Single Electricity Market

SEMO Revenue and Tariffs

&

TSO Dispatch Balancing Costs

for

October 2008 – September 2009

Decision Paper

V1.0

01 September 2008

SEM-08-093

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 from market participants its operational costs, capital costs, Imperfection costs associated with the balancing of the transmission systems (including constraints costs associated with generator units which are being tested).

This paper by the Regulatory Authorities includes decisions by the SEM Committee[1] on the form of SEMO regulation, the allowed revenue for SEMO, the cost of imperfections, 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 2008 to 30 September 2009. 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 principal).

In view of the start-up nature of SEMO and the associated uncertainty involved in estimating its costs, 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.

SEMO Allowed Revenue

Applying the Regulatory Authorities' inflation assumptions (see section 7.8), the total revenue sought by SEMO in End of March 2009 prices to cover its costs for the tariff period is €24.15 Million.

[1] The SEM Committee in Ireland and Northern Ireland was established by virtue of section 8A of the Electricity Regulation Act 1999 (the Act) and Article 6 (1) of the Electricity (Single Wholesale Market) (Northern Ireland) Order 2007 (the Order), respectively.

The primary function of the SEM Committee is the taking of any decision as to the exercise of a relevant function of the Commission for Energy Regulation (the Commission) or the Northern Ireland Authority for Utility Regulation (the Authority) in relation to a SEM matter on behalf of the Commission and the Authority by the SEM Committee as the case may be.

For the purposes of the Act and Order a matter is a SEM matter if the SEM Committee determines that the exercise of a relevant function of the Commission or Authority in relation to that matter materially affects, or is likely materially to affect, the Single Electricity Market.

The Regulatory Authorities have carried out an analysis of the various cost categories (as detailed in Section 7) and have decided on revenue for SEMO of €23.76 Million for this period. A comparison between the costs sought by SEMO and those decided by the Regulatory Authorities is shown below, in End of March 2009 prices.

Cost Area	SEMO Submission	SEM Committee Decision
Total Operating Cost	9,317,238	9,179,862
Discretionary Fund	262,166	-
Interconnector Administrator	318,582	318,582
Depreciation	11,746,323	11,746,323
WACC	2,510,386	2,510,386
Total Revenue	**24,154,694**	**23,755,152**

Table 1 – Summary of SEMO Allowed Revenue

SEMO Charges

The Regulatory Authorities have suggested the following indicative tariffs to recover the allowed SEMO revenue:

- Accession fee = €1,500
- Participation fee = €3,500
- Market Operator Fixed charge for Generator Units = €127 per MW
- Market Operator Fixed charge for Supplier Units = €392 per Unit
- Market Operator Variable charge for Supplier Units = €0.597 per MWh

Imperfections Charge

The Dispatch Balancing Costs (which include; constraints, uninstructed imbalances and genset-under-test costs), as determined by the TSOs is €122.04 Million in End of March 2009 prices. In addition, the cost of Energy Imbalances is €1.99 Million in End of March 2009 prices. The Regulatory Authorities have also included an allocation of €0.52 Million for Make Whole Payments. These three costs combine to give a total imperfection cost of €124.56. As a result, there will be an Imperfections charge to suppliers of €3.296 per MWh.

Generator-Under-Test Tariffs

For the original price control (November 2007 – September 2008), SEMO presented proposals for the recovery of costs associated with genset tests. However, following a proposal by the TSOs, the Regulatory Authorities have agreed that genset test costs will be dealt with separately as part of the ancillary services consultation.

Comparison with Initial Revenue & Tariff Period

In order to allow a comparison of the revenue approved for the initial tariff period and the new tariff period, a table in Appendix 2 is included.

2 TABLE OF CONTENTS

3 INTRODUCTION

3.1 THE SINGLE ELECTRICITY MARKET

The Northern Ireland and Ireland governments, the Northern Ireland Authority for Utility Regulation and the Commission for Energy Regulation (together "the Regulatory Authorities") and industry have worked together to create an All-Island Energy Market as outlined in the All-Island energy market development framework paper.[2]

The first step in this process, 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 market scheduled 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).

3.2 ROLE OF SEMO

The development of the SEM led to the requirement for a Single Electricity Market Operator (SEMO) to administer the market. With this in mind the Regulatory Authorities approved the plans of EirGrid and SONI, the transmission system operators for 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.

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] 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

3.3 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 SEM tariffs and fees, which are levied on market participants. To facilitate this recovery of costs the Market Operator Licence (Annex 1) requires SEMO to submit proposals on its allowed revenue and the charges required to recover this revenue to the Regulatory Authorities. 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 2008 i.e. it covers an 11 month period from 1 November 2007 to 30 September 2008. Therefore the revenue and tariffs need to be determined for the next tariff period.

3.4 IMPERFECTIONS & DISPATCH BALANCING COSTS

In addition to SEMO's operational costs, the Transmission System Operators (TSOs), EirGrid and SONI, submitted a paper to the Regulatory Authorities on 17 April 2008 detailing the costs relating to Dispatch Balancing Costs. Dispatch Balancing Cost is a TSO-defined term and refers to the sum of Constraint Payments, Uninstructed Imbalance Payments and Generator Testing Charges. The details relating to these are covered in Section 8 of this Decision Paper.

3.5 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[3] on the basis of that review on 24th June 2008, 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.

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

- Airtricity

[3] 'SEMO Revenue and Tariffs & TSO Dispatch Balancing Costs for October 2008 – September 2009 Consultation Paper' - SEM – 08 - 079

- ESBI
- ESB PG
- NIE Energy
- SEMO
- Synergen

3.6 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[2] 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.

3.7 STRUCTURE OF THE PAPER

This paper is structured as follows:

Section 3 outlines the background to the SEM, the role of SEMO within the market and the process behind the approval of SEMO's allowed revenue.

Section 4 outlines the regulatory principles that will be adhered to during the decision making process.

Section 5 covers the length of the new tariff period.

Section 6 outlines the form of regulation for SEMO.

Section 7 covers SEMO's allowed revenue, including operating costs, depreciation, and the Weighted Average Cost of Capital (WACC).

Section 8 outlines Imperfection Charges and details from the TSO in relation to Dispatch Balancing Costs, which covers the net cost of constraints and uninstructed imbalances. In addition, decisions on the process to be used for the estimation of generator-under-test tariffs are also briefly discussed.

For completion and consistency, the energy imbalances and make whole payments are also discussed in Section 8

Section 9 covers the form and magnitude of SEMO and market related charges.

Appendix 1 provides the energy inputs used to determine the calculation of tariffs.

4 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 which are unclear will cause disputes which 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 which 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.

5 LENGTH OF PRICE CONTROL

5.1 OVERVIEW OF LENGTH OF PRICE CONTROL

The SEM is less than a year old and as such it is recognised that both the SEMO organisation and the associated costs are still bedding down. While the actual costs to date can be used as a gauge of the costs going forward there is still insufficient historic information to carry out a detailed cost analysis that can be relied upon for future determination of revenues.

The consultation paper proposed that the new SEMO tariff period will run for a one year period from 1st October 2008 to 30th September 2009.

It should be noted that throughout this document the above timeframe will be referred to as *'the new tariff period'.*

5.2 CONSULTATION RESPONSES ON LENGTH OF PRICE CONTROL

One respondent considered that the proposed length of the next tariff period was a sensible and pragmatic choice, given the need to manage the risk associated with under or over recovery and the formative nature of the market. This respondent also assumed that the recent announcement regarding PES tariff timetable in Ireland would not affect the SEMO tariff period.

However another respondent noted that the SEMO tariff timetable (along with that of directed contracts, non-directed contracts, market parameters and operator charges) was based on alignment with retail tariff periods. This respondent suggested that with the decision of the CER to abandon the retail tariff adjustment timetable for 2008 (and hence to not allow full cost recovery from October 2008), that the Regulatory Authorities should adopt a new set of tariffs from 1 January, 2009, in order to avoid further competitive distortion in the market.

5.3 DECISION ON LENGTH OF PRICE CONTROL

One reason for the original tariff period was to align with the retail supply tariff periods. For the new tariff period it is understood that this alignment remains so far as the Northern Ireland tariffs are concerned and, indeed, for other contracts in the market.

Furthermore it seems reasonable to establish a new set of tariffs for SEMO for the proposed period, given that a new set of assumptions has been presented, in terms of the underlying costs to be recovered. This is in keeping with the decision paper published by CER on the Retail Tariffs[4]. On the basis of the above, it has been decided that the proposed term for the next tariff period appears to be reasonable.

---

[4] Decisions on Electricity Retail Tariff Inputs for 2008/2009 - CER/08/136

Decision 1

The SEM Committee has decided that the new SEMO tariff period will run for a one year period from:

1st October 2008 to 30th September 2009

This is in agreement with the regulatory principles outlined in Section 4 and the benefits of a relatively short new tariff period as outlined above.

6 FORM OF REGULATION

6.1 OVERVIEW OF FORM OF REGULATION

The consultation paper proposed that based on the short time frame for the new price control, it appears appropriate to keep the current rate of return regulation for the new price control period. This will ensure stability and predictability in the new market. For clarity the following was proposed:

- SEMO will be subject to rate-of-return regulation (that is, it will receive a rate-of-return on its asset base).
- For the energy and capacity cash-flows, SEMO is not a principal (i.e. is not a counter-party to the transactions), therefore these will be regarded as a cost pass-through.
- For the Imperfections Charge (Dispatch Balancing Costs + Energy Imbalance + Make Whole Payments), these will be regarded as a cost pass-through.

The consultation paper noted that all SEMO costs which are allowed for the new tariff period, including capital-related costs, will be subject to an *ex-post* review and determination by the Regulatory Authorities. This determination of efficiently incurred costs may result in an over or under-recovery of revenue being fed through to the subsequent tariff period(s).

6.2 CONSULTATION RESPONSES ON FORM OF REGULATION

One respondent believed that the proposed form of regulation is sensible and pragmatic, but suggested that, in the longer term the regulation should be based on some form of incentive arrangement, both for SEMO operating costs and for Imperfections, as SEMO is well placed to minimise both these costs.

Another respondent suggested that for future years SEMO costs should be compared to at least one comparable market operator function, suitably normalised, such as the BETTA market operator; ELEXON, to provide evidence of value for money. For the proposed tariff this respondent noted that the value was half that of ELEXON, which it thought might be considered surprising, given the order of magnitude difference between the two market functions. This respondent also suggested that there should be some form of incentive on TSO costs to encourage a reduction in dispatch and balancing costs.

A third respondent raised their concerns in relation to the introduction of incentive based rewards. They believe that a financial incentive would provide a strong impetus to continually improve operational performance. They encouraged the Regulatory Authorities to adopt such measures for the 2009-2010 period onwards and bring forward specific proposals at this stage next year when any bedding down issues will have been worked through.

In addition, this respondent highlighted that the SEMO charges cannot be a “pass through” as the charges are never incurred by the SEMO as it is not a party to the transactions under the T&SC. They suggest that the Regulatory Authorities and SEMO utilise a more accurate description of the transaction.

SEMO noted in its response to the consultation, that the consultation decision will set out a revenue amount which SEMO will utilise to run its business including a return on the RAB and cost pass-though for energy, capacity and imperfections. However, SEMO raised a concern regarding the statement in the consultation document that the ex-post review will comprise a determination of efficiently incurred costs, which may result in an over or under recovery being fed through to the subsequent tariff period(s).

SEMO believes that the ex-post review should not result in a disallowance of costs that have been incurred in operating its business up to the level of the regulatory determination on the revenue amount and that any additional amounts would be subject to regulatory approval before they are incurred. SEMO asks the Regulatory Authorities to consider that:

- The ex-post review relates to all SEMO costs;
- There are regulatory requirements to ensure that licence holders can finance their activities; and
- The efficient operation of the market is a matter that is covered in the MO licence.

6.3 DECISION ON FORM OF REGULATION

In so far as incentive arrangements are concerned, the Regulatory Authorities continue to consider incentive arrangements for SEMO (in respect of its costs and performance). As stated in the consultation document, it is the Regulatory Authorities' intention to use, among other things, the various reports currently published by SEMO to build up information on a number of areas for setting Key Performance Indicators. Some of these may be used as a basis for incentive arrangements in future price control periods.

The Regulatory Authorities judge that, although there may be some value in carrying out comparisons with other market operators, the complexity of suitably normalising their costs is such as to limit the value of a 'benchmarking' approach for providing an incentive to SEMO. Prior analysis of markets in GB, Ontario, Italy, Iberia, New Zealand, Australia, Pennsylvania New Jersey and Maryland and Nordic Countries provided little scope for direct comparison. This particularly applied in the SEM start up scenario. A 'benchmarking' approach may be considered in future tariff periods as the SEMO organisation and cost structure matures.

The Regulatory Authorities also judge that it is the TSOs rather than SEMO that have some ability to control imperfections costs and so are considering what incentive arrangements might be placed on the TSOs in order to optimise these costs.

Hence the form of regulation is appropriate recognising that the Regulatory Authorities will continue to appraise various forms of incentive scheme both for SEMO costs and performance and for imperfections for future tariffs.

In so far as the ex post review is concerned, the Regulatory Authorities intend to review all relevant SEMO costs and will agree an appropriate reconciliation for over or under recovery and will do so in a manner that is consistent with their statutory duties. The Regulatory Authorities will discuss the context, methodology and timing of the ex-post review with SEMO prior to carrying it out.

Finally, the Regulatory Authorities recognise that SEMO is not a counter-party to the energy and capacity transactions under the TSC and have used the term 'cost pass-through' as a useful shorthand to describe how these costs are handled by SEMO.

DECISION 2

The Regulatory Authorities' decision is that for the new tariff period SEMO will be subject to rate-of-return regulation (that is, it will receive a rate-of-return on its asset base), with the energy and capacity cash-flows being regarded as a cost-pass-through. The Imperfections Charges (Dispatch Balancing Costs + Energy Imbalance + Make Whole Payments) will also be regarded as cost pass-through.

All SEMO costs will be subject to an ex-post review and determination by the Regulatory Authorities. This determination of efficiently incurred costs may result in an over or under-recovery of revenue being fed through to the subsequent tariff period(s).

6.4 K FACTOR

6.4.1 OVERVIEW OF K FACTOR

As detailed in the consultation paper a 'k-factor' is used to accommodate any over or under recovery of funds from a previous revenue allowance. Such a reconciliation of revenue should take account, not just of overall income as against outgoings, but should also take account of any interest earned or payable arising from working capital provisions.

The Regulatory Authorities intends to review the final outturn costs for the current tariff period (1 November 2007 to 30 September 2008) once these figures are available. The Regulatory Authorities assumed that these figures would be available in October 2008.

Following analysis and any necessary approval of these figures a k-factor will be applied to the revenue allowance for the tariff period beginning at 1st October 2009. Accordingly, there will be no k-factor available for application to the new tariff period. For the avoidance of doubt, the k-factor will account for both SEMO costs and Imperfection cost variances.

6.4.2 CONSULTATION RESPONSES &REGULATORY AUTHORITIES COMMENTS ON K FACTOR

SEMO noted the Regulatory Authorities expectation that figures will be available for assessing the k-factor in October 2008. SEMO has not yet agreed a timetable for the ex post review and suggests that appropriate data will not be available before November 2008. SEMO suggests that discussions are held to agree an appropriate date for this review.

In so far as the timetable for the ex post review is concerned the October date was included as a reasonable expectation by the Regulatory Authorities in the absence of any submission by SEMO. The Regulatory Authorities will discuss the context, methodology and timing of the ex-post review with SEMO in the near future.

7 DETERMINATION OF ALLOWABLE REVENUE FOR SEMO

This section details the SEM Committee's decisions on SEMO's allowed revenue, and covers the operating costs of SEMO during the new 12 month tariff period, the capital costs and the Weighted Average Cost of Capital (WACC) that is to be used as remuneration for the parent companies. The costs/revenues are shown in detail from Section 7.1 below and are summarised in Section 7.8.

7.1 OPERATING COSTS

Operating expenditure covers costs to be incurred by SEMO from 1st October 2008 to 30th September 2009. The figures provided by SEMO in their final submission and the decisions of the Regulatory Authorities are detailed in the following sections. Unless otherwise stated, the costs in section 7 are in mid-2008 terms.

SEMO remarked that the Regulatory Authorities had presented costs in both mid-2008 and in End of March 2009 money and asked that a more consistent approach, such as quoting in mid-2008 terms be adopted for the decision paper. This remark also applies to other costs quoted in the consultation.

The Regulatory Authorities opinion is that any particular cost is clearly identified as being in mid-2008, or in End of March 2009 terms and that there is no inconsistency in the presentation of costs.

7.1.1 PAYROLL

7.1.1.1 OVERVIEW OF PAYROLL

SEMO'S Payroll costs are to cover all staff costs, including salaries, bonuses, employer's PRSI/National Insurance, employer's pension contribution, overtime, on call/shift, cars and other benefits.

The organisation chart provided in the SEMO submission is detailed below. This was the structure as of the end of February 2008.

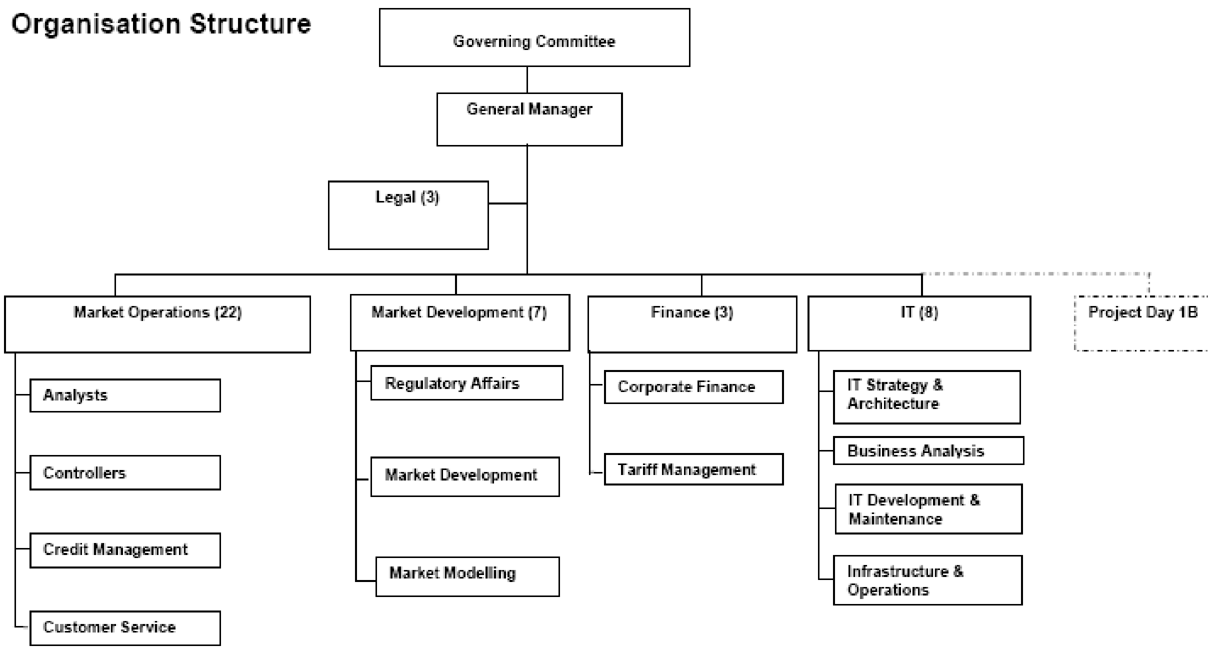

Figure 1: SEMO Organisation Chart – end February 2008

For the current tariff period, the approved headcount was set at 48 FTEs, with an average cost of €80k/year, per staff member, based on mid 2007 prices. The mid 2008 average payroll was estimated to be €83K using the inflation assumptions defined in the Decision Paper for the initial SEMO revenue and tariffs period.

Based on the actual costs for the first 4 months of the market, the average staff cost appears to be very close to the revenue allowance of €80k per annum.

The current staff complement (as of the end of February 2008) amounts to 44 FTEs, with one further position (Regulatory Affairs) being recruited for since then.

In the SEMO submission, the following areas have been suggested as possible areas for additional staff.

a. The work of the TSC secretariat is considerably more than could have been anticipated in the original revenue submission, SEMO has identified that further resources will be required to fully conduct the secretariat for the TSC. While Market Development's obligations under the TSC to manage market change are currently being met, the large number of TSC modifications and unforeseen number of emergency meetings have imposed a heavy workload on the team members managing market change and supporting the modifications committee including Supporting the Modifications Committee and Publishing of Market Information.
b. With additional Settlement at M+4 just completed and M+13 yet to be conducted, there may be a requirement for additional resources.

SEMO's final submission on 2 May 2008 requested funding for 48 members of staff. They have requested costs for payroll of €4,032K which equates to an average payroll cost of €84K.

7.1.1.2 CONSULTATION RESPONSES ON PAYROLL

One respondent noted that SEMO's level of operating costs, in particular Payroll costs, was somewhat in excess of their own costs, with similar staffing levels.

Two respondents commented on the underlying activities that relating to headcount and payroll:

- One respondent suggested that there are continuing delays to the publication of reports, with a risk of further deterioration as the M+4 and M+13 and ad-hoc settlement runs occur and that a more extensive test environment is provided for. The respondent expressed concern that these issues had not been referred to in the consultation and that resources for dealing with these issues should be accommodated in the tariffs.
- Another respondent noted its understanding that SEMO is advanced in its thoughts regarding the establishment of the SEMO Design Authority to facilitate the establishment and future change to an industry baseline for the central market systems. The respondent considered that it should be ensured that the SEMO resource levels are sufficient to accommodate this initiative.

7.1.1.3 DECISION ON PAYROLL

The analysis undertaken by the Regulatory Authorities prior to the consultation confirmed that the average staff cost for SEMO was in line with that assumed for the revenue submission. As for the scope of SEMO's operational activities, the SEMO revenue submission did not provide information on individual activities, other than those detailed in the consultation document. It has been assumed that SEMO has taken due account of likely activities for the tariff period in question. SEMO has indicated a requirement for additional staff, beyond that currently in place and provision has been made for this in their revenue requirement.

The Regulatory Authorities met with SEMO to discuss the issues raised in the responses to the consultation paper as described above. The Regulatory Authorities requested clarification regarding the recruitment of new staff. SEMO highlighted that they will be capped at 44 staff based on the Payroll allowance in the consultation paper. They stated that they may submit a business case for additional resources to the Regulatory Authorities at a later date.

Based on the discussions with SEMO, the Regulatory Authorities have decided to allow the requested allocation for Payroll as detailed in the SEMO submission. This results in a total cost of €4.032 Million for Payroll in the new tariff period.

The Regulatory Authorities also have decided that a cap is not put on the headcount and SEMO can employ more than 48 resources provided that they remain within the proposed allowed revenue.

DECISION 3

It is decided that for the new tariff period the allowed revenue for Payroll is **€4.032 Million**

This is based on the following underlying assumptions:

- SEMO to be allocated a headcount of **48**
- The average payroll cost per head is **€84,000**

7.1.2 IT & TELECOMMUNICATIONS

7.1.2.1 OVERVIEW OF 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 & Telecommunications. A breakdown of the proposed submission from SEMO is as follows:

Area of Support	Cost (€)
ABB system support:	400,000
Warrant Support & Maintenance: Market Systems:	675,000
Warrant Support & Maintenance: Corporate Systems:	400,000
Off site support:	200,000
Other system maintenance:	282,000
Total Support	**1,957,000**
Telecoms Costs	**311,000**
Total IT & Communication Costs	**2,268,000**

Table 2: IT & Telecommunications Submission proposed by SEMO

One point of note is the requirement to extend the ABB system support. This is additional support required to assist SEMO while the internal staff continue their familiarisation of the central market systems. SEMO states that due to the difficulty in recruitment of suitable resources, it is anticipated that these costs may still be required in the subsequent tariff period. For the new tariff period, SEMO are proposing €400k as a one off cost.

The other cost areas in the table above are described briefly below:

- **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 Supportworks.

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

It should be noted that the costs associated with the SEMO Help desk are included in the above submission. These costs cover the cost of phone lines and software systems (Support Works) and are not significant.

7.1.2.2 CONSULTATION RESPONSES ON IT & TELECOMMUNICATIONS

One respondent raised a concern about the extent of a testing environment for market participants to test their system interactions with the SEMO systems. They feel it is critical that all participants have a means of full regression testing of their systems and the interactions with the SEMO systems in full before any significant software releases are considered.

7.1.2.3 DECISION ON IT & TELECOMMUNICATIONS

The IT Support costs are regarded as high; however this is an area that is critical to the market. While the Regulatory Authorities are disappointed that the ABB System support needs to be extended, in the interests of ensuring that the needs of market participants are met, it is decided that the figures submitted by SEMO are included in the revenue for the new tariff period.

In relation to the testing environments, it is the understanding of the Regulatory Authorities that the testing environments that were available for Go Live will still be available for future software releases. The Regulatory Authorities suggest that any specific concerns could be raised with SEMO via the Project Management Forum for the Day 1+ Program.

DECISION 4

It is decided that for the new tariff period the allowed revenue for IT & Telecommunications is **€2,268M.**

7.1.3 FACILITIES

7.1.3.1 OVERVIEW OF FACILITIES

SEMO has office space in both jurisdictions. 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.

SEMO have been in recent discussions with EirGrid and CER in relation to the costs associated with the EirGrid move to the Oval offices and the payment required from SEMO. The outcome of the discussions in relation to facilities is that there will be a pro rata apportionment to SEMO of an amount of €1.006M on an attributable headcount basis. The previous submission of €360K for SONI remains the same. The net impact of this is an increase in the required revenue for premises and facilities giving a total Facilities charge of €1.366M.

7.1.3.2 CONSULTATION RESPONSES ON FACILITIES

SEMO noted what appeared to be an error in the consultation paper. Section 8.3.3 suggested that the facilities allowance was proposed as €1,336k, rather than €1,366k, which is the figure that carries through to the total proposed amount.

Another respondent noted that SEMO’s level of operating costs, in particular Facilities costs, was somewhat in excess of their own costs, with similar staffing levels.

7.1.3.3 DECISION ON FACILITIES

The Regulatory Authorities acknowledge this error and clarify here that the value for facilities is €1,366k. There was a typographical error in the consultation paper.

The SEM Committee has decided that a value of €1.366 Million is used for the new tariff period.

DECISION 5

It is decided that for the new tariff period the allowed revenue for Facilities is **€1.366 Million.**

7.1.4 PROFESSIONAL FEES

7.1.4.1 OVERVIEW OF PROFESSIONAL FEES

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

- General consultant and contractor support
- Disputes and Modifications Committee support
- Regulatory and legal support
- Market audit
- Corporate audit
- Communications
- Recruitment

Each of these areas are discussed below, detailing the SEMO requested costs and the Regulatory Authorities decision on appropriate costs. The costs are summarised in Table 3.

In the majority of cases, no specific comments were received relating to Professional Fees. Where no comment or response has been received it has been assumed that this reflects general acceptance.

7.1.4.2 GENERAL CONSULTANT AND CONTRACTOR SUPPORT

SEMO have requested a tariff submission of €215K. SEMO provided the following rationale for this fund – *'Due to the difficulty in procuring suitable specialized personnel, particularly in the IT area, it is anticipated that SEMO will require consultancy and contracting assistance for a period of time which is longer than what was previously expected. '*

In the SEMO submission, it is stated that there will be a relatively small staff turnover, so any higher cost backfill requirement should be minimal. The Regulatory Authorities understand that there is currently a knowledge transfer program underway as part of the extended support contract from the Prime contractor. In addition, as detailed in the Market System Development Plan submission to the SEM Committee, SEMO have plans in place for knowledge transfer from the Client Side Advisors during the delivery of the Day 1+ program.

With the above initiatives in mind and in the light of actual costs to date, The SEM Committee has decided on a lower figure of **€192K** for General Consultant and Contractor support. It is recognised that it is difficult to predict where and when specialised skills will be required, but the Regulatory Authorities consider that the allowance is sufficient to meet the needs over the new tariff period. It is recognised that consultancy support may be needed on an ad-hoc basis, but any such requirement should reduce as permanent staff become more experienced.

7.1.4.3 DISPUTES AND TSC MODIFICATIONS COMMITTEE SUPPORT

There are two cost elements listed under this area covering the costs associated with the Disputes Resolution Board and the costs required to coordinate and run the TSC Modifications Committee.

In the SEMO submission, it is stated that the Regulatory Authorities have deemed all costs associated with the Dispute Resolution Board as pass-through (to be recovered ex post) and therefore no provision is sought. However for the new tariff period, the Regulatory Authorities suggested that a provision is made for the Disputes Resolution Board. To date there have been no disputes so it is difficult to quantify the level of costs that should be allocated. Therefore the Regulatory Authorities estimate a cost for the Disputes Resolution Board of €100K. This provision should provide not only for the cost of meetings and the expenses of the Board members but also for the cost of administering the dispute, carrying out any specialist investigations or data analysis, and the cost of specialist legal advice in anticipation of any meetings, as well as the costs of any potential appeal. This can, and will, be reviewed for subsequent tariff periods in the light of experience.

In relation to the costs for the TSC Modifications Committee support, the actual costs for the meetings to date were used as a basis for proposing the new allowance. Using the actual costs to date, the average cost per meeting may be taken as €1K. Assuming in the new tariff period, there will be in the region of 6 meetings and a similar number of working forums, the total meetings are estimated to be 12. As a result the suggested allowance in relation to TSC Modifications Committee Support is €12K.

In summary, The SEM Committee has decided that the costs to cover Disputes and TSC Modifications Committee support is **€112K.**

7.1.4.4 REGULATORY AND LEGAL SUPPORT

Based on the actual costs in the first four months, there has been a relatively low spend in this area. The Regulatory Authorities assume that the majority of legal issues are being dealt with by the 3 legal staff members, as depicted in SEMO's organisation chart (see Figure 1). However, it is recognised that specialised advice may be required from time to time.

With this in mind, The SEM Committee has decided that a figure of **€60K** will be allowed to cover the costs associated with Regulatory and Legal Support.

7.1.4.5 MARKET AUDITOR

The Regulatory Authorities have recently selected a vendor for completing the Market Audit. The agreement is in place for a 3 year period. As the scope for year 2 of the market audit has not been completed and is dependent on the outcome of the market audit in June/July 2008, the Regulatory Authorities included a proposal in the consultation paper that a larger cost of €260K is allocated in year 2, to cover any potential scope increase.

The SEM Committee has decided on an allowance of **€260K** for the market audit to be carried out in 2009. It should be noted that the TSC provides for SEMO to recover the costs of the Market Auditor (TSC v4.2 2.143).

7.1.4.6 CORPORATE AUDIT

SEMO provided details of the numerous audits they are subject to. As they have two parent companies they have an additional overhead in this area as they need to fulfil the audit requirements of both parent companies. SEMO have had four internal audits to date:

- Internal audit on payments and security policy
- Internal audit on management account and budgetary process
- Central market systems Navita & Pomax
- Quality and data feeds

There are more internal audits planned in Q4/2008.

In addition, SEMO has also gone through the EirGrid external audit and are currently going through the SONI external audit. They are expecting a VAT inspection from HRMC in UK and also from the Irish Revenue Commissioners. A security audit on building access and controls and personnel security has also been conducted and will continue into 2008/09.

One respondent commented on the issue of multiple audits potentially taking place for similar purposes and suggested that the Regulatory Authorities consider whether some consolidation of audit requirements can be achieved.

The possibility of consolidating audits may be a worthwhile consideration for future tariffs, although it is recognised that due to the contractual nature of SEMO, it will still require to be audited by the parent businesses, which may have different accounting policies. The Regulatory Authorities will discuss this issue with SEMO.

The SEM Committee has decided on an allowance of **€49K** to cover audit activity in the new tariff period.

7.1.4.7 COMMUNICATIONS

SEMO intends to provide external communications and advice to the public. A figure of €11k is estimated as appropriate to cover advertising, printing and publishing.

The Regulatory Authorities have no basis to determine whether the requested tariff submission is appropriate. To date there has been minimal spend in this area, although this may be due to other areas taking priority and the re-branding of SEMO taking place recently.

Based on the above and the relatively small size of this area, The SEM Committee has decided that the figure of **€11K** is included for the new tariff period.

7.1.4.8 RECRUITMENT

SEMO highlighted to the Regulatory Authorities that the main recruitment drive took place in advance of SEM Go Live and the costs in their submission are to cover normal staff turnover levels. SEMO expects relatively little staff turnover during this price control period, and have submitted a figure of €30K as being appropriate for external recruitment agencies plus advertising.

Based on the actual costs for the first 4 months, where there were minimal costs associated with recruitment. The Regulatory Authorities take note of SEMO's expected small turnover of staff and therefore have decided on a reduced cost of **€20K** to cover the recruitment of new staff and any staff turnover that may occur.

7.1.4.9 DECISION ON PROFESSIONAL FEES

The costs associated with Professional Fees, as discussed in the previous sections, are summarised in the table below. The submission from SEMO and the decision from the Regulatory Authorities are both shown to allow comparison.

Cost Area	**Final SEMO Submission (€)**	**SEM Committee Decision (€)**
Consultancy and Contractors	215,000	192,000
Committees	112,000	112,000
Regulatory Legal	60,000	60,000
Market Auditor	284,000	260,000
Audit	49,000	49,000
Communications	11,000	11,000
Recruitment	30,000	20,000
Total Professional Services Cost	761,000	704,000

Table 3: Professional Fees Submitted by SEMO and Comparison to Regulatory Authority Decision

DECISION 6

It is decided that for the new tariff period the allowed revenue for Professional Fees is **€704K.**

7.1.5 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. The costs associated with each of these areas are detailed below. SEMO have requested a tariff submission of €358K, as detailed in Table 4.

7.1.5.1 TRAVEL AND SUBSISTENCE

The SEMO submission stated that significant costs are expected, including those for user conferences and seminars (€227k). It is stated that the initial focus has been on delivery, but that going forward more conferences and user groups will be attended. This appears to be a reasonable assumption; however, the Regulatory Authorities consider that the requested tariff submission is too high. Based on the actual spend, the Regulatory Authorities estimate that a cost of €148k may be regarded as an appropriate provision.

The SEM Committee has decided on an allowance of **€148K** for Travel & Subsistence.

7.1.5.2 OFFICE SUPPLIES

In consideration of the branded stationery as part of the brand development of SEMO, a figure of **€24k** is deemed appropriate by SEMO. The SEM Committee has decided that this is a reasonable cost and should be included in the new tariffs.

7.1.5.3 BANK CHARGES

SEMO have a requested a tariff submission of €20K for bank charges based on the following assumptions:

- Bank charges are €5 /£3.50 per transaction.
- It is estimated that there are approximately 50 - 75 payment transactions per week.
- Therefore the Annual cost could be up to €5 x 75 x 52weeks = €19,500

The SEM Committee has decided that this is a reasonable cost and a provision for **€20K** should be included for the new tariff period.

7.1.5.4 STAFF TRAINING

In their revenue submission SEMO state that, due to the newness of SEMO and the intensity of work required by staff in reaching steady state, training and development has been sacrificed over the first six month period of SEM.

Staff development and competency is crucial to the development of the market and SEMO fully expect to use the allowance that is currently in place. A tariff submission of €87K was requested by SEMO.

The Regulatory Authorities agree that there was limited time for training at the start of the market and consider that investment in training will improve the quality of the service SEMO provides to market participants and will reduce the dependency on external support.

The Regulatory Authorities consider that the training allowance should be available to the full headcount proposed in this document (i.e. 48, as detailed in section 7.1.1.3, rather than for the current headcount assumed by SEMO). As a result, The SEM Committee has decided on an allowance of **€92K**.

7.1.5.5 DECISION ON GENERAL AND ADMINISTRATIVE COSTS

The costs associated with General and Administrative Costs, as discussed in the previous sections, are summarised in the table below. The submission from SEMO and the decision of the Regulatory Authorities are both shown to allow comparison.

Cost Area	**Final SEMO Submission**	**SEM Committee Decision**
Travel & Subsistence	227,000	148,000
Office Supplies	24,000	24,000
Bank charges	20,000	20,000
Training	87,000	92,000
Total General & Admin Costs	**358,000**	**284,000**

Table 4: General and Administrative Costs Submitted by SEMO and Comparison to Regulatory Authority Decision

DECISION 7

It is decided that for the new tariff period the allowed revenue for General and Administrative Costs be **€284K.**

7.1.6 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 €100k.

The SEM Committee has decided that the figure of **€100K** provided by SEMO is included in the new tariff period.

Inclusion of such a figure for the new tariff period is however without prejudice to any determination to be made by the Regulatory Authorities 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 Regulatory Authorities can only accept that SEMO have made an informed estimate.

The Regulatory Authorities 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.

DECISION 8

It is decided that for the new tariff period the allowed revenue for Corporate Services is **€100K**

7.1.7 SUMMARY OF OPERATING COSTS

The operating costs as discussed in section 7.1 are summarised in the table below.

Cost Area	**Final SEMO Submission**	**SEM Committee Decision**
Payroll	4,032,000	3,987,979
IT & Communications	2,268,000	2,268,000
Facilities	1,365,856	1,365,856
Professional Fees	761,000	704,000
General & Administrative	358,000	284,000
Corporate Services	100,000	100,000
Total Operating Costs	**8,884,856**	**8,709,836**

Table 5: Operational costs sought by SEMO and decided on by the Regulatory Authorities.

It should be noted that there is a comparison of the revenue approved for the initial tariff period and the new tariff period in Appendix 2.

7.2 REGULATED ASSET BASE (RAB)

7.2.1 STATUS OF SEMO'S REGULATED ASSET BASE

During Q1/2008, the Regulatory Authorities worked with EirGrid and SONI to determine the actual costs associated with the establishment of the SEM. The Shared costs of the SEM Establishment program make up the SEMO RAB. Following detailed analysis of the submission by the Regulatory Authorities, the SEM Committee approved the amounts in Table 6 below. The costs include Interest during construction and inflation.

Summary (000s)	**SEMO RAB (Nov 2007)**
Shared Costs for SEMO	47,802

Table 6: Value of SEMO RAB in November 2007

A brief description of the background to each of the areas making up the SEM Establishment program can be found in the Decision Paper for the initial SEMO revenue and tariffs period (section 6.2.2) and comprises EirGrid's and SONI's project implementation costs, SEMO establishment costs and the costs of market trials.

The full value of the SEMO RAB at Go Live (1 November 2007) was €47,802,291. This has been inflated to reflect the value in March 2008 prices resulting in a RAB of €48,847,238

The depreciation for the first 11 Months of the market, assuming 5 year straight line and inflation is €8,908,818. Therefore the value of RAB at the start of the new tariff period is: €48,847,238- €8,908,818= **€ 39,938,420.**

7.2.2 2008/09 CAPITAL EXPENDITURE

For any investment SEMO are required to present their expenditure plans to the Regulatory Authorities. This includes a requirement to prepare and maintain a Market System Development Plan (MSDP) which details the system development requirements for the following two years. The current MSDP covers the Day 1+ activities up to January 2009 and was approved by the SEM Committee.

As the Day 1+ project has already started, it is prudent to include its value in the SEMO RAB and apply the appropriate depreciation in the new tariff period. The SEM Committee approved a capital budget of €10,738,258 for the Day 1 + Project. This includes an allowance for Interest during construction, contingency and the costs of retaining key client side advisor resources during the consultation period.

In addition to the MSDP SEMO are also in the process of consulting on the enduring solution for the SEMO website. This is discussed in section 7.3.4.

7.3 DEPRECIATION

7.3.1 OVERVIEW OF METHOD AND TIMEFRAME FOR DEPRECIATION

As detailed in the consultation paper, SEMO assets, as detailed in their RAB, are treated using straight-line depreciation over a five-year period. Other projects such as the Day 1+ project which come into live operation during the 2008/09 tariff period will be depreciated on the same basis.

One point of consideration detailed in the consultation paper is that in line with the parent companies policies, the Regulatory Asset Base (RAB) for SEMO has been set using a replacement cost approach. The valuation of the RAB has been approximated by taking the historic (acquisition cost) value of the assets, revaluing them to nominal values using inflation, and depreciating using straight-line depreciation. It could be questioned that considering that the majority of SEMO's Assets are of an IT nature and have a relatively short useful life, a historical cost method of calculating the RAB could be implemented (i.e. without any inflation adjustment),, rather than using the replacement cost methodology.

7.3.2 CONSULTATION RESPONSES ON METHOD AND TIMEFRAME FOR DEPRECIATION

One respondent argued that SEMO asset expenditure is approved on a project-by-project basis, equipment renewal is fully reflected in future charges and the productive capacity of the SEMO enterprise does not need to be maintained. For these reasons, the respondent argued that inflating historic costs, to arrive at what the respondent described as a current cost write-down value of SEMO assets, imposed an unnecessary extra charge on customers.

In contrast, SEMO commented that a Historical Cost Approach would not provide for the recovery of capital expended in real purchasing power terms and that the most appropriate approach for determining the SEMO RAB is to use the book method and apply a real WACC, as proposed.

7.3.3 DECISION ON METHOD AND TIMEFRAME FOR DEPRECIATION

In so far as the treatment of the SEMO RAB is concerned, it is not clear that there is a compelling argument to change the treatment of assets for the new tariff period. However, the Regulatory Authorities may wish to consider how best to treat the RAB, in the light of any future policy as to what expenditure should be capitalised for future tariff purposes.

DECISION 9

It is decided that for the new tariff the Replacement Cost Approach is used for the valuation of the SEMO RAB

7.3.4 TREATMENT OF NEW CAPITAL INVESTMENT

As highlighted above actual project capital spend figures, such as those for Day 1+ and the SEMO Website will be submitted for approval separately. In relation to the website, SEMO's plans are as follows:

'Following on from the public discussion with Market Participants on the SEMO website, there will now follow, over the coming months, detailed requirements analysis with internal users, market participants and industry. An initial SEMO website presentation / consultation has been conducted from which it was considered that a further public consultation would be appropriate. SEMO intends to conduct this ahead of a full scoping exercise prior to proceeding to tender. The timescale is such that a detailed costing would not be available until the summer of 2008 with tender negotiations to follow. It is expected that the cost recovery approval from the Regulators will not be sought until autumn 2008.'

Cost recovery would be to the same time frame originally approved by the Regulatory Authorities. Interest during construction would continue to be applicable where EirGrid and SONI carry the cost of financing capital expenditure. The rates of Interest during construction to be applied will be based on the cost of debt element from the WACC calculations for the respective parent companies. This equates to a rate of 3.73% for EirGrid and a rate of 3.55% for SONI.

7.3.5 VALUE OF DEPRECIATION FOR NEW TARIFF PERIOD

The two key areas of capital expenditure are related to the SEM Establishment Costs and the Day 1+ Project.

The total value of the SEM implementation in March 2008 values (the SEM set-up costs, SEM establishment costs and the costs of the Market Trials) is €48,847,238. Assuming this will be depreciating over a five-year period on a straight–line, book value basis the depreciation for the new tariff period is €9,769,448.

Likewise the Day 1+ Project (€10,738,258) will use a five-year period straight–line depreciation. This project is due to be completed in January 2009 so it is assumed that depreciation will be applied from February to September 2009 (8 months inclusive). This results in a depreciation value of €1,431,768.

Therefore the total depreciation in the new tariff period is €11,201,215.

DECISION 10

It is decided that the depreciation to be charged in the new tariff period will be **€ 11,201,215.**

7.3.6 DISCRETIONARY FUND FOR SMALL CAPITAL PROJECTS

7.3.6.1 OVERVIEW OF DISCRETIONARY FUND FOR SMALL CAPITAL PROJECTS

During discussions with the Regulatory Authorities in early 2008, SEMO raised the proposal of having a discretionary fund available to allow them to spend on small capital projects without incurring delays in gaining regulatory approval before proceeding. SEMO requested a provision of €250,000.

In the consultation paper, the Regulatory Authorities proposed that no allocation is allowed in relation to the discretionary fund and that any capital expenditure required by SEMO is submitted to the Regulatory Authorities for consideration on a case by case basis.

7.3.6.2 CONSULTATION RESPONSES ON DISCRETIONARY FUND FOR SMALL CAPITAL PROJECTS

SEMO expressed disappointment that a discretionary fund for capital projects is not to be allowed. SEMO suggest that this constitutes a risk, in that there is a low probability, high impact situation where equipment fails and has an impact on real time operation and SEMO express the hope that the Regulatory Authorities will recognise this and agree to discuss a procedure to grant permission for expenditure in such circumstances.

7.3.6.3 DECISION ON DISCRETIONARY FUND FOR SMALL CAPITAL PROJECTS

The SEM Committee has decided that no allocation will be provided for the discretionary fund. The Regulatory Authorities acknowledge the risk highlighted by SEMO and will work with SEMO to ensure that any justified areas of spend are assessed and approval granted where applicable in an expedient manner. In so far as such costs relate to TSC modifications, these should be outlined in the relevant Final Recommendation Report of the Modifications Committee.

DECISION 11

It is decided that no discretionary fund will be allowed. SEMO are required to submit any requests for capital expenditure to the Regulatory Authorities for consideration on a case by case basis.

7.4 INTERCONNECTOR ADMINISTRATION

7.4.1 OVERVIEW OF INTERCONNECTOR ADMINISTRATION

A new area of cost is in relation to the role of Interconnector Administrator. SEMO, in association with SONI, have provided the following information:

Currently SONI acts as Interconnector Administrator (IA) on behalf of Moyle. There are discussions under way between SEMO and the System Operators on charges yet to be established that will be harmonised across the island. These are:

1. *Under section 7 of the TSC, SEMO as Market Operator have an obligation to calculate the Modified Interconnector User Nominations (MIUNs). This may be done contractually by the IA on behalf of SEMO.*
2. *SEMO and System Operators to discuss the "pass on" of general Interconnector Administration charges and differences in the UK and SEM Interconnector Error Account charges in order to ensure harmonisation of charges across the island.*

The TSO's have held joint discussions with SEMO and following completion of a number of actions, a report will be drafted for the SEM Governing Committee. It is likely that the report will recommend some changes to the TSC which will aim to socialise the administration, error account and energy transportation costs of Moyle (and any future East-West interconnector).

For budgetary purposes it would be prudent to allow a budget as follows:

- *£220k (sterling) for SEM vs. BETTA error account differences*
- *£20k (sterling) for annual admin & GB Use of System charges*

For transportation costs (essentially capacity) for SO trading, the cost will most likely be treated as a constraint, so there is no need to allow this cost in the SEMO price control. A likely timescale for all approvals including a SEM Modification would be November 2008.

7.4.2 DECISION ON INTERCONNECTOR ADMINISTRATION

In the absence of a full agreement, The SEM Committee has decided that the costs suggested by SEMO are included in the new tariff period. In order to convert the sterling figure above to Euro, an exchange rate of €0.79 has been assumed. This results in a cost of €304K.

These costs allowed will be subject to an *ex-post* review and determination by the Regulatory Authorities.

DECISION 12

It is decided that for the new tariff period the allowed revenue for Interconnector Administration is **€304K.**

7.5 OTHER COSTS

Although not specifically addressed in recent discussions with SEMO, the Regulatory Authorities consider that the decision relating to 'other costs', as defined in the Decision Paper for the initial SEMO revenue and tariffs period (Section 6.1.9) are applicable to the new tariff period.

DECISION 13

In the interests of clarity, The SEM Committee has decided that the following processes are maintained for the new tariff period:

- In relation to financing interest payments to generators for underpayments related to the settlement reallocation process, the Regulatory Authorities propose that the cost associated with this process will be reviewed *ex-post* with allowed costs feeding into the subsequent tariff period(s).
- In relation to costs incurred due to the VAT arrangements that are in place, the Regulatory Authorities propose that the costs associated with the VAT arrangements will be reviewed *ex-post*, with allowed costs feeding into the subsequent tariff period(s).

7.6 INTEREST PROVISIONS

7.6.1 OVERVIEW OF INTEREST PROVISIONS

In the Decision Paper for the initial SEMO revenue and tariffs period (Section 6.1.10), the Regulatory Authorities' decided that working capital provided by the parent companies should be treated as outlined below. This is consistent with that currently in place for working capital provided by the parent companies in carrying out their transmission system operator functions.

<u>Mechanism for Under or Over Recovery of Revenue relating to EirGrid:</u>

For EirGrid, the following approach has been used for determining the interest rate (I) that is applied to allowed under and over-recoveries of transmission revenue for the previous year (t-1), and has been in use by the Commission since 2002:

> I_{t-1} *is the mean of the twelve monthly average three month Euribor rate between April and March of the year t-1 (that is, April of year t-2 to March year t-1) and adjusted for the difference in the mean of the twelve point to point Euro zone harmonised index of consumer prices and the Irish harmonised index of consumer prices between April and March of the year t-1.*

<u>Mechanism for Under or Over Recovery of Revenue relating to SONI:</u>

For SONI the following interest rate is used, as defined in the SONI System Operator Licence (Annex 1):

The arithmetic mean of the daily base rates of Northern Bank Limited (or such other bank as the Authority shall specify from time to time) current from time to time during the period in respect of which the calculation falls to be made.

In the consultation paper, the Regulatory Authorities proposed that working capital provided by the parent companies to cover fluctuations during the tariff period, and 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 determined using the above methodology.

The current tariff period has the mechanism that working capital will be provided by the parent companies on a 3:1 basis, this means that the “Euribor rate” will be applied to three quarters, and the “Northern Bank Limited” rate will applied to one quarter, of the working capital provided. This reflects the cost of short-term financing required to provide SEMO’s working capital needs. It is assumed that this ratio still applies.

7.6.2 CONSULATION RESPONSES TO INTEREST PROVISIONS

SEMO suggested that the interest applied to working capital provided by the parent companies should differ from that associated with over and under recovery of revenue. SEMO noted that this is not currently accommodated, but suggested that it holds discussions with the Regulatory Authorities to develop an appropriate arrangement. SEMO also noted that this argument is pertinent to the working capital provisions associated with the Imperfections Charges.

7.6.3 DECISION ON INTEREST PROVISIONS

In so far as the application of interest is concerned, it is for SEMO to make representations in order to support their revenue requirements. It is unclear however why interest paid should be treated differently from interest received.

The Regulatory Authorities will work with SEMO to understand the impact of this area and possible solutions. However, it is decided that until such times, the above mechanism will be used.

DECISION 14

The SEM Committee has decided that the same process for interest provisions, as described above, is maintained for the new tariff period.

7.7 WEIGHTED AVERAGE COST OF CAPITAL (WACC)

7.7.1 OVERVIEW OF WACC

As detailed in the Decision Paper for the initial SEMO revenue and tariffs period (Section 6.1.10), the Regulatory Authorities agree that SEMO should be allowed to recover reasonably incurred capital costs, and that the recovery of these costs should include 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 the different risk levels between a Market Operator activity and a System Operator activity into account but provides an indication on the returns which 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 Regulatory Authorities 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 Regulatory Authorities may appropriately use a single risk factor.

7.7.2 DECISION ON WACC

Similar to the initial tariff period, and due to the relatively short tariff period, The SEM Committee has decided that the cost of capital for the parent companies be used for SEMO for the new tariff period. It is envisaged however, that the level of WACC that would be appropriate to SEMO will be fully reviewed and considered as part of the subsequent, perhaps longer period of price control.

This leads to a pre tax WACC for SEMO as defined in the table below. The blended rate is based on the assumption of a 3:1 ratio between the WACCs for EirGrid and SONI respectively.

WACC	**Split of RAB**	**WACC 08.09**
EirGrid	75%	5.63%[5]
SONI	25%	6.30%[6]
Blended Rate for SEMO WACC		**5.80%**

Table 7: Value of pre tax real WACC for SEMO

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

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

Using the updated capital costs as outlined in Section 7.2, and based on the 3:1 ratio by which EirGrid and SONI fund these costs, the proposed WACC results in a total figure:

WACC = €2,392,545

It should be noted that, while it is decided that the total WACC provided to the parent companies during the new tariff period be calculated on the basis of a 3:1 split of funding between EirGrid and SONI, this decision will not affect the calculation of the WACC in subsequent tariff periods.

DECISION 15

It is decided that for the new tariff period the allowed WACC be **€2,392,545.**

7.8 INFLATION

7.8.1 OVERVIEW OF INFLATION

The final figures provided by SEMO on 2 May 2008 are in mid-2008 prices. In order to increase these figures to end of March 2009 prices, that is the mid-point of the new tariff period, the Regulatory Authorities increased these figures by the current value in the Consumer Price Index (CPI) (April 2008) as per the Irish Central Statistics Office website, and the current value in the Retail Price Index (RPI) (April 2008) as per the UK National Statistics Office website. This approach of using current rather than forecast inflation rates is typical given the difficulty of forecasting future inflation.

7.8.2 CONSULATION RESPONSES ON INFLATION

One respondent noted that the UK government uses the CPI, rather than the RPI, for all purposes associated with payment of pensions and benefits and that the CPI is more consistent with European measures of inflation. Hence, CPI should be used for the NI related inflation rate.

7.8.3 DECISION ON INFLATION

Many organisations continue to use the RPI and it is of note that it is the UK RPI that more closely reflects the CPI of Ireland, currently. It is not clear that there is a compelling argument to modify the proposed approach. It is therefore decided that the approach as detailed in the consultation document will be used. The inflation figures have been updated to use the most recent values.

Based on the June 2008 values, the Consumer Price Index (CPI) as per the Irish Central Statistics Office website (http://www.cso.ie/) has value of 4.96% and the current value of the Retail Price Index (RPI) as per the UK National

Statistics Office website (http://www.statistics.gov.uk) is 4.58%. This results in a combined value of 4.87% by weighting the values from each jurisdiction (that is, the CPI value for Ireland and the RPI value for Northern Ireland) according to the 3:1 financing split used by SEMO.

DECISION 16

It is decided that for the new tariff period the blended rate of inflation to be applied is 4.87%

7.9 SUMMARY OF ALLOWABLE REVENUE

The total revenue proposed by SEMO in its submission is €22.78 Million for the new tariff period in mid-2008 terms, covering its proposed operational costs, capital costs, depreciation and WACC. The Regulatory Authorities have carried out an analysis of these categories and have decided on total SEMO revenue of €22.35 Million for the new tariff period. The differences are summarised in the table below (detail is provided in preceding sections).

Cost Area	**Final SEMO Submission**	**SEM Committee Decision**
Total Operating Cost	8,884,856	8,753,856
Discretionary Fund	250,000	-
Interconnector Administrator	303,797	303,797
Depreciation	11,201,215	11,201,215
WACC	2,392,545	2,392,545
Total Revenue	**23,032,414**	**22,651,414**

Table 8: Total Revenue Submission (April 2008 Prices)

Applying the inflation rate proposed by the Regulatory Authorities to bring the these figures to mid-tariff period prices (end March 2009 - see Section 7.8) the total allowed revenue sought by SEMO is €24.15 Million and the total allowed revenue as decided on by the Regulatory Authorities is €23.75 Million.

Cost Area	**Final SEMO Submission**	**SEM Committee Decision**
Total Operational Cost	9,317,238	9,179,862
Discretionary Fund	262,166	-
Interconnector Administrator	318,582	318,582
Depreciation	11,746,323	11,746,323
WACC	2,508,978	2,508,978
Total Revenue	**24,153,286**	**23,753,745**

Table 9: Total Revenue Submission (End of March 2009 Prices)

All SEMO costs allowed for the new tariff period will be subject to an *ex-post* review and determination by the Regulatory Authorities. This determination of efficiently incurred costs may result in an over or under-recovery of revenue being fed through to the subsequent tariff period(s). Furthermore, all proposed costs/revenues apply to the new tariff period only and will be separately reviewed for the subsequent tariff period(s).

8 IMPERFECTIONS CHARGE

8.1 OVERVIEWOF IMPERFECTIONS CHARGE

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 allowance required for these two costs is provided by SEMO.

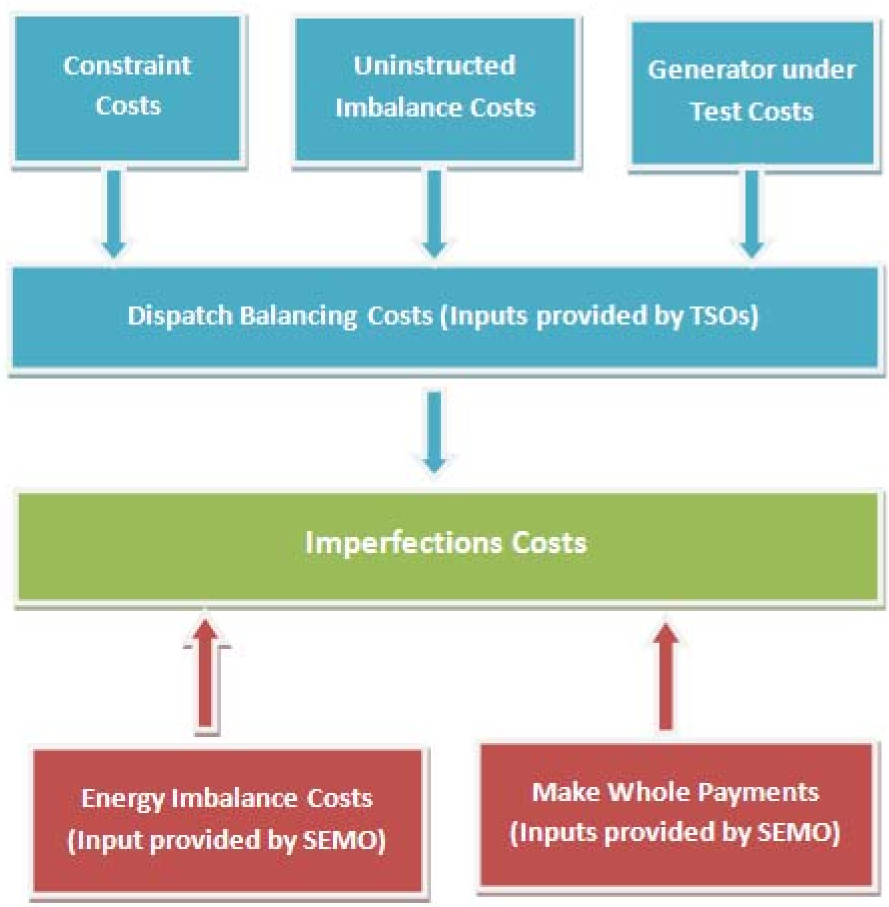

Figure 2: Make up of Imperfection Charges

The Transmission System Operators (TSOs) submission was prepared jointly by 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 2008 to September 30th 2009.

All these costs are estimated *ex-ante* and recovered from Suppliers on a MWh basis through the Imperfections Charge.

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 Costs is €114.4 million (in 2007 values) for the 12 month period from October 1st 2008 to September 30th 2009. Where possible, data from the first five months of the new Single Electricity Market was used to review figures submitted and assumptions made in the previous year's submission.

When converted to mid 2009 terms, using the assumptions detailed in section 7.8, the constraint costs are **€121.4 million.**

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 Regulatory Authorities have undertaken some high level of analysis of Uninstructed Imbalance Costs for the first five months of operation and it is apparent that these costs are not currently netting out to zero. Whilst it is recognised that these uninstructed imbalances will be offset by constraints, this could result in a net cost over the tariff period. However, the volatility and uncertainty of this cost is such that the implied budget of zero will be assumed for the new tariff period.

The Regulatory Authorities will continue to assess this cost over time.

8.4 GENERATOR UNDER TEST TARIFFS

Testing of a new generating unit, or an existing generating unit returning from major overhaul, is generally required in advance of the plant becoming fully operational. During a test the generator commonly requires that it be run at certain levels of output or a certain profiled output. It may not be possible to accurately predict the actual level of output of the unit at any specific time and there may be a significantly higher risk of a fault than for a fully commissioned generator.

These factors lead to increased system operating costs for the Transmission System Operator (TSO) for several reasons.

- The TSO will not be able to predict the output of the unit under test in advance with any degree of confidence, as it is common for tests to be cancelled at short notice or to vary significantly from their nominated level of output. To match supply and demand, the TSO will generally have to commit extra units to ensure a rapid response to changes from the unit under test's scheduled output and to ensure that the system would remain within normal security standards following the loss of the unit.
- As the unit under test is at a significantly higher risk of tripping, the TSO will carry additional operating reserve to ensure that security of supply is not compromised. This leads to additional costs associated with constraints, increased reserve premium, additional run hours, and trips and fast wind downs.

Under the TSC, a testing generator must pay a generator-under-test tariff, which reflects the increased constraint cost (but not other costs such as increased reserve) that they are causing to the system. Only net costs beyond those accounted for in the genset test tariffs are then covered within the Dispatch Balancing Cost.

For the original SEMO Revenue and Tariff consultation, SEMO also presented proposals for the recovery of costs associated with genset tests. The tariffs detailed in the Decision Paper for the initial SEMO Revenue and Tariff period will continue to apply until December 2008. Following a proposal by the TSOs, the Regulatory Authorities have agreed that new genset test costs will be dealt with separately, as part of the ancillary services consultation and these are assumed to fully cover the cost of gensets under test, leaving a zero contribution to the dispatch balancing costs.

8.5 ENERGY IMBALANCES

It had been assumed during the design of the SEM that SEMO would simply administer payments to generators and receipts from suppliers for energy, and that these monies would always equal. However, it is recognised that there is an energy imbalance in the SEM. This energy imbalance means that money received from suppliers will not equal the money paid out to generators and SEMO is required to finance any differences, ensuring that generators are paid for their loss adjusted market schedule quantities.

The imbalance arises from the implementation of loss factors in SEM, which it is expected will lead to differences between losses arising from meter quantities and actual market schedule quantities. Generators will be paid SMP times the loss adjusted market schedule quantities, however payments from suppliers will be based on loss adjusted meter quantities.

SEMO have provided an estimate of €1.9 Million for the cost associated with the energy imbalance with the following rationale:

'As anticipated, SEMO has incurred costs in matching energy payments to generators and receipts from suppliers. However, this can't be balanced until the end of the current tariff year. Given the lack of data at this point in time, SEMO is not in a position to provide analysis of a more complete nature than was previously submitted. While EirGrid and SONI will continue to finance this imbalance out of their own working capital provisions, SEMO continues to seek ex-ante recovery of these costs.'

In the absence of any detailed analysis by SEMO, it is not clear what this amount will outturn at. With this in mind The SEM Committee has decided that the full €1.9 Million be allowed for the new tariff period, subject to a full *ex-post* review. The figure provided is in 2008 terms. It is also decided to inflate this to end of March 2009 prices, i.e. the mid-point of the tariff period, using the methodology outlined in Section 7.8. This leads to a total figure in end of March 2009 prices of **€1.99 Million**.

8.6 MAKE WHOLE PAYMENTS

In the SEMO submission the cost of make whole payments was not referenced. Based on the small values of make whole payments seen in the market to date, a value of zero was proposed in the consultation paper.

SEMO provided comments in relation to this area. See section 8.9.

8.7 RECOVERY OF IMPERFECTION COSTS

As stated previously, the dispatch balancing costs, energy imbalance and make whole payments 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 Section 7.6 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 Section 7.6.

As detailed in Section 7.6.3, the Regulatory Authorities will work with SEMO to understand the impact of this area and possible solutions. However, it is decided that until such times, the above mechanism will be used.

8.8 PROVISION OF WORKING CAPITAL FOR IMPERFECTION CHARGES

The Regulatory Authorities propose that, as is currently the case, the funding of working capital requirements be provided by EirGrid and SONI.

In addition, the Regulatory Authorities propose 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 as determined using the methodology outlined in Section 7.6. 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 proposed 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 as determined using the methodology outlined in Section 7.6.

8.9 CONSULATION RESPONSES ON IMPERFECTION CHARGES

SEMO suggested that it is unclear whether Dispatch Balancing Costs, Energy Imbalances and Make Whole Payments are included in the Imperfection Charge, noting that Make Whole Payments have amounted to some €340k over the first 8 months of operation.

SEMO also noted that a new charge is identified (Energy Imbalance Costs), but no detail has been provided and that if this cost is no longer being recovered via the Imperfections Charge, then it must be ensured that there is no impact on the recovery of Dispatch Balancing Costs.

8.10 DECISION ON IMPERFECTION CHARGES

The TSC defines the Imperfection Charge as being intended to recover costs associated with;

- Dispatch Balancing Costs, which comprises of Constraint costs, Uninstructed Imbalances & Genset Test Costs
- Energy Imbalances and
- Make Whole Payments

SEMO noted that Make Whole Payments are running at €340k, for the first 8 months of operation. However, SEMO did not provide a view on Make Whole Payments in their revenue submission. The Regulatory Authorities have looked at the Make Whole Payments to date and have decided that an allocation of €500K should be included.

In the interests of clarity the Imperfections Charges will be made up of the following elements and costs for the new tariff period. The Energy Imbalance Costs will be recovered via the Imperfections Tariff.

Imperfection Costs	Mid 2007 Prices	Mid 2008 Prices	Mid 2009 Prices
Constraint Costs	114,400,000	116,378,642	121,354,644
Uninstructed Imbalances		-	-
Genset Test Costs		N/A	N/A
Energy Imbalances		1,900,000	1,981,238
Make Whole Payments		500,000	524,332
Imperfection Costs		**118,778,642**	**124,559,004**

Table 10: Summary of Imperfection Costs

DECISION 17

The SEM Committee has decided that for the new tariff period the full costs to be recovered via the imperfections charge is **€124.6 Million** (in March 2009 prices).

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 (see Sections 7 and 8). These charges consist of:

- energy and capacity charges,
- the Accession Fee,
- the Participation Fee,
- the Imperfections Charge,
- the Market Operator charges, and
- the generator-under-test tariff.

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 proposed that the same approach as used in the current tariff is continued in order to ensure appropriate stability.

For imperfections and genset tests, 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 by 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 decided that the forms of charges detailed in the Decision Paper for the initial SEMO revenue and tariffs 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.

The detail for capacity charges is being dealt with as part of another consultation process and so no decisions are made here in relation to capacity charges.

9.2 ACCESSION FEE

The TSC states that the Accession Fee will be a fee paid to SEMO by each applicant for accession to the TSC, to cover SEMO's costs incurred in assessing the application. SEMO have proposed that the current charge of €1500 for Accession should continue.

However, no information has been provided by SEMO on the actual effort required to execute an accession and so it is difficult to determine if the charge above is cost reflective. If these fees are not cost reflective, there is a risk that a barrier to entry is created and this should be remedied.

The Regulatory Authorities take into consideration that an analysis of these costs was not carried out by SEMO due to the small amount of actual costs available and the pressures of getting the systems and processes up and running following Go Live. This is an area that the Regulatory Authorities will require an analysis of as part of the ex-post review in Q4/2008, with the aim of having a more accurate tariff for the subsequent (potentially longer) price control.

Therefore the Regulatory Authorities propose that the Accession Fee of **€1500** is applied to the new tariff period.

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 €3500 for Participation should continue.

Similar to the Accession Fees, no information has been provided by SEMO on the actual effort required to execute registration for a new participant. The Regulatory Authorities will require an analysis as part of the ex-post review in Q4/2008, with the aim of having a more accurate tariff for the subsequent longer price control.

Therefore the Regulatory Authorities propose that a Participation Fee of **€3500** is applied to the new tariff period.

9.4 IMPERFECTIONS CHARGE

As detailed in Section 8.10, the revenue allowance for the imperfection charge is **€124.6 Million** (in March 2009 prices).

Using the Forecasted Demand Figures for 2009 (37, 788GWh), as specified in Appendix 1, the resulting imperfections charge for the new tariff period is €3.296 per MWh. (i.e. 124.6M/37, 788 = 3.296).

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. For the purposes of this consultation, due to the short duration of the tariff period, it is proposed the same proportions as were used in the initial tariff period will continue to apply in the new tariff period. These are detailed below.

The Regulatory Authorities propose that the majority of costs, 95%, be recovered through the Variable Charge. Applying this methodology to the costs proposed by the Regulatory Authorities for the new tariff period results in a Variable Charge of €0.597 per MWh to suppliers.

The Variable Market Operator Charge is calculated as follows:

- The Total Costs to be recovered by the MO Charges is €23,753,745.
- Allocating 95% of the cost to the Variable Charges results in €22,566,058.
- Using the Forecasted Demand Figures for 2009 (37, 788GWh), as specified in Appendix 1, the variable market operator tariff is €0.597 per MWh. (i.e. 22.6M/37,788 = 0.597).

It is proposed 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 proposed 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.

The Fixed Market Operator Charge for Generator Units is calculated as follows:

- The Total Costs to be recovered by the MO Charges is €23,753,745.
- Allocating 5% of the cost to the fixed charges results in €1,187,687.
- Using the 95:5 ratio above, with 158 Generator Units and 28 Supplier Units, as specified in Appendix 1, the costs allocated to Generator Units make up 99% of the fixed costs. This results in €1,176,712.
- Using the Installed capacity on the Island of Ireland (MW) figure of 9,300MW, as provided by SEMO, the Fixed Market Operator Tariff for Generator Units is €127 per MW. (i.e. 1.18M/9,300 = 127).

It is proposed that the Fixed Market Operator Charge to Supplier Units varies, based on the number of Supplier Units.

The Fixed Market Operator Tariff for Supplier Units is calculated as follows:

- The Total Costs to be recovered by the MO Charges is €23,753,745.
- Allocating 5% of the cost to the fixed charges results in €1,187,687.
- Using the 95:5 ratio above, and with 158 Generator Units and 28 Supplier Units, as specified in Appendix 1, the costs allocated to Supplier Units make up 1% of the fixed costs. This results in €10,975.

- Using the Supplier Units figure of 28, as provided by SEMO, the Fixed Market Operator Charge for Supplier Units is €392 per Unit. (i.e. 11K/28 = 392).

In summary, the proposals lead to:

- A Variable MO Charge of €0.597 per MWh for the new tariff period;
- A Fixed MO Charge to Generator Units of €127 per MW installed capacity. In other words, a total charge of €127 per MW installed capacity for the new tariff period; and,
- A Fixed MO Charge to Supplier Units of €392 per Supplier Unit - that is, a total charge of €392 per Supplier Unit for the new tariff period.

This allows the total revenue as decided by the Regulatory Authorities for the SEMO, €23.75 Million in mid-tariff 2009 period prices, to be recovered: €22.57 Million through the Variable Charge, €1.18 Million through the Fixed Charge to Generators, and €10,975 through the Fixed Charge to Suppliers.

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

These proposals are sustainable, stable, unambiguous and predictable, and are in agreement with the regulatory principles outlined in Section 4.

The avoidance of barriers to entry which could be caused by high Fixed Charges to Generator and Supplier Units is essential in maintaining a sustainable regulatory environment. In addition, the above proposals will allow the regulated business to finance its allowed operational costs, and any necessary capital expenditure, so that it can continue to operate in the future to the ultimate benefit of customers.

9.6 CONSULTATION RESPONSES ON TARIFFS

One respondent welcomed the relatively minor changes between the current tariffs and those proposed for the next tariff period. However, the respondent raised two concerns:

- No correctional factor is being applied to the next tariffs to account for over or under recovery in this tariff period; and
- The Fixed Market Operator Charge for Supplier Units is very small and the respondent suggests that this charge is removed.

SEMO raise a general concern (that actually applies to the consultation paper more widely) that reference is made to the word 'budget'. SEMO suggested that the consultation should refer to revenue submission, or other such terms, recognising that SEMO undertakes a budgeting exercise separately to making revenue submissions to the Regulatory Authorities.

SEMO also note that their understanding is that the Regulatory Authorities will approve a revenue requirement and SEMO will then submit tariffs for approval.

9.7 DECISION ON INDICATIVE TARIFFS

The Regulatory Authorities have provided for over and under recovery of funds under the initial tariff period to be reconciled at the earliest opportunity. This is outlined in Appendix 1 of the consultation document.

In so far as the Supplier Fixed Market Operator Charge is concerned, it is noted that the charge is small. However, the Regulatory Authorities consider that the allocation of charges is suitable. The Regulatory Authorities intend to look at the tariff structure in more detail for the subsequent tariff period when more actual data is available to allow a full analysis. As detailed in section 4 it is important that stability is maintained considering the infancy of the SEM.

SEMO's comment relating to the distinction between a budget submission and a revenue submission appears to be somewhat semantic. However, the comment has been noted and the use of the term budget has been minimised in this paper.

In relation to the setting of tariffs, this consultation has been undertaken in order to establish both the revenue requirements and the tariffs for the next tariff period and it should be noted that the Regulatory Authorities have given some consideration not only to the revenue amounts but to how best to allocate those amounts to the various tariff elements. However, it may be reasonable for the Regulatory Authorities to invite SEMO to confirm that the proposed indicative tariffs will result in the approved revenue requirement being collected.

The following indicative Tariffs are suggested for the new tariff period

- Accession fee = €1,500
- Participation fee = €3,500
- Imperfections Charge = €3.296 per MWh
- Market Operator Fixed charge for Generator Units = €127 per MW
- Market Operator Fixed charge for Supplier Units = €392 per Unit
- Market Operator Variable charge for Supplier Units = €0.597 per MWh
- Generator-under-test tariff = N/A (see section 9.4)

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.

Republic of Ireland - Total Electricity Requirement

In the table below, SEMO provides the current best forecast of the Total Electricity Requirement (TER) for the Republic of Ireland in 2009. This was based on EirGrid's forecast of the TER as part of its Generation Adequacy Reporting. Different growth forecasts are presented based upon low, median and high forecasts of general economic activity. The most recent Generation Adequacy Report (2008 – 2014) was published in November 2007: http://www.EirGrid.com/EirGridPortal/uploads/Publications/GAR%202008-2014.pdf.

In light of recent changes in the Irish economy, the Economic and Social Research Institute (ESRI) provided a more up-to-date forecast to EirGrid for GAR 2008 – 2014. The ESRI also provided alternative scenarios of higher and lower than median growth. Compared with last year, these boundaries are now tighter as the economic situation has become clearer.

For the purpose of determining the Market Operator charges, SEMO, based on discussions with EirGrid, is currently of the opinion that the low forecast for the TER presented in the Generation Adequacy Report of November 2007 represents the most likely scenario for 2009.

	2009
Total Electricity Requirement	30,561

Table 11 – EirGrid's Forecast of the Total Electricity Requirement (ROI) for 2009 (GWh)

The TER represents the total energy exported from generators connected to the transmission and distribution system plus any additional self-consumption – i.e. from those parties who produce energy and consume on site.

Northern Ireland - Units Sent Out

2008/09 NI Energy forecast figures were provided from SONI 2008 – 2014 generation adequacy assessments (statement not yet published).

	2009
Units Sent Out	9,544

Table 12 – SONI's Forecast of the Total Units Sent Out (NI) for 2009 (GWh)

Units Sent Out represents the total energy exported from generators connected to both the transmission and distribution system and is net of self-consumption.

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 Regulatory Authorities should be aware that these numbers are at very best rough estimates as it is difficult for SEMO 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 SEMO provides 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
Market Operator Charging	37, 788

Table 13 – 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)***
Energy	35,100 GWh	37, 788 GWh
Supplier Units	23	28
Generator Units	102	158
Generator Capacity	9,050 MW	9,300 MW

Table 14 – Additional Energy Inputs from SEMO

Supplier Unit and Generator capacity data is based on current expected numbers for 2008/2009.

11 APPENDIX 2 – COMPARISON OF REVENUE ALLOWED IN INITIAL TARIFF PERIOD WITH REVENUE ALLOWED IN NEW TARIFF PERIOD

The table below depicts the revenue allowed in the initial tariff period (November 2007 to September 2008). The second column shows the 12 month costs, assuming a linear approach. The costs shown are mid 2008 values.

Opex Costs	**11 month mid 2007 prices**	**11 month mid 2008 prices**	**12 month mid 2008 prices**
Payroll + Contingency	4,000,000	4,154,145	4,531,795
IT & Communications	2,377,000	2,468,601	2,693,019
Facilities	1,050,000	1,090,463	1,189,596
Professional Fees	897,000	931,567	1,016,255
General & Administrative	443,000	460,072	501,896
Total Opex Cost	**8,767,000**	**9,104,848**	**9,932,561**

Depreciation	9,258,333	9,615,115	10,489,217
WACC	2,477,877	2,573,365	2,807,308
Energy Imbalance	1,750,000	1,817,439	1,982,660
DBC Cost (Constraints)	109,254,000	113,464,247	123,779,179

Table 15 – Revenue allowed in initial tariff period

The table below comparison of revenue allowed in Initial Tariff Period with the revenue allowed in new tariff period. The costs shown are mid 2008 values to allow direct comparison.

Operating Costs	**2007/08**	**2008/09**
Payroll	4,531,795	4,032,000
IT & Communications	2,693,019	2,268,000
Facilities	1,189,596	1,365,856
Professional Fees	1,016,255	704,000
General & Administrative	501,896	284,000
Corporate Services	-	100,000
Interconnector		303,797
Depreciation	10,489,217	11,201,215
WACC	2,807,308	2,392,545
Total Operating costs	**23,229,086**	**22,651,414**

Imperfection Costs	**2007/08**	**2008/09**
Energy Imbalance	1,982,660	1,900,000
DBC Cost (Constraints)	123,779,179	116,378,642
Make whole payments	-	500,000
Total Imperfection Costs	**125,761,839**	**118,778,642**

Table 16 – Comparison of revenue allowed in Initial Tariff Period and new Tariff Period.