices. The RAs have proposed using an inflation projection of 0 per cent for the next price control period.

In its response, SEMO argued that for consistency with previous price controls figures should be calculated in mid-tariff prices. Hence, SEMO proposed that:

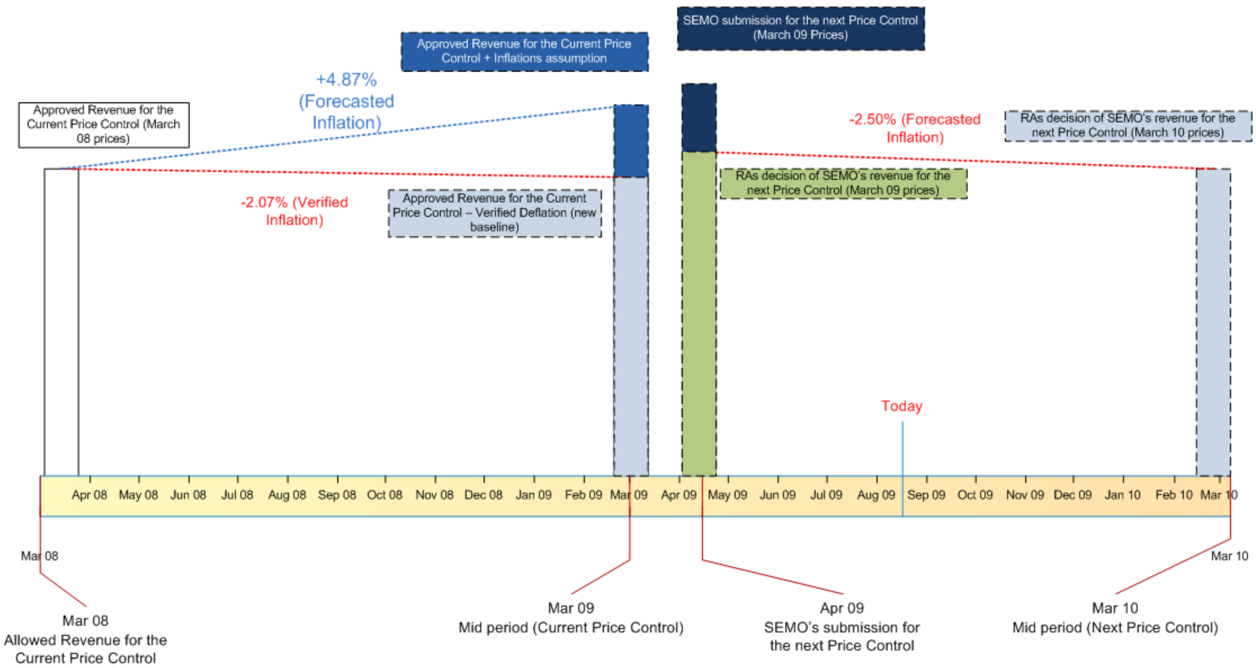
An inflation figure of -2.07 per cent should be used to adjust cost allowances from April 2008 prices to March 2009 prices. This figure was calculated by blending out-turn CPI and RPI data in the ratio 3:1.

In order to adjust these allowances to March 2010 prices, it proposed the use of a forecast inflation figure of -2.5 per cent. SEMO states that this figure is sourced from the ERSI. It relates to the CPI only (i.e. it has not been blended with the RPI).

The approach proposed by SEMO appears to be reasonable. There is merit in working consistently in mid-tariff period prices, and it is in the interests of customers to take account of expected deflation between April 2009 and March 2010 rather than assuming that inflation will be zero.

Therefore, the SEM Committee has decided to accept SEMO's proposal and keep the same approach as in the last two price controls. The tariffs will be set in mid-period prices. This implies that an adjustment should be made to SEMO's approved revenue in order to correct values to March 2010 prices.

According to forecast figures from ESRI, the inflation rate (CPI) between March 2009 and March 2010 will be -2.5%. Forecasts for RPI for the same period are difficult to obtain and vary significantly. Therefore, given that this figure will be used for tariff setting and that the final allowed revenue will be corrected by the actual outturn inflation (CPI and RPI blended as above), it has been considered that the ESRI CPI inflation prediction is an adequate indicator for current purposes. Therefore SEMO's approved revenue shall be corrected by this figure. The diagram below illustrates the process of inflation correction which was applied to the current price control and the equivalent approach for the next price control.



DECISION 1

- SEMO's revenues will be indexed in mid tariff period.
- The forecasted inflation from March 2009 to March 2010 (mid tariff period) which will be used to correct SEMO's allowance to mid tariff period will be -2.5%

5.2 OPERATING COSTS

5.2.1 PAYROLL

SEMO'S Payroll allowance covers all staff costs, including Salaries, Contractors, Bonus, Employer's PRSI/National Insurance, Employer's Pension Contribution, Overtime, On Call/Shift, Car, and Other Benefits. The activities of these staff are determined by legislation, licenses, and the TSC. SEMO is currently operating with a headcount of 50 employees and 1 contracted staff. The organisation chart provided in the SEMO submission is detailed below. This was the structure as of the end of April 2009.

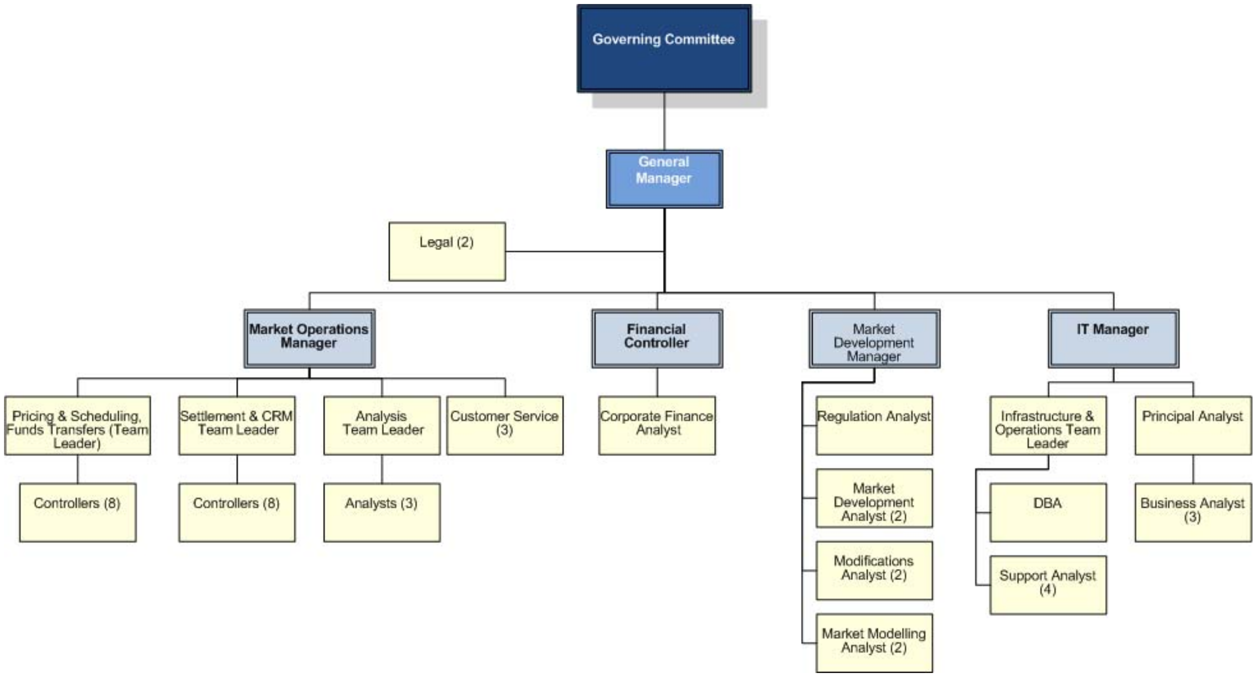


Figure 2 – SEMO's Organisation Structure

All respondents to the RAs' consultation emphasised the need to ensure that SEMO had sufficient resources to maintain current, levels of service. Most also mentioned the need fully to support the new website when available, expand services to the market and support important non-urgent areas of work for the future. All were concerned over potential reductions in resources. In making the decisions outlined below the SEM Committee has been mindful of these concerns. However it considers that in the longer term SEMO, along with the other regulated companies in the sector, will need to demonstrate increasing efficiencies in line with market trends and ultimately delivering value to consumers.

The allowance for payroll costs, according to the Decision Paper on the current price control, was increased by 4.87% in line with inflation assumptions prevailing at the time of the RAs' decision. However, as described in the previous section, the verified accumulated inflation from March 2008 to March 2009 was -2.07%. Therefore to keep SEMO's payroll allowance in the same real levels from the current price control in March 2010 prices the approved payroll allowance in March 2008 prices should be corrected by – 4.52% (2.07% + 2.5% compounded).

Further, in order to correct SEMO's payroll in line with the national trends in payroll cuts recorded in both jurisdictions of the market, the SEM Committee has decided that the a real cut of 2% should be applied. Therefore the baseline for the determination of the next payroll allowance is**: € 3,772,827.68** which corresponds to the approved revenue (March 2008 prices), adjusted by -4.52% (inflation correction) plus -2% of real correction. The SEM Committee believe this is appropriate given the current economic climate.

The SEM Committee then considered any requested increase in personnel from March 2008 to the present time. It is understood from SEMO's submission that in order to maintain the current level of the service, SEMO have expanded its payroll expenditure by €258,000. To accommodate the extra staff who has been hired, €258,000 should be added to the payroll expenditure to provide for:

- An extra resource in the Modifications Committee Secretariat;
- A controller to deal with M+13 resettlements;
- Half a resource to accommodate increased registration applications; and,
- An additional resource for SEMO Operations due to increases in the amount of funds transferred.

In light of the views expressed by respondents to the consultation the SEM Committee accepts that these values should be included in the baseline of the next price control.

Further, SEMO stated in its submission that a provision should be made in order to cover the pay increase of 2.5% incurred in April 2008 due to the National Wage Agreement (NWA) in Ireland. This payment has increased SEMO's payroll by €81,000.

Finally, during 2009-10 two additional resources will be required:

> ***"SEMO IT Website Technical Analyst*** *– This resource is required to support and administer the new website which now has to be internally hosted due to the complexity of the interfaces between the Central Market Systems and the new website.*
>
> ***Additional IT Database Administrator*** *– There are 17 production and non production databases which require a high level of support and maintenance to ensure the high availability of the Central Market Systems. There are also an increasing number of data requests from the market which can only be provided by a DBA. This resource should reduce SEMO's exposure to issues such as security, archiving, alerts, performance, sizing, backups etc.*

The SEM Committee accepts that these resources are necessary in order to keep SEMO's forward plan on track. While it is understood that SEMO's payroll will have to be adjusted upwards, they have decided that the actual average cost per resource should be kept at the same levels as the baseline described in the table above. Therefore the SEM Committee has decided that the provision for the new required staff should not exceed 2 x 80,457 = **€160,915**. Added to the total in the table below this gives a total payroll cost of € 4,264,268.

The Table bellow summarizes the SEM Committee decision on SEMO's payroll:

Payroll Allowance	SEMO's Allowance for the Current PC (March 08 Prices)	SEMO's Allowance for the Current PC (March 09 Prices) -2.07%	SEMO's Proposed Allowance for the Next Price Control (March 09 Prices)	RAs Decision in March 09 Prices (-2% Payroll)	RAs Decision in March 10 Prices (-2.5%)
Payroll	€ 4,032,000.00	€ 3,948,537.60	€ 3,948,537.60	€ 3,869,566.85	€ 3,772,827.68
Expanded Payroll (New Enduring Obligations)			€ 258,000.00	€ 258,000.00	€ 251,550.00
NWA paid in April 2008			€ 81,000.00	€ 81,000.00	€ 78,975.00
Total Cost	€ 4,032,000.00	€ 3,948,537.60	€ 4,287,537.60	€ 4,208,566.85	€ 4,103,352.68
Average Cost per Head for 51 employees				€ 82,520.92	€ 80,457.90
2 New Resources (2 x Average)				€ 165,041.84	€ 160,915.79
Total Expanded Cost				€ 4,373,608.69	€ 4,264,268.47

DECISION 2

The allowed budget for Payroll will be **€ 4,264,268 (March 2010 Prices)**

5.2.2 IT & TELECOMMUNICATIONS

Considering the complex IT systems deployed to support the SEM, it is not surprising that a significant cost area within the SEMO operational costs is IT & Communications. this is an area that is critical to the market. The cost components associated with IT & Communications are as follows:

- **Warrant Support & Maintenance: Market Systems** – these costs are largely made up of 3 elements -Support contracts for base Vendor maintenance (ABB), third party software and hardware items.
- **Warrant Support & Maintenance: Corporate Systems** – these costs cover requirements such as Outsourcing of network and security IT services, Website Hosting, Hardware Support, Microsoft Licences, Oracle Licences, Antivirus, printers & Networks equipment.
- **Off site support** – This is continued support from the Prime contractor on a remote basis
- **Other system maintenance** - This covers the costs associated with the support agreement for Axapta, and other items such as system Support.

- **Telecoms Costs –** This covers the cost of the data links between the SEMO premises in Dublin and Belfast

In its submission SEMO has proposed the following allowance for IT & Communications:

IT & Communications	
Total IT Support & Maintenance	1.735
SEMO Communications Requirements	459
	2.194

Table 6: Total IT and Telecoms Costs proposed by SEMO

The RAs understand that the figures proposed by SEMO are in line with the historical cost for this item. The allowance for IT & Communications in March 2010 shall be: **€ 2.139 Million** (2.194 x (1-2.50%))

DECISION 3

The allowed budget for IT & Telecommunications will be **€ 2,139 Million (March 2010 Prices)**

5.2.3 FACILITIES

SEMO will continue to co-locate on property provided by both parent companies and will be charged accordingly. Facilities costs cover all shared space and include cleaning services, maintenance, car parking, security, mail service, copy bureau, switch board and catering and canteen services as well as rent, insurance and utilities.

One respondent to the consultation claimed that Eirgrid's premises in Dublin are significantly more expensive that general Dublin rates and that only an average figure for Dublin should be allowed. While the SEM Committee accepts the validity of this point it also accepts that SEMO has no ability to manage this in the short term and so has considered the proposal based on the current costs. In its submission SEMO has proposed an allowance for Facilities of **1,406 Million**. However, in absence of any substantial change in the facilities occupied by SEMO, the SEM Committee sees no reason for an increase in this area. Therefore the it has decided that the allowance for the current price control of €1.365m be used and corrected by inflation in the period March 2008 to March 2010 (-4.52%).

DECISION 4

The allowed budget for Facilities will be **€ 1,305 Million (March 2010 Prices)**

5.2.4 PROFESSIONAL FEES

Professional fees cover SEMO requirements for external professional services in respect of:

- Committees
- Consultancy/Contractor/Other
- General Consultant support

SEMO is seeking an allowance of € 690,000 to cover cost associated with professional fees. The table bellow details the allocation of this budget.

Committees	
MOUG	5,000
Modifications Committee and Disputes	50,000
Subtotal	55,000

Consultancy / Contractors / Other	
MIP v LR study	40,000
Stakeholder Survey	30,000
Market Coupling	10,000
UUC Workshop	5,000
Renewables	15,000
Interconnection	20,000
Capacity Payments	35,000
Review and update of procedures and documentation	25,000
Review Ergonomics of IT systems	40,000
Security and Policies Review IT	20,000
Subtotal	240,000

General	
Legal Support (eg possible expert Counsel advice on impact of proposed mods to risk profile)	60,000
Recruitment	45,000
4 internal audits (eg banking controls, Navita systems robustness etc)	40,000
Market Auditor	250,000
Subtotal	395,000

Total Professional Fees	**690,000**

Table 7: Summary of Professional Fees submitted by SEMO

In addition, the following explanation was provided by SEMO:

*"**Committees** - Of the 55k Committees budgeted 25k is spent on MOUGs, Mod Committee meetings and Working Groups. The other 30k is a provision for Market Disputes*

Consultancy/Contractor/Other

> ***Internal Audit** - This budget is for the various internal audits and is just sufficient to support this activity.*
> ***Market Auditor** - The Market Audit costs the full €250k.*
> ***Consultancy / Contractors / Other** - This is the hardest category to predict expenditure. At the moment an amount for Fuel Mix has been approved and the MIP vs LR Study and the Stakeholder Survey have both been endorsed by the Regulators. The other categories are provisions to bolster the Regulatory Work Programme and supported in our submission on August 14th in Section 4.1. SEMO would contend that Interconnection, Market Coupling, Capacity Payments and Rewneables are all justifiable budgetary amounts.*

General Consultant Support

> ***Legal** - An amount of 60k is sought for the Mods Committee for specific legal advice.*
> ***Recruitment** - In Market Operations alone there was a staff turnover of approximately 8 personnel. In overall terms the staff turnover is running at approximately 30%. SEMO believe an amount of 45k is therefore justified."*

It is important to note that while some of the cost categories SEMO have budgeted for may never be spent (e.g. Legal Advice, Disputes etc), nonetheless SEMO is correct to budget for these eventualities. Nonetheless any over or under expenditure in area of cost will be subject to ex-post review by RAs. The allowance of: €690,000 in March 2010 prices shall be: 690,000 x (1-2.5%) = 672,750

DECISION 5

It is decided that the allowance for Professional Fees will be: **€672,750 (March 2010 Prices)**

5.2.5 GENERAL AND ADMINISTRATIVE COSTS

This category covers the remaining expenses expected to be incurred in operating the SEMO business. It includes Travel & Subsistence, Office Supplies, Bank Charges and Staff Training. SEMO's proposals for General and Administrative Costs are as follows:

Description	**Costs (€,000)**
Travel and Subsistence	154
Office Supplies	50
Bank Charges	30
Staff Training	118
Miscellaneous / Conferences	94[2]
Total General & Administrative Costs	**446**

Table 8: Summary of General and Administrative Costs

The figure of 446k is substantially above the allowance for the current revenue. The RAs understand that in the absence of significant fluctuations on SEMO's headcount, this cost component should be constant throughout the years. Therefore, the SEM Committee has decided that the approved allowance for the current price control corrected by the verified inflation should be used on the next price control. Therefore, the current allowance of €358,000 (March 2008 prices) in March 2010 prices is: 358,000 x (1-4.52%) = 341,825

DECISION 6

The allowance for General and Administrative Costs will be: **€341,825 (March 2010 Prices)**

5.2.6 CORPORATE SERVICES

The SEMO submission made reference to corporate services being charged from the parent companies. Corporate services are provided by EirGrid and SONI to SEMO, for example HR. It is anticipated that this will be an annual charge on the SEMO business provided by EirGrid and SONI and will be available for the ex-post review. The costs to date for Corporate Services have not yet been agreed. SEMO has suggested an estimate of €50k.

Inclusion of such a figure for the new tariff period is however without prejudice to any determination to be made by the RAs on any such costs in the *ex post* review to be carried out for the existing tariff period. It is however understood that there may be legitimate costs in this area in the new tariff period and it is correct and prudent to include an allocation in the new tariff period. In the absence of any further data, the RAs can only accept that SEMO have made an informed estimate.

[2] 60k is to be use for hosting the APEX conference

The RAs intend to follow up on this area with SEMO to ensure that proper mechanisms are in place regarding charges being made from the parent companies to SEMO. The Corporate service allowance in March 2010 shall be: € 48,750 (50,000 x (1-2.5%)

DECISION 7

The allowed budget for Corporate Services will be **€48,750 (March 2010 Prices)**

5.3 K FACTOR

SEMO's allowed revenue consists of its operational costs plus Imperfections costs. Both of these may have k factors applied in any given year as set out in appendix 3.

The SEM Committee has decided that the k-factor applied to the allowance for operational costs in the next tariff period should adjust SEMO's revenue downwards to take account of the excess income that SEMO earned (over and above its actual costs) in the first price control period. The downward k factor adjustment to be applied to the SEMO's next revenue allowance is **€1,926,376**.

DECISION 8

It is decided that the k Factor to be applied to the SEMO's next Revenue allowance is **€1,926,376**

6 CAPITAL EXPENDITURE

In its submission, SEMO have proposed an allowance for Business and IT Release CAPEX. This allowance would enable SEMO to recover from tariffs the necessary resources to finance their capital investments. Nevertheless, this does not have any impact on the RAs ability to scrutinise the capital as the items come up and challenge again on an ex post basis.

The SEM Committee decided that some provision should be made for SEMO in the next price control. However, the RAs would like to stress that that this money can only be used on projects approved by the RAs through a formal approval process. With this in mind SEMO have proposed the following categories of CAPEX items:

- SEMO IT Release CAPEX
- Business CAPEX (predictable)
- Major Market Changes

The business CAPEX will cater for hardware, software and telecommunications upgrades. The IT Release CAPEX will allow SEMO to deliver market modifications, non Trading and Settlement Code changes, system defects and operational efficiencies. Major Market Changes CAPEX is to be catered for on a cost pass through basis.

6.1 IT RELEASE CAPITAL EXPENDITURE

SEMO IT have now moved to a biannual IT release strategy. Regular IT releases allows SEMO IT to co-ordinate its IT resources and retain vendor expertise and support for the Central Market System. This biannual release strategy should reduce development costs and focus Market Participants on the development of key market rules that will benefit the SEM.

SEMO are now seeking for a total of €1,233,125 for 2009-10 which will cover 2 scheduled releases from our software vendors The table below outlines the proposed amounts and releases for Year 2009-10.

IT Release CAPEX	Release 1 Oct 2009	Release 2 April 2010	Total
Scheduled Releases	€100,000	€1,133,125	**€1,233,125**

Table 3: Summary of the IT Release CAPEX

6.2 BUSINESS CAPEX

SEMO have identified a number of Business CAPEX projects and systems that are required. Software upgrades are necessary for continued software vendor support. Additional systems are being proposed to increase operational efficiencies and aid better decision support. A summary of the Business CAPEX items can be seen in the table below.

Business CAPEX Item	Business Justification	Proposed Amount
Axapta Upgrade	Current version of SEMO accounting system, Axpata, is out of support	**100k**
Upgrade Servers / Network	The current Storage Area Network (SAN) is rapidly running out of capacity and requires immediate replacement *Reduction in price forecast due to EirGrid public tender.*	**600k**
Upgrade Comms Links	The current Communication links connecting Belfast and Dublin have reached capacity and are starting to impact on market system performance	**800k**
SEMO Website	Website is required by market participants, SEMO and Regulators to provide prompt and accurate information.(Please note that this is the approved cost but excludes the ABB costs which are included in the April 2010 release capital sum). (Note that this project has been approved as it was mentioned in the consultation Paper)	**571k**
Printing / Enveloping Machine	Time saving of valuable resources, also reduces errors and potential repetitive stress injury.	**50k**
Administered Settlement System	Based on the AS review currently ongoing a system maybe be required depending on the comments due to be received to the consultation paper.	**100k**
Treasury System	The treasury function in SEMO is vital. Given the volume of money flowing through the market, the seasonal variances in cash balances and the nature of a dual currency, a proper treasury system for SEMO is recommended.	**50k**
Electronic Fax Solution	Currently if there is a LCF or a GCF SEMO has to fax all market participants. Faxing is very manual and can be prone to errors, this solution would ensure that all data faxed is recorded and the resources utilised during a Communications failure could be utilised more efficiently	**100k**
Discretionary Fund	For small capital projects	**250k**
Hardware	Market participants have requested an on-line help desk	**50k**

Replacement	system to facilitate readily available updates on logged calls	
TOTAL		**2,671k**

Table 4: Business CAPEX Items

SEMO have examined their Business CAPEX requirements and still believe the vast majority of these items need to be implemented and seek some provision for these items in this tariff year. SEMO therefore seeks a reasonable allowance (which will be subject to ex post review and individual capital approval) to be recovered in this tariff year. SEMO therefore propose a provision of €2 Million for Capital investment (Business CAPEX + IT Release CAPEX)

The €2m provision in relation to Capital Expenditure would be added to the SEMO Regulatory Asset Base and the way in which the cost of this capital expenditure is recovered is via the depreciation element of the SEMO tariff. As a result the amount of new CAPEX is recovered over the life of that asset (5 years) and appears in the SEMO tariff under the depreciation line.

It implies that the SEMO's Regulated Asset Base (RAB) would be incremented in the beginning of the next price control by €2 Million. SEMO would then be able to recover this cost component (through WACC and Depreciation) from October 2009 onwards. Any departure from the costs initially estimated will be scrutinized by RAs during the ex-post review. Furthe,r despite the fact that the cost of the capital will start to be recovered from October 2009, the ex-post review will note the date of project implementation compared to the date that the cost of the project was included in the RAB. Any exceptional unforeseen over expenditure in CAPEX will be subject to RAs approval. Following ex post review all costs that the RAs accept as reasonable would be provided for.

DECISION 9

SEM Committee has decided that the allowance for Capital Expenditure will be **€ 1.950 Million** (March 2010 Prices)

6.2.1 MAJOR CAPITAL EXPENDITURE

CAPEX amounts for major strategic developments are usually conducted under Project arrangements i.e., major changes to the Trading and Settlement Code and supporting systems which will be provided for on a cost pass through basis. For any major capital expenditure SEMO are required to present their expenditure plans to the RAs. The SEM Committee has decided that SEMO is to be incentivised to deliver this form of CAPEX. See the Incentivisation section.

6.3 REGULATED ASSET BASE (RAB)

6.3.1 ASSESSMENT OF ASSET BASE

As discussed in the Decision Paper for the initial SEMO revenue and tariffs period, the SEM Committee has decided that the book value method will be used for the valuation of the SEMO RAB. This method will allow SEMO to recover the costs incurred in a stable, sustainable and predictable manner, in line with the regulatory principles outlined in Section 4 of this document.

6.3.2 STATUS OF SEMO'S RAB

The table below shows a summary of the SEMO RAB since Market Go Live. There have been two major items on the SEMO RAB:

1) The SEM Establishment project which were the costs in relation to the introduction of the Central Market System
2) The Day 1+ Project which were the costs in relation to the delivery of majority of the Section 7 of the TSC

In addition, the SEMO website is planned to be implemented in Q1/2010 at an estimated cost of €571K. SEMO identified a number of other areas of potential CAPEX expenditure, however the business cases for these are still in development. The RAs recognise that some additional CAPEX expenditure is likely to occur in the next tariff year and have made an allocation of €2M for these in the allowed revenue. This includes the SEMO Website Costs. It should be noted that SEMO are required to receive formal approval from the RAs for CAPEX related expenditure and the above allocation will be subject to a full ex post review.

For all elements on the RAB, a 5 year straight line depreciation has been applied. This results in a final Net Book Value (NBV). The NBV for each entity has been calculated for the end of each tariff year.

For the tariff year 09/10, the inflation has been determined. The midpoint in the tariff year has been used to calculate the level of inflation to be applied. The tables below shows the calculation of the RAB in March 2009 Prices. The RAB is the inflated to March 2010 Prices using an inflation rate of -2.5% The calculation of these is detailed in the table below,

Value of RAB in November 2007 (real)	47,802,291
Annual Depreciation (real)	9,560,458
Depreciation incurred between Nov 2007 & Sept 2008 (real)	8,763,753
NBV of RAB in October 2008 (real)	39,038,538
Depreciation incurred between October 2008 & March 2009 (real)	4,780,229
Value of RAB in March 2009 (real)	34,258,309
Inflation from Nov 07 to Mar 09	-0.45%
Value of RAB in March 2009 (with inflation)	**34,102,582**
Annual Depreciation (with inflation)	**9,517,000**

All Values below are in March 2009 Prices

	RAB in October 09	Depreciation in Y09/10	RAB in October 10
SEM Establishment	29,344,082	9,517,000	19,827,082
Day 1+	8,427,023	1,872,672	6,554,351
CAPEX Allocation for Tariff Year 09/10	2,000,000	400,000	1,600,000
Total	**39,771,105**	**11,789,671**	**27,981,434**

Table 9: Status of SEMO's RAB

The Value of the RAB in March 2010 is the midpoint between the RAB in October 2009 and October 2010. This equates to € 33,876,269. By applying the -2.5% inflation results in a RAB of **€33,029,363** (in March 2010 prices).

6.3.3 WEIGHTED AVERAGE COST OF CAPITAL (WACC)

The RAs agree that SEMO should be allowed to recover reasonably incurred capital costs, and that the recovery of these costs should include a fair remuneration for the parent companies - that is, a fair WACC. For the initial tariff period, the WACC for the parent companies was used for SEMO. This approach does not take into account any different risk levels between a Market Operator activity and a System Operator activity but provides an indication on the returns that stakeholders require. The question to be considered for the purposes of the SEMO revenue submission is whether the application of the parent companies' WACCs is appropriate in the context of SEMO. It is possible, for example, to use a differentiated WACC for a part of a business where there is a different level of risk.

If the risks across various regulated activities are materially different, the use of a single rate of return may have an adverse impact on the ability of the RAs to simultaneously encourage efficient investments and protect customers from excessive pricing. On the other hand, if the systematic risk faced by a firm only differs slightly across its different products, it may not make a significant difference to WACC estimation and the RAs may appropriately use a single risk factor

SEMO is proposing a WACC of 5.8 per cent, based on a blended average of the WACC figures applied by the CER for Eirgrid and NIAUR for SONI. The weights used in calculating the blended average are based on funding for SEMO being supplied in the ratio 3:1 from Eirgrid and SONI respectively. SEMO's calculation of this blended WACC is shown in the table below.

WACC	**Split of RAB**	**WACC 08.09**
Eirgrid	75%	5.63%[3]
SONI	25%	6.30%[4]
Blended Rate for SEMO WACC		**5.80%**

Table 11: Value of pre tax WACC for SEMO

The RAs (through their consultants) undertook research in order to ascertain whether any convincing evidence existed of a difference in risk exposure between system operators and market operators. The conclusion of this research was that there is not any compelling qualitative case for concluding that market operation involves lower underlying exposure to systematic risk. There are a number of systematic risk factors that are potentially relevant to SEMO. While market operation may involve a different set of systematic risk factors from system operation, the RAs do not see any convincing basis for concluding that overall exposure to systematic risk is either lower or higher, based on the nature of the business activity. Based on the 3:1 ratio by which EirGrid and SONI fund these costs, and the NBV values for the RAB calculated above, the RAs decided that the WACC shall be equal to **€ 1,915,703** (in March 2010 Prices)

DECISION 10

It is proposed that the allowed WACC be **€ 1,915,703**

[3] WACC as defined in 2006-2010 Transmission Price Control Review Decision Paper

[4] WACC as defined in SONI Price Control 2007 2010 Decision Paper

6.3.4 DEPRECIATION

Depreciation forms the largest single component of SEMO's requested revenue, exceeding both total operational cost and the WACC allowance. SEMO's depreciation allowance includes amounts both for depreciation on its existing RAB and for depreciation associated with its proposed CAPEX. In its submission, SEMO has calculated depreciation using a straight-line methodology and an asset life of five years in line with the approach taken by the RAs in setting the two previous price controls.

In the RAs view, SEMO's depreciation methodology appears reasonable. Straight-line depreciation is often used by regulators, and five years does not seem an unreasonable asset life for IT-related assets. Its approach also has the advantage of consistency with past SEMO price controls.

Further, if the WACC has been set at SEMO's true market cost of capital, then it can be argued that the choice of depreciation period is NPV-neutral from the perspective of SEMO and its customers. Where this condition holds, once the RAs have allowed CAPEX into the RAB the choice of depreciation period only affects how that amount is recovered through time rather than the total amount that is recovered.

Therefore the SEM Committee decided that the above principle is maintained during the new tariff period, but revisited in the future.

Based on the NBV values for the RAB calculated above, the SEM Committee decided that the Depreciation shall be equal to **€ 11,494,930**

DECISION 11

It is decided that the allowed Depreciation be **€ 11,494,930**

7 INCENTIVISATION

In the SEMO submission, a section was included on possible options for introducing forms of incentivisation for SEMO. The 3 areas under consideration are:

- **Key Performance Indicators** – 4 operational performance indicators that will deliver superior service levels and will benefit market participants.
- **Major Market Change CAPEX** – An incentive for SEMO to deliver projects on time and within budget.
- **OPEX Savings**.

The SEM Committee has assessed the submission provided and have decided upon the appropriate levels of incentivisation.

7.1 KEY PERFORMANCE INDICATORS

7.1.1 SEMO PROPOSAL ON KPIS

SEMO proposed 4 KPIs for consideration in their revenue submission. These were labelled:

- Ex-Ante
- Ex-Post Initial
- Invoicing
- Credit Cover Increase Notice (CCINs)

Each of these KPIs is described briefly below.

KPI	Description
Ex-Ante (Pricing Report)	The Ex-Ante publication targets refer to the percentage of occurrences where the Ex-Ante Pricing reports are published on time. Currently the target time for publication is 13:00 every day, seven days a week. The Ex-Ante pricing runs are carried out on D-1 and give an indicative forecast of MSQs (Market Scheduled Quantities) and SMPs (System Marginal Price) for all units. The Ex-Ante is also important for setting the Interconnector Unit Nominations for all Interconnector Units. Unlike the prices and quantities, the Interconnector nominations are fixed and cannot be re-priced after the Ex-Ante is published.
Ex-Post Initial (Pricing Report)	The Ex-Post Initial publication targets refer to the percentage of occurrences where the Ex-Post Initial pricing reports are published on time. Currently the target time for publication is 17:00 every day, seven days a week. The Ex-Post Initial pricing runs are carried out on D+4 and give the final SMPs and MSQs for all participants. These figures are used for the final settlement of all market participants.
Invoicing	The Invoicing targets refer to the percentage of occurrences where Invoices to all participants are published on time. Currently for the weekly energy market and Variable

	Market Operator Charge (VMOC) invoices the target is Fridays at 12:00. Capacity is invoiced at 12:00 seven working days after the end of the month, and the Fixed Market Operator Charge (FMOC) invoices are published on the first Friday after the end of the month at 12:00. The Invoicing KPI is a good example of a "downstream" measure that captures the performance of all settlement activities preceding it. For example, if there is significant delay in publication of daily settlement statements this will usually have a knock-on effect on invoicing and thus will impact the Invoicing KPI.
Credit Cover Increase Notice (CCINs)	The credit cover increase notice targets refer to the percentage of occurrences where the CCINs are published on time. Currently the target time for publications is 17:00 every working day. CCINs reports are used to inform market participants that their posted collateral cover is less than their required collateral cover. They then have two working days in which to rectify this on receipt of the CCIN.

The Assumptions relating to these KPIs are

1. The metric is delivered within one hour of the targeted time;
2. External factors outside the Market Operators direct control are excluded e.g. Limited Communication failure by Market participant, late provision of data by System Operators or the Meter Data Provider, Government policy changes, RA policy changes etc; and
3. The first week after a System release is excluded from the annual target.

With regard to SEMO's risk/reward proposal, the RAs are minded to use a reward only mechanism for this one year period. The RAs do not wish the potential for financial penalties to distort the behaviour of SEMO or to have a negative impact on the energy market. The SEM Committee therefore decided to have an incentive scheme that is based on Target KPI and an Upper Bound Metric.

The RAs have decided that a reward mechanism equivalent to 2.5% of total internal costs shall be implemented. Each of the KPI's are weighted according to the importance of each indicator. The table bellow outlines the targets and weights of each KPI.

Metric	Weighting	Target	Upper Bound	Year to Date
Ex-Ante Pricing Report	**0.2**	**99%**	**100%**	**99%**
Ex-Post Initial Pricing Report	**0.2**	**99%**	**100%**	**99%**
Invoicing	**0.4**	**90%**	**95%**	**87%**
Credit Cover Increase Notices	**0.2**	**98%**	**100%**	**98%**

If SEMO's performance is above target, SEMO would earn rewards which would increase linearly up to the maximum level (i.e. total pot multiplied by weighting on that KPI) at the specified upper bound. In terms of assessing the KPIs, the RAs decided that a measurement is taken at the end of the tariff year, using the average value of each KPI over the full year. A calculation of the amount of reward to be allocated to SEMO can then be determined. It is assumed that this work will make up part of the ex post review of the tariff period.

7.2 MAJOR MARKET CHANGE CAPEX

The SEM Committee has decided that an incentive mechanism will be introduced for major CAPEX projects. Only projects with scope for efficient project management shall be incentivised. Further, proposed incentives would only apply to CAPEX projects with a value in excess of € 500,000.

The RAs believe that 25% of savings retention proposed by SEMO is too high in terms of the amount to be retained and have decided that 10% is more appropriate. In addition, the RAs have included a brief description of the process that should be used in terms of determining the value of the incentive. A worked example is provided below for illustrative purposes only. The process should run as follows:

1. SEMO submit business case to the RAs for CAPEX approval. The business case should detail all areas of expenditure and all assumptions used. Any contingency allowance should be clearly defined and identified.
2. The RAs complete a full analysis of the submission ensuring close scrutiny of costs and assumptions in the business case and seek clarification where necessary.
3. The RAs approve the appropriate budget allowance for the project.
4. On completion of the project, a full report of expenditure should be submitted to the RAs by SEMO
5. The RAs will check for the following in relation to the incentive calculation:
    - Was the scope of the project fully delivered? If not, the approved budget for areas of the project not delivered it should be removed from the incentive calculation
    - Was the contingency fund used?

The worked example below shows how the incentive calculation would work.

Values in €000's	Amount Approved	Amount for Incentive Calculation	Final Project Costs
Project Hardware	400	400	385
Project Software	300	300	320
External Resources	350	350	360

Internal Resources	200	45	45
Other Expenses	50	50	20
Sub Total	**1,300**	**1,145**	**1,130**
Contingency (10%)	130		
Total CAPEX	**1,430**	**1,145**	**1,130**
Saving			15
Saving retained by SEMO (10% of saving)			1.5
Saving Returned to Customers (90% of saving)			13.5

A budget of 1.3M was approved by the RAs plus a contingency fund of 10%. In the example, the contingency fund is removed from the incentive calculation. In addition to this, any internal resources planned but not used or charged to the project are also removed from the incentive calculation, as it is assumed these costs are incurred under OPEX and therefore no efficiencies have been achieved. This adjusted budget amount is then compared with the final project costs and the savings determined. In the above example a saving of 15K was achieved, with SEMO being rewarded with 10% of this saving. Any over or under expenditure on major capital investment will subject to the scrutiny of the RAs and in case of over expenditure, the RAs will decide in the ex-post review if extra funds should or not be provided for.

7.3 OPEX SAVINGS

Given careful attention to SEMO’s proposal, the RAs propose that no incentives in relation to OPEX savings should be applied to SEMO for this price control period. The RAs have carried out a full analysis of the SEMO OPEX submission and have proposed reduced values where deemed appropriate.

The RAs believe that OPEX efficiencies may be incentivised in the future as part of a longer price control period.

8 IMPERFECTIONS CHARGE

8.1 OVERVIEW

The costs associated with Imperfection Charges are depicted in the diagram below. Three of the costs covering constraint costs, uninstructed imbalance costs and testing charges (collectively known as Dispatch Balancing Costs) are provided by the System Operators, Eirgrid and SONI. In addition to these, there are also Energy Imbalances and Make Whole payments. The budget required for these two costs is provided by SEMO.

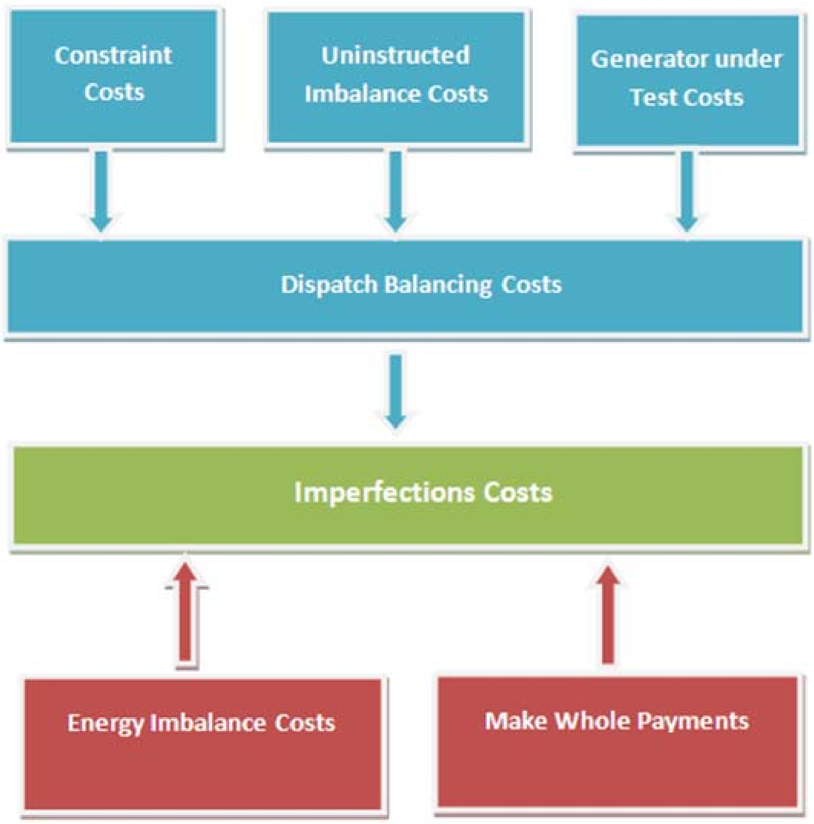


Figure 3: Make up of Imperfection Charges

The Transmission System Operators (TSOs) submission was prepared jointly by the Eirgrid and SONI, and captured an all-island estimate of constraint costs, uninstructed imbalance costs and testing charges, collectively known as Dispatch Balancing Costs. The forecast of Dispatch Balancing Costs is for the period from October 1st 2009 to September 30th 2010.

All these costs are estimated *ex-ante* and recovered from Suppliers on a MWh basis through the Imperfections Charge. (see the section 8.7 bellow)

8.2 CONSTRAINT COSTS

The constraints portion was largely modelled by the TSOs' using the simulation package PLEXOS which captured some of the key transmission and reserve constraints. This was then supplemented with specific analysis of factors, which it is not possible to capture in the model as well as factors affecting Dispatch Balancing Costs as a whole.

Essentially, by performing multiple runs of the PLEXOS model, adding in key reserve requirements and specific transmission constraints, the effect in terms of increases in total production cost was analysed. This difference in production cost between these simulations represented the constraint costs associated with the modelled transmission and reserve constraints. This built on the PLEXOS modelling described above and also looked at the effect and impact of:

- perfect foresight,
- market modelling assumptions,
- specific transmission system constraints,
- specific reserve constraints, and,
- other factors.

The TSOs' forecast of Constraint Nominal Cost is €106 million for the 12 month period from October 1st 2009 to September 30th 2010. Where possible, data from the first five months of the Single Electricity Market was used to review figures submitted and assumptions made in the previous year's submission. The breakdown of the cost of constraints is detailed in Appendix 2

8.3 UNINSTRUCTED IMBALANCE COSTS

In the TSO submission the cost of uninstructed imbalances is estimated to be zero, with most attention being paid to the cost of constraints

Uninstructed imbalances (positive or negative) require corresponding constraining (down or up) of other generators. It is assumed that the uninstructed imbalance payment parameters (DOG and PUG)are set sufficiently far apart to allow recovery of the additional constraint costs incurred and no extra provision is made in the TSO submission. The RAs will continue to assess this cost over time.

8.4 GENERATOR UNDER TEST TARIFFS

The TSC requires the TSOs to report to the RAs proposing values for the Testing Tariffs at least four months before the start of the year to which they shall apply (TSC clause 5.175). The RAs have been advised by the TSOs that work is currently underway to develop a new set of Testing/Commissioning tariffs and it is expected that these will be consulted upon by the end of September 2009. Therefore the TSOs have proposed the continuation of the existing tariffs until the new testing tariffs are approved.

Nonetheless the testing tariffs have been set at a level that should, on average, recover the additional costs imposed. Therefore a zero provision has been made for the net contribution of Generator Testing Charges to Dispatch Balancing Costs.

8.5 ENERGY IMBALANCES

It is assumed that the costs of uninstructed imbalances (for over and under generation) will, on average, be recovered by the uninstructed imbalance payments for the forecast period. Therefore, a zero net cost has been provided for this.

8.6 MAKE WHOLE PAYMENTS

For the first 12 months of the market Make Whole Payments amounted to €311,652 i.e. 12 months to 31st October 2008. Therefore the approved provision for Make Whole payments is €311,652.

8.7 RECOVERY OF IMPERFECTION COSTS

As stated previously, the dispatch balancing costs are estimated *ex-ante* and this estimate is recovered during the relevant tariff period through the imperfections charge.

However, it is almost certain that differences between the costs being recovered and paid out will lead to instances where SEMO will:

- require working capital to fund constraints payments that exceed revenue collected through the imperfections charge, or,
- have collected revenue through the imperfections charge that exceeds the amount being paid out on constraints.

To allow for the first scenario, the mechanism described in the Decision Paper for the initial SEMO Revenue and Tariffs is that the funding required covering fluctuations during the tariff period, and any allowed under-recovery of revenue during the tariff period will be paid back, in the subsequent tariff period(s), with the appropriate amount of interest as determined using the methodology outlined in 7.3 and in the Appendix 3. This reflects the cost of short-term financing required to provide SEMO's working capital needs.

Similarly, for situations where the revenue recovered by the SEMO through the Imperfections Charge is greater than that paid out in constraints (second scenario above), the Imperfections Charge in the following tariff period(s) will be reduced by an appropriate amount to reflect the allowed over-recovery and the associated interest as determined using the methodology outlined in outlined in 7.3 and in the Appendix 3.

It is decided that this mechanism is continued in the new Tariff period

DECISION 12

The RAs have decided that **€106,311,652** will be recovered through the imperfections charge during the new tariff period.

8.7.1 PROVISION OF WORKING CAPITAL FOR IMPERFECTION CHARGES

The SEM Committee has decided that, as is currently the case, the funding of working capital requirements be provided by EirGrid and SONI.

In addition, the SEM Committee has decided that funding required to cover fluctuations during the tariff period, and any allowed under-recovery of revenue during the tariff period be paid back in the subsequent tariff period(s) with the appropriate amount of interest. This reflects the cost of short-term financing required to provide SEMO's working capital needs.

Similarly, for situations where the revenue recovered by SEMO through the Imperfections Charge is greater than that paid out, it is decided that the Imperfections Charge in the following tariff period(s) will be reduced by an appropriate amount to reflect the allowed over-recovery and the associated interest. For details of the k factors to be applied in 2009 – 2010 see section 9.4 above.

9 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 own allowed costs and allowed market related costs. These charges consist of:

- energy and capacity charges,
- the accession fee,
- the participation fee,
- the Imperfections Charge,
- the Market Operator charges

In order to be sustainable and cost-effective, the tariffs should seek to accurately recover the costs identified in a broadly cost-reflective way and to reflect an optimal regulatory approach. For the next tariff period, given its short duration, it is decided that the same approach as used in the current tariff is continued in order to ensure appropriate stability.

For imperfections, the allocation of the costs to participants is dictated by the TSC. However, for SEMO costs, the TSC allows for allocation of costs to a number of fees and charges. In respect of this allocation, as with the cost analysis, stability is considered to be delivered given the proposal that the current split between the SEMO variable and fixed charges is maintained and that the Accession and Participation Fees continue to reflect the costs of accession and registration. It is proposed that the decisions made in the Decision Paper for the initial SEMO revenue and tariffs period, in relation to the forms of charges will be applicable in the new tariff period.

9.1 ENERGY AND CAPACITY CHARGES

The structure and detail of charges for energy purchased from the "pool" is defined in the TSC. It will be a per MWh charge, 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.

9.2 ACCESSION FEE

The TSC states that the accession fee will be a fee paid to the SEMO by each applicant for accession to the TSC, to cover the SEMO's costs incurred in assessing the application. SEMO have proposed that the current charge of €1500 for Accession should continue. In response to a query made by the RAs, SEMO has provided the following rationale for the definition of the accession fee:

"SEMO believes it should be allowed to retain a cost reflective fee. Currently these fees are simply netted off overall SEMO costs. The workload in SEMO for processing a Party registration is approximately 4 days work. With an estimate cost of €382 per day (Based on the revenue decision paper last year which allowed an average salary of €84,000, divided by 220 working days) the average cost is €1528 per party registration."

The RAs understands (as discussed in the Payroll section) that the appropriate level for the average payroll for the whole organisation is €80,457. However, this figure probably does not reflect the cost of the personnel involved in the registration process. With this in mind the RAs requested to SEMO information on the distribution of the staff per grade and salary band. It was possible to possible to calculate the weighted average cost per resource which is **€ 61,000**. The RAs understand that the weighted average reflects more appropriately the cost of the personnel involved in the registration process as it accounts for the fact that most of the SEMO staff are allocated in grades which the remuneration is below to €80,457**.** Substituting the figure € *84*,000 by € 61,000 and using the same process proposed by SEMO, the value for the accession should be € 1,115 in opposition to € 1,500 suggested by SEMO.

Decision 13

SEMO's accession fee will be fixed in **€ 1,115**

9.3 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". SEMO have proposed that the current charge of €3,500 for Participation should continue. Similar to the Accession fees, SEMO has provided the following rationale for the determination of the participation fees.

"The workload in SEMO for processing unit registration (Legal review, administration, application checks, credit risk analysis, setting up bank details, setting the unit up in the system, managing the interactions with internal and external parties etc) is approximately 10 days work. With an estimated cost of €382 per day (Based on the revenue decision paper last year which allowed an average salary of €84,000, divided by 220 working days), the average cost is €3820 per unit registration."

Following the same principle assumed to calculate the Accession Fee decided by the RAs (which assumes a cost of €61,000 in opposition to *€84,000* proposed by SEMO, the participation fee should be fixed at €2,800 in opposition to the €3,500 proposed by SEMO.

Decision 14

SEMO's Participation Fee will be fixed at **€ 2,800**

9.4 IMPERFECTIONS CHARGE

The SEM Committee has decided that the Imperfection Charge to be recovered will be: **€106,311,652** (Decision 12).

As regards the k factor to be applied to the Imperfections allowance from the 2007-2008 period, this will give a downward adjustment of **€3,678,938**.

Normally the k factor arising from the 2008-2009 period would be applied to the Imperfection allowance in 2010 -2011. However given its magnitude and the benefit to consumers of an early application SEMO have proposed that this be applied one year early. The SEM Committee has welcomed this proposal which will result in a downward adjustment of **€8,900,000**

The total over recovery of imperfection charges within the period 2007-2009 is **€12,578,938.**

The SEM Committee has decided that the k factor relative to the period 2007-2009 will be: **€12,578,000**

Using the Forecasted Demand Figures for 2009 (34,060 GWh), as specified in Appendix 1, and the DBC specified in the Decision 12, the resulting imperfections charge is €2.752 per MWh. (i.e. (106,311,652-12,578,000) /34,060 = **2.752**)

This cost allowed will be subject to review and determination ex-post, with allowed under or over-recoveries feeding into the subsequent tariff period(s).

Decision 15

SEMO's Imperfection Charge will be fixed at € **2.752** per MWh

9.5 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 and SONI, and the appropriate WACC. These proposed costs are detailed in Section 7.

However, the TSC does not specifically state what proportion (or type) of costs should be allocated to either the fixed or the variable element of the charge for recovery. It is decided that the same proportions as were used in the initial tariff period will continue to apply in the new tariff period.

The RAs decided that the majority of costs, 95%, be recovered through the Variable Charge.

It is decided that the fixed charges to Generators and Suppliers will recover the remaining 5% of all costs between them in a 95:5 ratio. That is, the revenue recovered through the Fixed Charges will be weighted to ensure that for each Generator Unit registered the revenue recovered through the Fixed MO Charge to Generators will be 19 times the revenue recovered through the fixed MO charge to Suppliers for each Supplier Unit registered.

Furthermore it is decided that the Fixed Market Operator Charge to Generator Units varies by MW of installed capacity. This is accommodated by the TSC, which states that the Fixed Market Operator Charge to Generator Units may be different for each Generator Unit. It is decided that the Fixed Market Operator Charge to Supplier Units varies, based on the number of Supplier Units. In summary, the proposals lead to:

- A Variable MO Charge per MWh for the new tariff period;
- A Fixed MO Charge to Generator Units per MW installed capacity. In other words, a total charge
- A Fixed MO Charge to Supplier Units per Supplier Unit

As per the initial tariff period, it is decided that the Fixed Market Operator charge be billed on a monthly basis.

The table bellow outlines the tariffs that will apply for the next price control. These tariffs are just an indicative value and are subject to review. SEMO will publish shortly after the publication of this Decision Paper the tariffs that will be applied to the next price control.

	Current Tariffs	New Tariffs	Variation
Costs to be Recovered by SEMO	23,753,745	22,181,519	-6.6%
K - Factor (Revenue Allowance)		1,926,376	
Total Cost		20,255,143	
Recovery via Fixed Charge	1,187,687	1,012,757	
Recovery via Variable Charge	22,566,058	19,242,386	
Fixed Generator Charge (per MW)	127.0	87.8	-30.9%
Fixed Supplier Charge (per Unit)	392	367	-6.5%
Variable Supplier Charge (per MWh)	0.597	0.565	-5.4%
Imperfections Charge (per MWh)	3.296	2.752	-16.5%
Accession Fee	1,500.00	1,115.00	-25.7%
Participation Fee	3,500.00	2,788.00	-20.3%

10 APPENDIX 1 - DETERMINATION OF THE DEMAND FIGURE USED IN SEMO'S REVENUE SUBMISSION

This Appendix explains the determination of the demand figure used in this year's revenue submission.

In the tables below, provided by SEMO, shows the current best forecast of the energy at the trading point (transmission boundary) for the Republic of Ireland and Northern Ireland for the period 1 October 2009 – 30 September 2010

	2009/10
Energy at the trading point	26,500

Table 13: EirGrid's Forecast of the Energy at the trading point (RoI) for the period 1 October 2009 – 30 September 2010 (GWh)

	2009/10
Energy at the trading point	8,819

Table 14: SONI's Forecast of the energy at the trading point (NI) for the period 1 October 2009 – 30 September 2010 (GWh)

Total Electricity Traded in SEM - All Island

Total Electricity Traded in the SEM is electricity traded by units participating in the SEM at the trading point. The trading point is at the transmission boundary.

TER and Units Sent Out are converted to Total Electricity Traded in SEM by removing:

- an estimation of transmission losses (~2%),
- an estimation of self consumption (2% ROI, 0% NI) and,
- an estimation of demand met by units outside the market.

The calculation of transmission losses, self consumption and generation outside of the market is not without its difficulties. The Market Participants should be aware that these numbers are at very best rough estimates as it is difficult to accurately assess the likely scale of self-consumption (in ROI), the scale of transmission losses in the absence of bulk supply point metering and the likely scale of generation outside of the market.

Based upon these assumptions an indication of the likely number of units upon which Market Operator charges are to be based upon, although this may be subject to revision later in the year should further updated data become available.

	2009/10
Market Operator Charging	34,060

Table 15: Estimate of Number of Units Charged for Market Operator Charging Purposes (GWh)

In addition to the above, the following inputs were also provided by SEMO:

	2007/08 (11 months)	2008/09 (12 months)	2009/10 (12 months)
Energy	35,100 GWh	37, 788 GWh	34,060 GWh
Supplier Units	23	53	64
Generator Units	102	126	142
Generator Capacity	9,050 MW	9,300 MW	11,267 MW

Table 16: Summary table showing the number of Supplier and Generator units and the Generator capacity.

11 APPENDIX 2 - BREAKDOWN OF CONSTRAINT COSTS FOR 2008/09

The table below shows the breakdown of cost types for Constraints as detailed in the TSO submission

Description		Cost (€m)	Total (€m)
PLEXOS modelled constraints for 12 months			**70.46**
System Operator Interconnector Trades			**5.64**
			Specific Constraint Modelling
Specific Transmission System Constraints			**4.52**
	Radially connected generation	0.81	
	Transmission scheduled and forced outages	3.71	
Perfect Foresight Effects			**15.24**
	Changes to demand and generator availability	8.84	
	–Impact of wind variability and forecastability	6.18	
	Moyle schedule set D-1	0.22	
Specific Reserve Constraints			**3.01**
	Turlough Hill	3.01	
	Replacement reserve	0.00	
	Increased regulation at night	0.00	
Market Modelling Assumptions			**1.58**
	UUC and RCUC differences	1.13	
	Hydroelectric generator constraints	0.45	
	Generator constraints	0.00	
	Within-day testing	0.00	
	Start up costs in PLEXOS	0.00	
Other			**5.55**
	Wind Dispatch and System Security	3.07	
	Capacity Tests for System Security	2.48	
Total Forecast 2009			**106.00**

Table 17: Breakdown of Cost Types for Constraints

12 APPENDIX 3 - APPLICATION OF K FACTOR

The RAs assumption is that the process used for the application of a k factor should be similar to any other regulated business. The current allowable SEMO revenue and tariffs set for the initial tariff period will come to an end on 30 September 2009. Following the end of this period, it is intended that SEMO submit a report to the RAs detailing the actual spend during the period and a comparison to the budget for the price control period. At this point there is an opportunity for SEMO to explain any variances (in greater or lesser detail depending upon the scale of the variance). As part of the review the RAs would expect to see a line-by-line analysis, and detailed figures in respect of interest paid or received. This analysis should include not only the direct SEMO costs, but also any costs associated with imperfections.

It is assumed that SEMO will need sufficient time to collate the figures (including any input on imperfections and genset tests from the TSO) and provide the appropriate commentary and obtain any necessary internal sign off on the report. At present it is assumed that the report would be available by the end of October 2009

On receipt of the report the RAs will carry out a review and anticipate having at least one meeting with SEMO to discuss any areas requiring clarification. Once all open issues have been closed, the RAs will make their report to the SEM Committee who will make a decision on the K factor. The RAs will share their report with SEMO prior to submission to the SEM Committee. In terms of when the K factor will be applied, the decided time lines are demonstrated below.

Price Period	**Dates**	**K factor**	**Application of K factor**
Price Period 1	1 November 2007 – 30 September 2008	K factor 1	
Price Period 2	1 October 2008 – 30 September 2009	K factor 2	
Price Period 3	1 October 2009 – 30 September 2010	K Factor 3	K factor 1
Price Period 4	1 October 2010– 30 September 201y (TBD)	K factor 4	K factor 2 K factor 3 will be applied in year 2 of any extended time period.
Price Period 5	1 October 201y– 30 September 201z (TBD)	K factor 5	K factor 4 will be applied in year 2 of any extended time period.

Table 18: Application of K Factor Example

13 APPENDIX 4 – SEM Committee responses to the Market Participants (MP)

DURATION OF THE PRICE CONTROL

MP RESPONDING	PROPOSAL	SEM Committee Response
ESB	On the duration of the Price Control only one respondee, ESB, objected to the proposed 1 year period. This was on the basis that Market Participants require SEMO to be responsive to service requests throughout the year arising from system and/or market events and that determination of allowable SEMO revenue on an annual basis is likely to limit the flexibility for SEMO to react on a timely basis to Market Participant requirements in terms of operational services, which might otherwise be possible under a scenario where greater regulatory certainty over revenue allowance for a longer 3 or 5 year period were known. In addition ESB stated that, from its own experience, for regulated entities price control determination is a detailed and resource intensive process and it assumes that for SEMO, an annual process is likely to consume substantial management and analyst resources for a number of months each year. ESB believes that there could be greater value to Market Participants in reducing the frequency of the revenue determination process so as to free up SEMO management resources to focus their activities on market developments and service delivery.	The SEM Committee agrees that a longer tariff period is worth considering in the future. However, it has decided on a further one-year price control at this time due to a number of factors, including: the fact that SEMO is still a relatively new organization with an evolving work programme; the current economic and financial climate, which makes it difficult to project SEMO's future costs; and the need for better cost reporting procedures to be put in place to underpin a longer term revenue-setting process.

FORM OF PRICE CONTROL

MP RESPONDING	PROPOSAL	SEM Committee Response
General **SEMO**	While the form of the price control was not specifically consulted upon, most respondents emphasised the need for SEMO to be able to respond *flexibly* to the developing needs of the market. SEMO believes that the line by line approach proposed in the regulatory consultation paper does not allow SEMO to be flexible and efficient at allocating resources to addressing the demands of the business. SEMO are therefore seeking an overall operating cost amount which can be flexibly managed by them. As has been the practice to date, SEMO costs would be subject to the scrutiny of the regulators through the ex post review and a k factor for under or over recovery. SEMO therefore believes that the provision of overall allowable revenue should be preserved as a general regulatory principle and applied here.	In the consultation paper, the RAs stated that SEMO would be expected to keep its expenditure within the limits established for each category of OPEX. This approach, whilst limiting its flexibility, will prevent SEMO from using any under spend/excess revenue in some categories to avoid making the efficiencies in other categories, most importantly payroll. The SEM Committee has therefore decided that the OPEX allowance for each category will be limited to the values for each category given elsewhere in this decision paper.

PROPOSAL 1 INDEXATION

MP RESPONDING	PROPOSAL	SEM Committee Response
PPB Endesa SEMO	Only two respondees, Endesa and PPB, stated a view on the approach to indexation and both supported the approach put forward by the RAs. SEMO acknowledge the current deflationary environment and ask that the RAs adopt a consistent approach in their pricing. The RAs consultation paper July 2009 sets out deflation in May 2009 terms. However the precedent in previous years has been to use mid tariff prices. SEMO therefore requests that the RAs are consistent in their approach and use mid tariff March 2009 prices and an appropriate forecast through to mid 2010. To adjust from March 08 (last years determination) requires a -2.05% change (Actual blended CPI/RPI for that period) and a forecasted change from March 09/10 of -2.5%	The SEM Committee agrees with SEMO's suggestion and has decided the mid tariff price approach. For details see section 5.2.1 of this decision paper.

PROPOSAL 2 PAYROLL

MP RESPONDING	PROPOSAL	SEM Committee Response
ESB Endesa Airtricity IWEA PPB NIEES	**Summary –** It was raised the concern that the Regulatory Authorities Proposals regarding OPEX, particularly in the area of payroll budget, might give rise to a reduction in SEMO resource levels and therefore a deterioration of existing service levels. It is proposed that the allowed budget for payroll be set at an appropriate figure to ensure that the current level of service is not adversely impacted. Further, in addition to maintaining the existing level of service, provision should be made for enhancing the services provided. In particular, SEMO should have a sufficient payroll allowance to ensure that the once the new website is up and running, sufficient resources are available to maintain the website and provide useful market information updated on a daily basis. NIEES also suggested that given that this price control extends for a period of only one year, it is unreasonable to expect an individual business costs to fully reflect price changes on the economy as a whole.	The SEM Committee's decision on payroll is laid out step by step in section 5.2.1 of this decision paper. The allowed budget for payroll is €4,264,268.

MP RESPONDING	PROPOSAL	SEM Committee Response
SEMO	The Regulators have proposed the March 2008 baseline figure of €4.032m for payroll costs, appropriately adjusted for inflation / deflation. SEMO believes that this figure should now be adjusted to reflect the additional roles, responsibilities and obligations which SEMO now fulfils and will continue to fulfil in the forthcoming period Oct 2009 / Sept 2010. The baseline figure of €4.032m proposed by the Regulators should be revised upwards to reflect the end of tariff year position and incorporate the following: €258k additional annualised recruitment based on the additional obligations which SEMO now fulfils (see Table 1 below) and for the additional Modifications resource of €48k recruited following approval from the RAs. Payment of the NWA @2.5% in April 2008 (ROI only) (€81k) SEMO therefore proposes that a total amount of €4.371m in mid 2009 terms is the appropriate amount which should be allowed for the period Oct 2009 / Sept 2010 to enable SEMO to continue its current level of administration and management of the market for participants. SEMO has made additional efficiency savings totalling €154k through leveraging existing resources and increased productivity levels. These additional efficiency savings have not been included in the calculation of the revised cost baseline. The Regulators contend be an additional cut of 1% should be in the payroll allowance over and above the deflation figure (page 16 paragraph 2 o f the consultation document). SEMO would argue that SEMO has demonstrated that they have delivered above and beyond the requested service levels. This equates to savings of €154k and a +3.86% increase in efficiency in real terms and	The SEM Committee's decision on payroll is laid out step by step in section 5.2.1 of this decision paper. The allowed budget for payroll is €4,264,268.

PROPOSAL 3 IT AND TELECOMMUNICATIONS

MP RESPONDING	PROPOSAL	SEM Committee Response
PPB NIEES Endesa	Three respondees commented specifically on the RAs' proposal regarding the OPEX allowance for IT and telecoms. PPB agrees with the specific proposal. Endesa encourages the RAs to ensure that the budget include sufficient provision to allow for support and maintenance of the IT and telecommunication system. The third, NIEES, welcomes the disclosure of the information and the reductions the RAs have suggested but view these and other (non-payroll) OPEX costs as being in excess of their expectation for such items. (Other respondees refer to the general need for adequate OPEX to maintain and/or improve service levels.)	Given these responses the SEM Committee is of the view that the proposed allowance of €2.139 M for IT and telecommunications is appropriate – see section 5.2.2 of this decision paper.

PROPOSAL 4 FACILITIES

MP RESPONDING	PROPOSAL	SEM Committee Response
PPB NIEES Endesa	Three respondees commented specifically on the RAs' proposal regarding the OPEX allowance for facilities. PPB agrees with the specific proposal. NIEES welcomes the disclosure of the information and the reductions the RAs have suggested but view these and other (non-payroll) OPEX costs as being in excess of their expectation for such items. Endesa Ireland considers that the allowed budget for facilities is too high and that the rental costs for the Oval Building are at least 30% more expensive than comparable office space within Dublin. They propose that while SEMO should have free choice to determine their office location the rent that is allowed to be recovered from the market should be capped at least 30% below the RAs proposed level.	Given the range of responses and the timescale for this price control the SEM Committee will allow SEMO's proposed facilities costs of €1.304M as discussed in section 5.2.3 of this paper. The appropriateness of this in the longer term will be considered as part of the next price control.

PROPOSAL 5 PROFESSIONAL FEES

MP RESPONDING	PROPOSAL	SEM Committee Response
PPB Endesa	Two respondees, PPB and Endesa, commented specifically on the RAs' proposal regarding the allowance for professional fees. PPB stated that, as acknowledged in section 3.2 of the consultation paper, SEMO's role could be summarised as 'to facilitate the efficient, economic, coordinated operation and administration of the Single Electricity Market'. The state that, given this role, it is not clear why SEMO would, or should, incur the costs of the specified studies that are possibly outside the remit of SEMO and that some may fall more appropriately into the Transmission System Operators' remit. Given this PPB disagrees with the proposed allowance for professional fees of €690,000. Endesa stated that there was insufficient information provided to determine if the budget for professional fees is appropriate. They suggested that the RAs ensure that SEMO's approved budget is sufficient to meet their existing requirements and to allow for the additional advice required relating to interconnector usage, integration of high levels of renewables, market coupling and, in particular, global aggregation.	In SEMO's response to the consultation they have given a breakdown of their proposed €690,000 allowance for professional fees. On this basis, and given the emphasis most respondents have placed on the need for important development work to be progressed by SEMO, the SEM Committee has decided to allow this. The final indexed amount is €672,750 as discussed in section 5.2.4 of this paper.

PROPOSAL 6 GENERAL AND ADMINISTRATIVE

MP RESPONDING	PROPOSAL	SEM Committee Response
PPB Endesa	Two respondees, PPB and Endesa, commented specifically on the RAs proposal regarding the allowance for general and administrative costs. PPB agrees with the RAs proposal. Endesa stated that there was insufficient information provided to make substantive comments on the proposed allowance but emphasized that, in particular, the RAs should ensure that the training budget is sufficient to ensure that SEMO staff receive adequate training.	Given the responses the SEM Committee will allow SEMO's proposed facilities general and administrative costs of €341,825 as discussed in section 5.2.5 of this paper.

PROPOSAL 7 CORPORATE SERVICES

MP RESPONDING	PROPOSAL	SEM Committee Response
PPB Endesa	Two respondees, PPB and Endesa, commented specifically on this proposal and both agreed with it.	Given the responses the SEM Committee has decided to allow SEMO's proposed allowance of €48,750 for corporate services as discussed in section 5.2.6 of this decision paper..

PROPOSAL 8 PREDICTABLE CAPEX

MP RESPONDING	PROPOSAL	SEM Committee Response
PPB Endesa	Two respondees, PPB and Endesa, commented specifically on the proposal regarding predictable CAPEX, agreeing that that only the €571,714 required for the website, be allowed at this stage. Endesa recommended that market participants be consulted on other proposals as e they are assessed.	Given these responses the SEM Committee has decided to allow SEMO's proposed allowance of€571,714 for predictable CAPEX (website only) and that all other business/predictable CAPEX items should be individually scrutinised and approved with appropriate consultation with market participants. However the RAs have decided that for the purpose of tariffs and to enable SEMO to invest in these items that a total allowance of €1.950 M will be included in the tariff figures with the actual expenditure (following separate approval) above or below this being corrected for in subsequent periods via the k-factor. This is discussed in more detail in section 6 of this decision paper.

PROPOSAL 9 WEIGHTED AVERAGE COST OF CAPITAL (WACC)

MP RESPONDING	PROPOSAL	SEM Committee Response
PPB Endesa SEMO	Two respondees, PPB and Endesa, commented specifically on the RAs proposal for the appropriate WACC. PPB agreed with the RAs proposal to continue to use blended WACCs of Eirgrid and SONI. Endesa Ireland does not consider that it is appropriate to utilise different WACC rates for the all-island component of EirGrid's businesses in Ireland and Northern Ireland, as they propose that there is no difference in the business risk for these two activities [of Eirgrid]. Therefore, Endesa Ireland proposes that the WACC to be utilised for SEMO is 5.63% giving €1,797,968. In its section entitled "Rate of return regulation", SEMO argues that due to the evolution of real interest rates in periods of deflation the RAs should either revise the WACC upwards or adjust the basis on which inflation indexation is applied to the RAB. More particularly, SEMO argues that: a) The application of deflation to the RAB results in an adjustment akin to a write down in value. b) The real cost of debt on which the WACC is based, combined with indexation of the RAB to negative inflation, effectively assumes that SEMO is able to source capital at either zero or negative nominal interest rates. SEMO states that there is a floor of zero on nominal interest rates, and so real rates rise in periods of deflation.	Notwithstanding Endesa's assertion that there is at present no difference in the risk between [Eirgrid's] two TSO activities in Ireland and NI, the two companies do at present have different WACC allowances. The SEM Committee has therefore decided to continue to apply the blended rate of 5.8%. The ongoing appropriateness of the individual WACCs will be reviewed as part of the Price Controls for Eirgrid and SONI during the coming year. It is expected that the use of a blended rate will continue to be appropriate (while it is acknowledged that the WACC's may converge or become identical). Regarding SEMO's further arguments on this issue, it is the view of the SEM Committee that these do not stand up to scrutiny and can be rejected. The argument that the application of deflation to the RAB results in a write-down in value is incorrect as the value of the RAB is unchanged in real terms. The second argument about nominal interest rates could have validity in some contexts, but does not apply to the specific proposals put forward by the RAs. It is true that there is a floor of zero on nominal interest rates, since holding cash implicitly yields nominal interest of 0 per cent and hence there is no incentive for anyone to hold assets that yield a lower nominal return than they could get from holding cash. It is also true that in periods of significant deflation this can lead to higher real interest rates. However, the effect of deflation on real interest rates identified by SEMO does not apply in all periods of deflation. When the rate of deflation is less than the real interest rate the nominal interest rate can adjust to take account of deflation without falling to the floor of zero. A further reason for rejecting SEMO's suggestion of an increase in the WACC is that, since the SEM Committee has decided to pursue a one-year price control based on rate of return regulation, this affords SEMO greater protection from risk as compared to its parent companies. Therefore the decision of the SEM Committee, using the updated calculations with the mid-year tariff approach, is to allow a WACC of €1,915,703.

PROPOSAL 10 DEPRECIATION

MP RESPONDING	PROPOSAL	SEM Committee Response
PPB Endesa	Two respondees, PPB and Endesa, commented specifically on the RAs proposal for depreciation. Both agreed with it.	Given the responses received the SEM Committee has decided to allow SEMO's proposed depreciation of €11,494,930.

PROPOSAL 11 MO AND IMPERFECTION CHARGES

MP RESPONDING	PROPOSAL	SEM Committee Response
Viridian PPB Endesa NIEES	Three participants, Viridien, PPB and Endesa commented on the RAs proposals for MO and Imperfections charges. All three respondees agree with the RAs proposal that €106,311,652M to be recovered via tariffs for dispatch balancing costs. (This is a cost pass-through item for SEMO and tariffs are adjusted via a k-factor year on year to correct for any under or over-recovery.) Viridien propose a fixed exchange rate for market operator and imperfections charges akin to the capacity payment mechanism: - the existing methodology means that Northern Ireland suppliers and customers must deal with fluctuating exchange rates to cover market operator charges and imperfections charges denominated in Euros. They state that a revised methodology fixing the exchange rate would provide greater certainty to customers and would eliminate competitive and jurisdictional distortions. Any surplus or deficit relative to outturn rates could be dealt with through the k-factor. As regards the proposed introduction of a new charge to recover Make Whole Payment costs, PPB and Viridien both disagree with this as they state that it may require additional investment or be more costly to administer for participants to make amendments to their current systems, to account for a new line item appearing on an existing invoice or to process a new invoice. PPB proposes that the Make Whole Payment costs be included within the Dispatch Balancing Costs. Viridien suggest that this cost would be more efficiently recovered through the imperfections charge but only if the Make Whole Payment cost continues to be reported separately in the interests of transparency. The state that it is unclear how Make Whole Payments have been incurred and why they are to be recovered as proposed in the consultation paper. VP&E understand from the Trading & Settlement Code that Make Whole Payments should be reflected in SMP and ask why this not the case. They state that they would appreciate further clarity on this point and ongoing transparency in how Make Whole Payments are incurred and that it would be useful to provide examples by way of explanation. NIEES expressed disappointment that, given the timing of the paper, the value of the proposed Variable Market Operator Charge was omitted as it is required for the retail tariff setting process.	Given the responses received the SEM Committee has decided to allow the recovery, via the Imperfections tariff, of €106,311,652M for dispatch balancing costs. The proposal for a fixed exchange rate akin to the approach used in the capacity payment mechanism will be examined for the next Price Control period. Under paragraph 4.139 of the T&SC "The purpose of Make Whole Payments is to make up any difference between the total Energy Payments to a Generator Unit in a Billing Period, and the Schedule Production Cost within that Billing Period (where the difference is arithmetically positive calculated over the Billing Period) as set out algebraically [in the TSC]." Regarding NIEES's comment on the omission of a value for VMOC, given that many of the inputs to this figure were themselves the subject of this consultation, it was felt that it could be premature and misleading to issue an estimate any earlier

PROPOSAL 12 AND 13 ACCESSION AND PARTICIPATION FEES

MP RESPONDING	PROPOSAL	SEM Committee Response
PPB Endesa SEMO	Two respondees, PPB and Endesa, commented specifically on the RAs proposal regarding accession and participation fees. PPB agrees with the RAs proposal. Endesa point out that under the T&SC SEMO is only permitted to recover the costs incurred in assessing the application. As the RAs have shown that these costs should be reviewed, Endesa Ireland considers that they are due a refund In its response, SEMO states that the income associated with accession and participation fees is currently returned to the consumer, and proposes that it should be allowed to retain these fees to cover the costs of carrying out these activities. The RAs understand that when SEMO refers to the income from these fees being returned to customers it means through the k-factor,	Regarding the point made by Endesa , the current level of accession and participation fees was approved by the RAs as part of the last revenue review. Therefore Endesa was subject to the fees prevalent at the time of its entrance in the market. For that reason the RAs confirm that no refund should apply. Regarding SEMO's proposal that these costs should be funded directly through retension of the accession and participation fees, the SEMC believes that this has some merit in that the amount of funding SEMO receives would vary in line with the volume of registrations and hence the resources required. However as it stands this would represent double-counting since it has already been allowed for via the payroll. In the absence of a strong case to support a departure from the current treatment, the SEMC has decided to keep the actual funding mechanism (through the payroll allowance and returned to market participants through k factor). The accession fee will be €1,115 and the participation fee will be €2,800.

PROPOSAL 13 KPIS/INCENTIVISATION

MP RESPONDING	PROPOSAL	SEM Committee Response

MP RESPONDING	PROPOSAL	SEM Committee Response
Viridian PPB NIEES Endesa ESB	Five respondees commented on the RAs proposals for KPI based incentivisation. These were Viridien, PPB, NIEES, Endesa and ESB.As regards the choice of metrics Viridien support the use of KPIs which reflect accuracy of market data as well as timeliness. It states that the KPIs suggested in the consultation paper focus exclusively on the timely publication of market data. VP&E would also like to see the accuracy of market data incentivised to some extent. For example it might be useful to have KPIs for resettlement caused by market operator errors. PPB believes that the publication of the statements and invoices should be grouped together under one KPI and that other potential KPIs would be accuracy of data published (i.e. there should be no need to republish data unless erroneous data was provided to SEMO by data providers) and response to participant queries (a response from the help desk issuing a query number should not be considered as a metric for this KPI. Simple queries should receive a response within 2 days while more complex queries could have a target of 2 weeks). ESB suggests some additional KPI metrics that should also be included. These are • Indicative Settlement reports; and • Initial Settlement reports; As regards the relative weighting of the metrics the only respondee commenting specifically on this was NIEES who supported the RAs proposal to increase the weighting towards invoicing. As regards the level of the metrics the only comment was from ESB who proposed that the 90% target for invoicing should be increased. As regards the magnitude of the reward available the two respondees commenting on this, PPB and NIEES, both supported the 2.5% of OPEX proposed. As regards whether the mechanism should be symmetrical i.e. include penalties as well as rewards as proposed by SEMO, or rewards only as proposed by the RAs, the only respondee commenting on this, Viridien, suggest that if the KPIs	A number of additional KPI's, including accuracy of information as well as timescales, have been suggested by respondents. The RAs acknowledge that these and others may have merit in a more fully developed approach to incentivistion and will consider in more detail as part of the next Price Control and will include a customer survey and other research as appropriate. In the mean time the SEM Committee will accept the KPIs proposed by SEMO. In terms of the weighting used, the SEM Committee believes that a heavier weight should be applied to the invoicing KPI. It is recognised that this is an area of improvement that will benefit all market participants. The SEM Committee has decided a weighting of 40% for invoicing and 20% for the other metrics. Regarding the KPI targets, the SEM Committee does not accept that it is appropriate to set a target for any KPI which is less than the current performance level. It has therefore set the lower limits on the Ex Ante and Ex Post Initial Pricing reports to 99%. The SEM Committee will closely monitor the KPIs records during the next price control and research will be carried out in order to determine if the initial set of KPIs are delivering the appropriated set of incentives.

MP RESPONDING	PROPOSAL	SEM Committee Response
	capture accuracy as well as timeliness (as suggested above) it then becomes more appropriate to use penalties as well as rewards in the incentive structure because penalties may have the potential to distort accuracy unless accuracy *per se* becomes a performance metric. Other comments regarding the use of a KPI based incentive scheme include • The first two weeks after a system release should not be excluded from the annual target. This will ensure importance is given to good system testing before moving a release to the production environment (PPB) • In terms of incentive mechanisms for SEMO, as a state-owned monopoly, it is not appropriate for SEMO to be a profit-making venture. However, SEMO staff should be incentivised to deliver projects on time and within budget and to meet the KPIs. SEMO should be asked to submit a proposal for such an incentive scheme (Endesa) In terms of incentive mechanisms for SEMO, Endesa Ireland considers that as a state-owned monopoly, it is not appropriate for SEMO to be a profit-making venture. However, SEMO staff should be incentivised to deliver projects on time and within budget and to meet the KPIs. Endesa Ireland considers that SEMO should be asked to submit a Proposal for such an incentive scheme.	

MP RESPONDING	PROPOSAL	SEM Committee Response
PPB **NIEES** **Endesa** **SEMO**	MAJOR MARKET CHANGE CAPEX PPB agrees with the RAs' proposal to set the incentive for major CAPEX projects to 10%. NIEES support this approach plus the limit of €500,000 for eligibility for this incentivisation. SEMO believe that the revised amount of 10% retained on CAPEX savings is too low and does not balance the risk of CAPEX overspend with no cost recovery, as proposed by the Regulators. It should be recognised that any overspend of the regulatory approved project budget carries an unacceptable risk which SEMO should not be exposed to. SEMO are seeking assurance that any unforeseen or exceptional circumstance that is highlighted to the Regulators should be eligible for cost recovery through the appropriate mechanism.	The SEM Committee has decided to keep the CAPEX incentive at 10%. Unforeseen and unavoidable increases in major market change projects will be reviewed and if appropriate approved by the RAs.

OTHER PROPOSALS FROM RESPONDEES

MP RESPONDING	PROPOSAL	SEM Committee Response
Viridien Endesa	Other proposals contained in the responses (although not necessarily within the scope of this decision paper) include: • The publication of SEMOs initial revenue submission (Endesa) • TSO incentivisation to minimise dispatch balancing costs and make whole payments (Viridien and Endesa) • Eventual unbundling of the market operator from the TSOs and in the interim increased independence (Endesa) • Better demand forecasting by SEMO including the use of supplier forecasts (Endesa) • Promotion of demand response (Endesa)	The SEM Committee will publish SEMO's original revenue proposal along with the responses to the consultation and this decision paper. It should be noted however that this was submitted in the context of a three year price control. TSO incentivisation on dispatch balancing costs and other areas of performance is outside the scope of this decision paper. Nonetheless the SEM Committee have already stated their intent to investigate options as part of the forthcoming price controls for both Eirgrid and SONI. At present the SEM Committee has no specific plans regarding greater independence or eventual unbundling of SEMO, however all such options will be kept under review over the coming years as the market develops. In the meantime the SEM Committee welcomes proposal from SEMo and from market participants for improvements in areas such as demand forecasting. The promotion of demand response is a stated strategic objective of the SEM Committee which will be canvassing the proposals of market participants over the coming months.