Geoff Brown & Associates Ltd

TECHNICAL REVIEW OF ALLOWABLE REVENUE FOR THE INDEPENDENT MARKET OPERATOR FOR 1 JULY 2013 TO 30 JUNE 2016

Prepared for

ECONOMIC REGULATION AUTHORITY

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DISCLAIMER

This report has been prepared for the Economic Regulation Authority to assist it in its review of IMO's proposed allowable revenue and forecast capital expenditure for the period 2013/14 to 2015/16. Geoff Brown and Associates Ltd accepts no responsibility to any party other than the Authority for the accuracy or completeness of the information or advice provided in this report and does not accept liability to any party if this report is used for other than its stated purpose.

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EXECUTIVE SUMMARY

Governance

The Independent Market Operator (IMO) is subject to a governance framework that is very robust in terms of external and internal budget preparation and reporting processes and it appears to adhere very strongly to that governance framework. However the IMO's governance processes for the development and implementation of information technology (IT) capex projects could be further enhanced to increase the likelihood of efficient capex outcomes. In particular, we believe that the IMO should incorporate post implementation reviews as part of its standard IT project implementation process.

Opex and Capex Forecast Preparation

The operational expenditure (opex) and capital expenditure (capex) forecasts have been developed with what appear to be sound forecasting principles, taking the 2012/13 budget year as a base year and adding or removing incremental expenditure items. In particular:

- costs appear to have been allocated between gas and electricity operations in a consistent and transparent manner based on a sound methodology;

- costs have been allocated between the three service categories that the IMO is required to provide in a consistent and transparent manner based on a sound methodology; and

- recurring costs have been escalated in a reasonable manner taking into account general cost and labour price inflation factors. We note the escalation proposed for non-labour components, which is based on advice from WA Treasury, is lower than inflation forecasts over the same period and may be conservative.

Opex and Capex Efficiency

We have considered the expenditure line items incorporated within the allowable revenue and forecast expenditure proposal in terms of the services they provide, in the light of the Economic Regulation Authority's (Authority's) requirement to ensure that the approved expenditure includes only costs that would be incurred by a prudent provider who acts efficiently and seeks to achieve the lowest practicably sustainable cost of delivering the services.

In reviewing cost efficiency, we considered the expenditure that was approved by the Authority for the review period 1 July 2010 to 30 June 2013 (AR2) and examined the manner in which recurrent costs have been forecast and the nature of any step cost changes. Those step cost changes included the additional expenditures specifically approved by the Minister Energy as part of the Market Evolution Program (MEP) and a special project following the review of Verve Energy.

We are of the view that:

- the final AR2 opex, excluding depreciation, was higher than that approved by the Authority for AR2, but we consider it to be reasonably efficient given the amount of changes that were introduced with the MEP;

- the recurring costs included in the forecast for AR3 are reasonable and show some productivity improvements, primarily due to the integration of gas and electricity operations.

- the depreciation (amortisation) provided for in the allowable revenue proposal is reasonable compared to the historical capex incurred;

- the proposed extension of the IT asset lives to 5 years is sound and aligned with the strategic objectives set out in the IT roadmap for the core market systems IT assets;

- the step change in accommodation costs associated with the lease of the IMO offices may have been reduced if a location outside of the central Perth CBD area had been selected. We acknowledge that there may be qualitative advantages in locating the offices in the CBD including convenience for other market participants and attractiveness for the retention of staff but from a pure cost efficiency basis the additional lease costs are higher than other alternatives.

- the inclusion of a base annual capex provision for unspecified non MEP related rule changes is reasonable, given the IMO's past history of such expenditure. However the 30% uplift in 2014/15 (amounting to approximately $65,000) to provide for a possible change in the reserve capacity auction process and possible changes to the STEM market is speculative and, in our view, should be removed from the forecast.

We are unable to form an opinion within the timeframe available, and with the information available to us, as to the efficiency of the historical capex. There was a $1.5 million overrun in the costs in the MEP project and that there were additional costs incurred as a result of system upgrades to cater for a 24 hour market. The IMO indicates that the $1.5 million MEP overrun was driven by delays in market implementation as a result of System Management delays. We have not specifically investigated the cause of any delays or the basis for establishment of the original delivery timeframes but, from an overall market perspective, the timeframe for implementation of all the required IT systems appears to have been optimistic especially in the case of the System Management systems. Consequently a different overall planning process allowing for flexible project delivery to accommodate potential project delays may have resulted in lower cost outcomes within a similar delivery timeframe. We do not ignore the fact that the introduction of the major MEP changes has resulted in significant market benefits in terms of reduced costs in the provision of generation services.

1. INTRODUCTION

Geoff Brown & Associates Ltd (GBA) has been engaged by the Economic Regulation Authority (Authority) to provide technical advice and assistance in assessing the efficiency and appropriateness of the proposed operating and capital expenditure for the Independent Market Operator (IMO) for the period 1 July 2013 to 30 June 2016. This advice is provided in this report.

Under clauses 2.22.3 and 2.23.3 of the *Wholesale Electricity Market Rules* (Market Rules), the Authority is required to determine the allowable revenue for the IMO and System Management, for each review period. Since the commencement of the Wholesale Electricity Market (WEM) in Western Australia in September 2006, the Authority has previously determined the allowable revenue for the IMO and System Management for two review periods. The first review period covered the period 1 July 2007 to 30 June 2010 while the second covered the period from 1 July 2010 to 30 June 2013. For ease of reference in this report we will refer to the upcoming review period as AR3, to the second review period as AR2 and the first review period as AR1.

As a result of rule change RC_2011_02, the Authority's determination under clauses 2.22.3 and 2.23.3 of the Market Rules has been expanded for AR3 to include the forecast capital expenditure (capex) of both the IMO and System Management.

Sub clauses 2.22.3(a) and 2.23.3(a) of the Market Rules require the IMO and System Management to each submit a proposal for its allowable revenue and forecast capex to the Authority by 30 November of the year prior to the start of the review period. The IMO has submitted its proposal for AR3 and this proposal is the subject of this report.

The purpose of the Authority's review of the IMO's proposal and its subsequent determination of the IMO's allowable revenue for AA3 is to ensure that the IMO only recovers the costs that would be incurred by a prudent and efficient provider that incurs the lowest practicably sustainable costs of delivering the services set out in the Market Rules. As part of the Authority's review, we have been engaged to assess the IMO's proposed expenditure for AR3 from a technical perspective, and advise the Authority on the extent to which it meets this objective.

Our report incorporates, but is not limited to, an examination of the following aspects of the Imo's proposal:

- the key factors driving the proposed expenditure;
- the appropriateness of major items of expenditure proposed;
- the appropriateness of a number of specific items of expenditure that have been identified by the Authority;
- the governance processes used by the IMO to manage historical capex and operating expenditure (opex) and forecast its capex and opex requirements for AR3;
- the appropriateness of methodologies used to estimate expenditure, including the calculation of items such as depreciation and the escalation of expenditure over time; and
- the efficiency of proposed expenditure assessed within the context of the levels of service that is provided by the IMO.

In undertaking our review we have not carried out any audits of information provided by the IMO. We have relied on the accuracy of the information in the IMO's proposal and of the supporting information that the IMO has provided. Nevertheless, in undertaking our review we have sought further clarification where we considered information was inconsistent, could be inaccurate or where we required further details. However, where we considered that the information provided to us was reasonable, we took it at face value and did not seek additional evidence to corroborate its accuracy.

2. EXPENDITURE FORECASTS

2.1 INTRODUCTION

The most significant recent impact on the IMO's operations has been the implementation of the Market Evolution Program (MEP), which commenced in 2010, following the 2009 market participant endorsed Market Rules Evolution Plan and the Government-commissioned Verve Energy review.

The implementation of the MEP during this period allowed the IMO to make considerable improvements and enhancements to the WEM. The IMO has indicated that the MEP delivered:

- a new registration system;
- a real-time balancing market;
- a real-time, load-following ancillary services market (LFAS); and
- a significant enhancement in market transparency.

The MEP has been a significant contributor to the WEM and driven much of the capex during AR2. The depreciation and interest costs on this investment are a significant component of the IMO's proposed revenue requirement for AR3.

Historically the Authority has had no role in approving the IMO's capex. However, as a result of the recent change to clause 2.22.3 of the Market Rules the Authority must now approve the IMO's forecast capex in determining the allowable revenue for a future regulatory period. Hence, in the normal course of events, major projects such as the MEP will be subject to the Authority's review and approval before they are implemented.

In accordance with a Government decision announced in May 2011, the IMO is now also responsible for the provision of gas information services and is preparing to launch a gas bulletin board on August 1 2013. This work is not funded through the allowable revenue approved by the Authority. The IMO anticipates that its gas information services operations activities will eventually be subject to a similar allowable revenue approval process as its electricity operations.

In this section we overview the IMO's forecast opex and capex requirements for AR3 and compare them with the IMO's actual and expected[1]expenditures during AR2.

For economy of wording, the actual expenditures in 2010/11and 2011/12 and the expected expenditure in 2012/13 are collectively referred to as "actual" AR2 expenditure.

In summary the IMO is seeking approval from the Authority for the allowable revenue and forecast capex amounts set out in Table 1 below.

Table 1: IMO Proposed Allowable Revenue and Capex ($'000, nominal)

	2013/14	2014/15	2015/16	Total
Allowable revenue	15,825	16,265	16,686	**48,776**
Forecast capex	2,583	1,984	1,707	**6,274**

Clause 2.22.2 of the Market Rules requires that the allowable revenue must be sufficient to cover the forward looking costs of providing the relevant services in accordance with the following principles:

1 2012/13 figures are expected values, as this financial year is not yet complete.

i. recurring expenditure requirements and payments are recovered in the year of expenditure;

ii. capex is to be recovered through the depreciation and amortisation of the assets acquired by the capex in a manner that is consistent with good accounting principles;

iii. costs incurred that are related to market establishment, as designated by the Minister, are to be recovered over a period determined by the Minister from "energy market commencement"; and

iv. notwithstanding (i), (ii) and (iii), expenditure incurred and depreciation and amortisation charged, in relation to any "declared market project" are to be recovered over the period determined for that declared market project.

2.2 OPEXFORECAST

The IMO's allowable revenue proposal proposes allowable revenue of $48.8 million for AR3, an increase of 19% compared to AR2. The main line items in the allowable revenue forecast are set out in Table 2 below. The depreciation line item is discussed in more detail in section 4.2 of this report while we consider the main opex line items in this section and in section 5 of this report.

Table 2: Allowable Revenue Proposal for AR3 compared to AR2 ($'000, nominal)

	AR2				AR3				Increase for AR3	
	2010/11	2011/12	2012/13	Total	2013/14	2014/15	2015/16	Total	$'000	%
Employees Benefit Expense	4,649	5,093	5,394	**15,136**	5,568	5,851	6,102	**17,521**	2,385	16%
Accommodation Costs	336	358	204	**899**	715	753	783	**2,251**	1,352	150%
Supplies and Services	5,368	5,235	4,470	**15,074**	5,064	4,952	4,984	**15,000**	(74)	(0.5%)
Borrowing Costs[1]	178	532	592	**1,303**	582	391	304	**1,277**	(26)	(2%)
Depreciation[1]	1,424	2,004	5,565	**8,993**	3,946	4,368	4,563	**12,877**	3,884	43%
Total Expenditure	11,956	13,223	16,225	**41,405**	15,875	16,315	16,736	**48,926**	7,521	18%
Less Interest Income	(153)	(175)	(170)	**(498)**	(50)	(50)	(50)	**(150)**	(348)	(70%)
Net Expenditure	**11,803**	**13,048**	**16,055**	**40,907**	**15,825**	**16,265**	**16,686**	**48,776**	**7,870**	**19%**

Note 1: The IMO is a non-profit organisation that finances capex through funding advanced by the Western Australian Treasury. Borrowing costs fund the interest on these loans while depreciation is used to repay the principal.

The proposed allowable revenue is some 19% higher in nominal terms than the AR2 actuals with the primary differences being:

- employee labour costs increasing by 16%;
- building lease costs (accommodation) increasing by 150%; and
- depreciation costs increasing by 43%

The major opex line items are discussed below:

2.2.1 Employee Benefit Costs

Employee benefit costs incorporate salaries, superannuation, payroll tax and fringe benefits tax associated with the employment of IMO staff. Employee benefits account for 36% of the total allowable revenue amount in AR3, which is comparable with 37% for AR2.

2.2.2 Accommodation Costs

Accommodation costs relate to the costs of leasing the IMO offices in Perth together with cleaning, electricity, maintenance and car parking associated with those offices. Accommodation costs represent 4.6% of the total allowable revenue for AR3, up from 2.1% in AR2.

2.2.3 Supplies and Services Costs

The IMO notes that supplies and services costs incorporate information technology (IT) expenditure, accounting, auditing, human resources, administrative costs, insurance, travel, training and consultant expenditure in support of service delivery. These costs represent 31% of the total allowable revenue for AR3, down from 37% in AR2. We note that the total level of expenditure on supplies and services is almost identical to that in AR2 in nominal terms and the reduction in relative contribution to the AR3 allowable revenue is primarily a result of the overall increase in allowable revenue sought for AR3 in other areas and in totality.

A further breakdown of supplies and services costs can be seen in Table 3 below

Table 3: Supplies and Services Expenditure - 2012/13 Expected and AR3 Forecast ($'000, nominal)

Expenditure Area	2012/13	2013/14	2014/15	2015/16
IT support	2,146	2,181	2,261	2,269
Corporate support	957	1,108	1,132	1,196
Legal and compliance	288	295	778	481
Market operations	59	85	86	88
Market administration	759	597	387	573
System planning	260	255	308	377
ERA GST recovery*	0	543	0	0
Total	**4,470**	**5,064**	**4,952**	**4,984**

*Note: ERA GST recovery is a one-off item subject to specific discussions with the Authority

IT support is the largest line item and accounts for over 40% of the forecast support and services opex. It incorporates the following key elements:

- wholesale electricity market system (WEMS) – this is the IMO's largest contract expenditure and relates to the support of the WEMS system at a cost of approximately $784,000 per annum. We consider this expenditure in more detail in section 3.4.2 of this report;
- settlements maintenance and support;
- data centre hosting by specialist service providers;
- high speed fibre links between head office, production and backup data centres;
- specialist database support;
- IT desktop and infrastructure support; and
- telecommunications and internet access costs.

2.2.4 Key Opex Factors

The MEP is probably the largest single factor driving the IMO's opex and capex requirements. This has both a direct and indirect impact on the opex forecast for AR3.

The IMO has indicated that it has prepared its forecast primarily on a "business as usual" basis from its 2012/13 expenditure. With that assumption as a base, there are several other key factors that have impacted the overall opex forecast as set out in the sections below.

2.2.4.1 Employee Benefit Costs

In its proposal the IMO notes that it currently has 39 approved positions, corresponding to 38.5 full time equivalents (FTEs). Five temporary positions (corresponding to 4.5 FTE) were approved for 2012/13 for the gas implementation services project (GISP), with three of these positions planned to transition into permanent positions from 2013/14. The IMO does not propose to have any dedicated gas positions from 2013/14 as its gas functions will be seamlessly integrated into its existing operations. The IMO considers that this approach should reduce the key man dependency risk elements in its operations.

The IMO is also targeting the addition of two staff in the form of:

- A junior lawyer, required as a result of the MEP changes and the associated increase in market compliance monitoring activities, additional rule drafting and commercial legal responsibilities. The role will also assist in reducing the current level of key person dependency risk.

- An additional graduate position to assist in alleviating the difficulty in recruiting suitably qualified and experienced analysts and market operators and retaining them in a competitive labour market.

The IMO notes that, while the above employee additions will result in a net increase in FTE numbers across the IMO (43 FTEs from 2013/14), the allocation of 4.1 FTEs to gas and a percentage of corporate overheads to gas operations will result in an effective net reduction in staff numbers allocated to electricity. FTE numbers under the allowable revenue proposal will effectively reduce from 38 in 2012/13 to 37.5 for the AR3 period. The basis for the allocation of costs between electricity and gas activities is discussed in section 4.1.2.

The employee expense costs are impacted by proposed salary increases in the form of a 5.5% annual increase for 18 specialist positions and a 4% per annum increase for the remaining positions (discussed in further detail in section 4.3).

2.2.4.2 Accommodation Costs

There is a significant increase in accommodation costs associated with the IMO's office relocation, brought about by the expiry of its previous lease. The IMO's proposal and supporting documentation requested by us detail significant difficulties in securing office accommodation in Perth to meet its specific requirements. The final outcome resulted in:

- a leased area increase to 860m^2, compared to an area of 477m^2 under the previous lease. The IMO indicates that the increase in space requirement is necessary to properly accommodate its staffing needs and enable a more client friendly design layout, incorporating a conference room capable of hosting market participant events and training activities.

- A rental for the new lease of \$660 per m^2 compared to the previous rental of \$396 per m^2 (an increase of 67%). This was due to the previous lease reflecting rental rates which were "locked in" when the lease for Governor Stirling Tower was negotiated by the Government in 2002. The IMO benefited from a lower rental rate when it moved into Level 3 of Governor Stirling Tower in April 2008 (\$315 per m^2) that was substantially discounted to the prevailing market rate – this benefit carried through when the IMO took out the new lease on Level 17 of Governor Stirling Tower.

The new lease took effect from 1 July 2012 and in the normal course of events would have seen an increase of nearly \$378,354 per annum (201%) between 2011/12 and

2012/13. The combination of a lease incentive in the form of a contribution towards fit out and a delay in vacating the premises by the previous tenant mitigated the potential cost impacts in 2012/13, but the full effect of the increased lease costs will be incurred in the AR3 period (combined with a 4% annual increase in lease costs).

2.2.4.3 *Supply and Services Costs*

Whilst not increasing in nominal terms (and thus decreasing in real terms) there are several factors that have influenced the forecast opex in this area. The IMO has noted the following key influences:

- The impact of the MEP with the introduction of the competitive balancing and load following ancillary service (LFAS) markets, in particular, has resulted in a need for 24/7 support since 1 July 2012, resulting in
    - a $30,000 annual increase in the WEMS support contract;
    - infrastructure support cost increases of $15,300 annually;
    - external database support cost increases of an estimated $30,000 per annum; and
    - an additional $60,000 annual requirement to support on-call and after hours support allowances.
- Legal and compliance costs incorporate a one-off full operational compliance audit planned for the IMO in 2014/15 ($600,000) and System Management in 2015/16 ($300,000). This full operational audit was recommended by PA Consulting in its 2012 market audit report.
- System planning costs are budgeted to fluctuate over AR3 in line with planned cyclical reviews required by the Market Rules including a review of the maximum reserve capacity price (MRCP) methodology and a review of the weighted average cost of capital (WACC) calculation of the MRCP.

Supply and services costs are forecast to escalate at 1.75% per annum in the absence of contract specific escalation provisions.

2.2.5 Comment

The Authority has requested that we review WEMS maintenance support expenditure as this is the largest single opex line item other than employee benefit expenditure. This item is considered in detail in section 3.4.2 of this report.

Other opex line items are primarily ongoing business expenditure items which have been influenced by the factors set out in section 2.2.4. We review the efficiency of the overall opex forecast in section 5.

2.3 CAPEX

AR3 is the first period for which the Authority is required to approve the IMO's capex forecast. The fact that depreciation represents approximately 26% of the proposed allowable revenue reflects the impact of capex (and associated depreciation/amortisation) on market fees.

All of the capex proposed under AR3 by the IMO relates to IT expenditure. The capex forecasts are derived from the IMO's key strategic IT planning document, which was developed in late 2012 and is referred to as its IT roadmap.

The IMO states that the IT roadmap is the primary strategic planning tool that it uses to ensure that the planning, delivery, management and use of IT systems optimally support its operations. This document was submitted to the Minister for Energy for endorsement on 26 October 2012, for consideration as part of the State capital budget for 2013/14 onwards.

This is the third such IT roadmap that the IMO has produced and was developed to support its allowable revenue and forecast capex proposal forAR3. The first roadmap covered the period 1 July 2008 to 30 June 2010 and focused on the separation of the IMO's systems from the Department of Treasury and Finance systems. The second roadmap covered the period from 1 July 2010 to 30 June 2013 and addressed the substantive work needed to bring core market systems (such as settlements and metering) up to date with current release versions so that they could be supported more effectively by the IMO's strategic IT service providers.

A functional summary of the capex proposed for AR3 together with the expected capex for 2012/13 is summarised in Table 4 below.

Table 4: Summary of Forecast IT CAPEX ($'000, nominal)

CAPEX Area	2012/3	2013/14	2014/15	2015/16
Corporate Support (Non-Market Systems) - Electricity Allocation	170	131	128	177
Wholesale Electricity Market System (WEMS)	911	654	385	249
Settlements	316	368	70	35
Infrastructure Support (Market Systems)	849	972	1,000	824
Data/ Information Provision	685	459	402	423
MEP Transitional Support	750	0	0	0
TOTAL	**3,681**	**2,583**	**1,984**	**1,707**

2.3.1 Key Capex Factors

The IT roadmap notes that the IMO identified the need to adopt one of three strategic options given the limitations of the WEMS code supplied by the vendor, ABB. Specifically the IMO considered whether to:

1. initiate a project to redevelop the ABB components of WEMS;
2. replace WEMS entirely with a suitable replacement product (or project); or
3. work within the limitations of the current system, implementing changes to reduce areas of technical risk until the next major investment point.

The decision was to proceed with option 3 as representing the best compromise given the high level of capital investment required to implement options 1 or 2.

In developing its capex forecast the IMO has proposed a number of smaller projects consistent with the objectives of option 3 and designed to address limitations of the current ABB system which include:

- the framework delivered by ABB was not suitable for a 24/7 market, and as such significant ancillary processes are in place to provide the required level of stability to WEMS;
- the level of obsolete technology embedded in the ABB WEMS components make the system difficult to extend and support;
- the amount of effort and cost required to resolve defects in obsolete Fortran and C code is very high; and

- the lack of a comprehensive automated regression test suite for WEMS means that significant changes are currently tested manually, extending the time to deliver robust outcomes.

The roadmap proposes to replace the current core market systems in 2016/17 (or in the event of a major change to the WEM design) and as result the capex budget reflects a declining investment in core WEM systems.

As a consequence the IMO states that the focus of the forecast capex is to:

- continue to maintain existing systems to ensure they remain current and supported by their vendors;

- extend applications to support market participants that have a varying degree of technical sophistication;

- maintain the strategic objective of enhancing market transparency; and

- develop and implement integrated compliance and monitoring tools in the WEM systems.

In addition, the limitations of the existing system are being partially addressed by seeking to replace obsolete code and technology and implement an automated regression test suite. Some of these items (and others) were included in the AR2 period capex forecast but were not implemented due to the major resource requirements of the MEP project.

The impact of the MEP related Market Rules changes has resulted in the need to carry out additional "ancillary" activities such as additional compliance monitoring and one of the proposed projects is to develop automatic compliance monitoring tools.

2.3.2 Major and Specific Expenditure Items

The IMO has not incorporated any major capex items in its proposal for the AR3 period. Most of the projects are of a smaller incremental nature, with the largest having a value of around $250,000 per year and relating to the replacement of IT infrastructure. The IMO notes that if a Market Rules change requires changes to be implemented within IMO systems, which require additional capital to be spent, then it is not in a position to delay implementation into the next review period.

In the absence of any specific rule change currently under detailed consideration, the IMO has advised no major capex items are proposed in the forecast AR3 capex budget.

As a whole we found the IT roadmap to be a well formulated document and the approaches and capex items incorporated within it to be generally reasonable both from a strategic and tactical perspective.

3. GOVERNANCE REVIEW

3.1 INTRODUCTION

This section reviews the governance processes for the management of the IMO's expenditure, including the policies, processes and procedures that it has in place to plan and manage both its capex and opex.

This includes the policies and processes that the IMO uses to:

- set expenditure budgets and develop annual operating plans;
- formulate new projects and programs and approve them for implementation;
- control the actual cost of approved projects and programs; and
- forecast its capex and opex requirements for the AR3 period.

Particular consideration is given to:

- the alignment of the policies, procedures and processes for the management of expenditure with IMO's overall business objectives;
- the extent to which IMO's policies and procedures are consistent with good practice; and
- the extent to which the IMO's policies and procedures are implemented in practice;

In considering how well governance principles are applied in practice, we have examined the key projects and programs, taken from those implemented during the AR2 regulatory period and those proposed for AA3.

3.2 GOVERNANCE FRAMEWORK

Governance establishes the processes, systems and controls that ensure that all investment decisions are made consistent with corporate objectives and also with good industry practice. It embraces clarity of roles and accountabilities, accurate/timely information and clear processes/criteria to support decision making, and the ongoing review and monitoring of business processes and outcomes.

This section looks at the framework that the IMO has established for expenditure governance and considers specific documented plans, policies, procedures and processes that are considered by the IMO to be key inputs into the framework underpinning its AR3 allowable revenue and capex proposal and the management of its actual expenditure.

3.2.1 Budget Governance Framework

In response to specific information requests from us, the IMO has identified a list of documents key to the governance of capex and opex investments in the business through the overall forecasting and budgeting process. Each of these is discussed in detail in this section.

3.2.1.1 Market Rules

The Market Rules govern the operation of the wholesale electricity market, and have legislative authority conferred by section 123 of the Electricity Industry Act 2004. Section 2.22 of the Market Rules sets out various process requirements in respect of formulating the IMO's allowable revenue and forecast capital expenditure proposal. Specifically, Market Rules 2.22.3, 2.22.4, and 2.22.12 deal with the process requirements regarding the allowable revenue and forecast capex proposal to the Authority.

Section 2.22 also deals with the annual budget formulation process. Specifically, clauses 2.22.2, 2.22.5, and 2.22.6 to 2.22.11 deal with the process for determining the IMO's annual budget. The IMO must submit a budget each year that is consistent with the allowable revenue and forecast capex determined by the Authority to the Minister for approval.

Section 2.24 of the Market Rules is concerned with the annual budgetary process as it deals with the arrangements for determination of market fees, which provide the revenue required to fund the IMO's normal operations. The Market Rules also cover "declared market projects" where the special approval requirements set out in clauses 2.22.13 and 2.22.14 apply.

3.2.1.2 IMO Regulations

The Electricity Industry (Independent Market Operator) Regulations 2004 (established under the Electricity Industry Act 2004), known as the "IMO Regulations", regulate the establishment and accountability arrangements of the IMO. Part 4 of the IMO Regulations mandates various requirements in respect of the annual operational plan, which is required under Regulation 31 to include *"...an estimate of income and expenditure and source of funding during the relevant financial year*" (i.e. a budget). The effect of Regulation 30 is that the IMO's operational plan requires the Minister's approval, who must first obtain the Treasurer's concurrence.

IMO Regulation 24 requires the Minister to be consulted on major initiatives, and states:

> *The IMO must consult the Minister before it enters upon a course of action that in its opinion –*
>
> *(a) amounts to a major initiative; or*
>
> *(b) Is likely to be of significant public interest.*

The MEP funding arrangements were accommodated under this Regulation.

IMO Regulation 33 – Modifications of operational plan, states:

> *(1) An operational plan may be modified by the IMO with the approval of the Minister.*
>
> *(2) The Minister cannot approve a modification of an operational plan without the Treasurer's concurrence if the modification could result in financial costs, or increased financial costs, to the State.*

Under Regulation 33, the IMO has referenced "special projects" in some of its operational plans, which cover situations when the IMO is aware of a significant body of work in an upcoming year, the specifics of which are uncertain. The project is identified in the annual operational plan (inclusive of an estimate of the budget, based on the best information at the time the operational plan is developed). The special project is then subject to the mandated approval requirements of the operational plan process which requires IMO Board approval, Minister's approval and Treasurer's concurrence.

IMO Regulation 44 requires the Minister to be kept informed, and states*:*

> *The IMO must–*

(1) keep the Minister reasonably informed of the operations, financial performance, and financial position of the IMO, including the assets and liabilities, profits and losses and prospects of the IMO;

(2) give the Minister reports and information that the Minister requires for the making of informed assessments of matters referred to in paragraph (a); and

(3) if matters arise that in the IMO's opinion may prevent, or significantly affect, achievement of the IMO's targets outlined in its operational plan, promptly inform the Minister of the matters and its opinion in relation to them.

The IMO complies with this Regulation by submitting quarterly reports to the Minister.

3.2.2 Internal Procedure: Determination of IMO Budget (August 2007)

This procedure sets out the process that the IMO follows when formulating its budgets, both in terms of securing approval from the Authority for its allowable revenue every three years and obtaining approval from the Minister for its annual budgets.

This is a high level document that provides internal actions that build on the requirements of the Market Rules and IMO Regulations.

The document sets out the basis for the development of the allowable revenue and forecast capex submissions and also the development of the IMO's annual budget.

3.2.3 Board Manual

The IMO Board has approved an IMO Board Manual, which formalises the role and responsibilities of the IMO Board including the approval of the allowable revenue submission to the Authority and approval of the IMO's annual operational plan.

3.2.4 Internal Procedure on Fees (March 2012)

This document sets out the internal process requirements involved in determining the IMO's fees each year.

3.2.5 Budget Governance Assessment

We concur with the IMO's view that the IMO Regulations, the Market Rules, and the IMO Board Manual combine to provide a strong governance framework in respect of the IMO's budgetary formulation.

3.3 BUDGET REPORTING PROCESSES

The IMO has identified a number of policies and procedures, as well as management accounting arrangements, supporting the review of the IMO's budgetary performance.

The IMO has an Accounting Policies and Procedures Manual, which contains detailed procedures in respect of the IMO's budget reporting (and broader financial management arrangements). The document is comprehensive and incorporates procedures associated with monthly financial reporting processes and management reporting tasks.

The IMO describes the following processes for reviewing expenditure in relation to approved budgets during the course of the year:

1. Processes designed to ensure approved budgets are loaded into the financial reporting system are set out in the Accounting Policies and Procedures Manual;

2. Processes to ensure required end-of-month procedures are completed; e.g. monthly reconciliations for salaries/bank accounts, monthly accruals identified by managers and posted (this ensures the monthly reported "actuals" are complete and accurate);

3. Monthly reports produced from the financial system, showing YTD budget performance (with reports showing annual budget, YTD budget, YTD actuals, and YTD variances). This is produced at both a corporate and branch level;

4. All reports are reviewed by the Group Manager, Corporate Services (a CPA qualified accountant) who signs off on the final production of the monthly reports;

5. Copies of the Branch level monthly reports are provided to managers, together with detailed transactional reports;

6. The Group Manager, Corporate Services reports to the executive each month on the financial performance (against budget) of the IMO, as a standing agenda item; and

7. The Group Manager, Corporate Services prepares quarterly reports detailing the financial and program management performance of the IMO, which require variances of 10% or more to be explained and agreed with the CEO. The reports are presented to the IMO Board and Minister.

3.3.1 Annual Reporting Process

Division 3 of the IMO Regulations imposes various obligations relating to the preparation of the IMO's annual financial reports and directors' reports. These require the IMO to adopt financial reporting provisions equivalent to those of the corporations' law.

These requirements result in several disclosures being made in respect of the IMO's annual budgetary performance:

- a report on operations as part of the directors' report, which discloses the annual reported result against the approved budget.

- an explanatory statement as a note to the annual financial statements outlining in detail significant variances against the approved budget.

The directors' report and annual financial statements included in the annual report are required to be audited by the State Auditor General (the IMO notes that it was recognised as a "better practice" reporting agency by the audit office for the 2010/11 financial year).

Audited annual reports are required to be submitted to the Minister, who is required to table the reports in the state parliament. Once tabled, the IMO posts the annual reports on its website, where they are available for review by market participants.

In addition to external audits, the IMO is also subject to

- Office of the Auditor General audits related to annual financial performance and special purpose audits;

- internal audits, through a three year audit plan which address a range of financial management issues; and

- market audits which cover compliance by the IMO with the Market Rules.

The IMO is also required to attend budget estimate hearings arranged by the state parliament, which scrutinise proposed budgets for coming years, as well as prior year financial performance.

3.3.2 Budget Reporting Assessment

The processes and procedures outlined above, combined with sample reports provided by the IMO, lead us to believe that the IMO has sound procedures, processes and practices in place to manage its budget expenditure.

3.4 PROJECT APPROVALS AND MANAGEMENT

We note that the IT roadmap is a strategic document that provides a planning basis for the IMO's capex plans. The plan provided as part of the IMO's AR3 proposal is reasonably comprehensive and sets out a solid platform for future capex expenditure.

3.4.1 IT Project Governance

In response to specific questions on IT governance, the IMO indicated that it does not have a formally approved policy for the governance of IT projects. However it indicated that it uses a framework to ensure a consistency of delivery of IT projects. The framework is template based and was formally approved within the business several years ago.

The first step of this framework is the development of IT road maps that normally cover a three year period and establish a broad requirement for capital investment.

The IMO has indicated that it uses templates for the execution of all IT projects. For significant projects the template detail is extensive, while for smaller more routine projects a more simplified level of detail is incorporated. For projects that require a significant development effort, the IMO states that it supplements the process with development methodology documentation.

A copy of the base template used for projects and sample documentation for significant projects were provided as supporting information. By way of example, the IMO provided details for various elements used in the management of the MEP implementation, which are described below.

- There was a project steering committee consisting of the chief executive (CEO), all senior managers, the MEP project manager, and senior contract support staff. Meetings were held monthly, or more frequently if required, with standing agenda items including monthly project status report, project risk register, and MEP implementation task list;

- Oversight and governance arrangements for the MEP also included monthly reports to the IMO Board for the duration of the project, with all key decisions brought to the Board for approval;

- Industry involvement and oversight was provided through various forums, including the market rules steering group, the rules development implementation working group (RDIWG) and the market advisory committee.

The IMO noted that a post implementation review that was undertaken was the benefit analysis conducted on the benefits delivered to the market after four months operation (which identified benefits far in excess of what was identified prior to the commencement of the project). A copy of the analysis was included as part of the IMO's AR3 proposal.

Based on our review of the information provided by the IMO, many aspects of the IT governance appear to be approached in the correct manner. We do note however that there is a lack of coherent, well documented, overarching IT project governance guidelines within the IMO.

Clearly there were issues with the overall market delivery of the MEP balancing and load following market implementation, given that it was over-budget and delayed in implementation. The project involved dependencies on a number of third parties, including System Management, and not all factors relating to project implementation were within the IMO's control. On review of limited correspondence and planning documents in relation to the project from some of the involved parties, we believe that original timeframe was optimistic. We make this comment generally and the delays may not have been attributable to any actions or inactions on the part of the IMO.

However, as a result of this major project, we would have expected that a post implementation review would be carried out, both from an internal IMO perspective and a combined System Management/IMO perspective to provide lessons for future projects. Post implementation reviews are key elements of the governance of major IT projects and, while the IMO commissioned a report that reviewed the market benefits, no such review was undertaken on the cost side. As part of a post implementation review additional consideration might be given to providing for flexible project delivery options that may reduce the cost impacts of any future major project delays.

In summary we note that while the IMO carries out its IT operations in a reasonably well-structured manner, significant improvements could be made in its governance framework to further ensure efficient outcomes from its project investments.

3.4.2 Review of WEMS Maintenance and Support Contract

As part of our review of governance we examined the process surrounding the awarding and management of the major IT contract to maintain and support WEMS. This contract is about to be renewed, so we considered both the award of the original contract and the processes surrounding the current tender process. The contract was even more significant, given the fact that much of the work involved in the MEP project involved capital improvements to the WEMS system carried out by the IT contractor.

3.4.2.1 2008 Contract

The WEMS maintenance and support contract was awarded to Power System Consulting (PSC) in 2008 following a process to seek alternatives to support and maintenance from ABB given the escalating costs of this support.

The IMO has provided extensive details of the process involved in awarding the contract which included:

- an expression of interest;
- a qualified tenderer short listing process, identifying ABB, M-Co[2] and PSC as pre-qualified tenderers;
- a tender process involving further negotiation on rates with the preferred tenderer;
- recommendations from an internal IMO evaluation panel based on the tender submissions;
- an independent consultant's review of the internal recommendations; and
- final Board approval and contract award.

The successful tenderer was PSC. In addition to support and maintenance services associated with the WEM, the contract provided for capital improvements to the WEMS on a time and materials basis. This element was eventually quite significant given that PSC implemented the major MEP enhancements to the WEMS.

2 The CEO and another employee of the IMO declared a conflict of interest in the overall process having been employed previously by M-Co

3.4.2.2 2013 Contract

In late 2012 the IMO issued a tender (by invitation only) for the provision of IT support services for the WEMS and the gas bulletin board. This was required, as the 2008 contract described above expires in mid-2013.

Despite the tender being issued to a number of potential respondents, including several who indicated that they would be submitting tenders, only two responses were received only one if which was compliant, that being from PSC. The second response from Ventyx (ABB's successor) only incorporated a capability statement. The process was overseen by an independent probity auditor, BDO Audit.

The IMO sought advice from BDO as to the implications of proceeding with only one tenderer and were advised that there was no reason not to proceed. At the time of writing this report, the IMO has indicated that it has negotiated a slight reduction in support fees (compared to the previous PSC contract) and was proposing to recommend that the Board approve the award of a contract to PSC

In reviewing the related tender and contract negotiation documentation for both the 2008 contract and the 2013 proposed contract we could find no anomalies in governance or process, although we did not undertake a detailed audit.

3.5 CONCLUSION

We consider that the IMO has a strong governance framework in place to manage its expenditure. We have noted however that there are certain elements of the IT project governance process that could be strengthened.

We note that the Market Rules, under Rule Change RC_2011_2, allow for the situation where the annual budget proposal of either the IMO (or System Management) can recover up to an additional 15% above the Authority approved revenue over the review period without the need for the Authority to reassess the allowable revenue. This means that effectively the market fees can be up to 15% higher than those approved by the Authority. In the case of the IMO AR3 proposal, this 15% "threshold" equates to just over $7 million.

A similar situation will apply to capex from 1 July 2013, whereby the IMO (and System Management) can spend up to an additional 10% over the capex approved by the Authority without being required to seek additional approvals. The 10% threshold for the IMO AR3 proposal equates to just over $625,000.

4. FORECAST METHODOLOGIES

In reviewing the proposed expenditures, we consider the methodologies used by the IMO to prepare and estimate the forecast expenditures. These are discussed in the following sections.

4.1 COST ALLOCATION

The issue of cost allocation is relevant to two aspects of the IMO's operations, as discussed below.

4.1.1 Service Category Allocations

The IMO is required to seek approval of its allowable revenue in terms of each of the three services it provides as defined under clause 2.22.1 of the Market Rules. As part of its AR3 proposal, the IMO disaggregated its proposed allowable revenue into the three distinct services as shown in Table 5.

Table 5: Proposed Service Category Disaggregation of IMO Allowable Revenue ($'000, nominal)

Service Category	2013/14	2014/15	2015/16
Market Operations	8,008	8,217	8,186
System Planning	2,721	2,912	3,050
Market Administration	5,096	5,136	5,450
Total Allowable Revenue	**15,825**	**16,265**	**16,686**

We have reviewed the basis for allocation costs between the service categories and believe that the methodology set out in the working papers supporting the submission for such cost allocations is soundly based. The actual allocations are consistent with this methodology

4.1.2 Allocation between Electricity and Gas Activities

Given that the IMO is now responsible for providing gas information services, it is important that the allowable revenue does not include any cross subsidies between gas and electricity activities. Direct gas and electricity costs are allocated to the relevant activity.

For the purposes of allocating indirect costs, the IMO has established a gas overhead allocation methodology, which was developed in conjunction with consultants Ernst & Young and included as part of the working papers forming part of the IMO proposal. We believe that the allocation methodology is soundly based and the allocation amounts included in the allowable revenue proposal are consistent with the methodology. We note that there is some estimation involved in the practical implementation of this process, as managers are required to estimate the percentage of their time and their staff's time that is spent undertaking each activity (gas and electricity) as part of the allocation process.

4.2 DEPRECIATION

The IMO states that the implementation of the MEP during AR2 allowed it to make considerable improvement and enhancements to the WEM systems, and has achieved the strategic objective of extending the life of the existing WEM systems to the next milestone change in the WEM design or to at least 2016/17 when the core system will be 10 years old.

During AR2, MEP capex was $9.8 million up to 30 June 2012 which, together with the expected additional $750,000 in 2012/13, results in a total capex of $10.55 million in AR2.

This outcome results in additional depreciation and borrowing costs of $6.7 million, which was not anticipated at the time the Authority approved the IMO's AR2 proposal.

The total combined borrowing and depreciation costs, covering borrowings to fund both the MEP and other capex, can be seen in Table 6 below.

Table 6: Comparison of Proposed AR3 and Estimated AR2 Depreciation and Borrowing Cost ($'000, nominal)

	AR				AR3				Increase for AR3	
	2010/11	2011/12	2012/13	Total	2013/14	2014/15	2015/16	Total	$'000	%
Depreciation	1,424	2,004	5,565	8,993	3,946	4,368	4,563	12,877	3,884	43%
Borrowing Costs	178	532	592	1,303	582	391	304	1,277	(26)	(2%)
TOTAL	**1,602**	**2,537**	**6,157**	**10,296**	**4,528**	**4,759**	**4,867**	**14,154**	**3,858**	**41%**

The combined level of borrowings and depreciation is proposed to increase by 41% in AR3 and depreciation and borrowings account for 30% of the total proposed allowable revenue (compared to 25% estimated in AR2).

We note that the increase in AR3 has been tempered by the IMO's decision to change the economic life of its IT assets from 3 years to 5 years and depreciate the expenditure over that timeframe. This decision was made effective from 1 July 2012. The decision is consistent with the IMO's strategic IT roadmap which proposes to replace its core market systems in 2016/17 and we concur with the extended depreciation periods. As a result we believe that the depreciation amounts included in the AR3 submission are derived on a reasonable basis.

4.3 ESCALATION

The forecast expenditures in the IMO allowed revenue proposal for both capex and opex are nominal expenditures.

The nominal figures were derived from 2012/13 budget costs escalated in accordance with the following approaches:

4.3.1 Specific Escalation Factors

Where specific escalation factors are known in advance (e.g. 4% increases apply to office lease costs) these are applied directly to the 2012/13 costs.

4.3.2 Labour Escalation Factor

For labour the IMO has assumed an annual 5.5% increase for designated key specialist positions and an annual 4% increase for other staff positions across the whole AR3 period. These figures have been endorsed by the IMO Board and were developed as a result of a specialist remuneration consultant report[3] commissioned by the Board and provided as part of the AR3 submission.

In considering the reasonableness of this escalation figure we note that the key economic forecasts included in the Western Australian State Budget 2012-13 Overview Paper incorporate wage price index (WPI) increases of 4.5% over each year of the AR3 period. The level proposed by the IMO is higher than this figure on a weighted average basis and the IMO Board has approved the forecast salary increases on the basis that the skill level of the IMO is likely to be on the higher end of the labour cost spectrum and within an area where there are competing demands. The turnover of staff in key positions at the IMO is reflective of this.

3 *Work Value & Remuneration Policy Review – Key Positions Independent Market Operator*, Mercer Consulting,4 October 2012

4.3.3 Default Escalation Factor

For materials and services without a designated specific escalation factor or without fixed contract prices or borrowing costs, the IMO has applied a 1.75% annual indexation figure to its 2012/13 costs. The indexation factor was provided by State Treasury as a general indexation factor for non-salary costs, across each of the three years of the AR3 period.

We note that the Western Australian State Budget 2012-13 Overview Paper incorporated a 3.25% annual CPI increase over AR3 and that the WPI increase is projected to be 4.5%. Given that the IMO utilises specialist consulting services, we would expect the value of those services to increase by something around the level of WPI increase. Consequently we believe that 1.75% escalation factor included in the IMO submission may be conservative and that the actual escalation factors may be somewhat higher.

4.3.4 Conclusion

We are of the view that the escalation factors incorporated in the IMO's AR3 proposal are reasonable, although the default escalation factor would appear to be conservatively low.

We have carried out sample checks of the application of the escalation factors and have found that in all cases the escalations have been applied as described in the overall forecasting process. The working papers supplied with the IMO budget reflect the actual workings and show line item assumptions with respect to escalation factors.

5. EFFICIENCY OF PROPOSED EXPENDITURE

The purpose of the Authority's determination of the allowable revenue for the IMO is to ensure that only costs that would be incurred by a prudent provider that acts efficiently and seeks to achieve the lowest practicably sustainable cost of delivering the services, are included in the approved forecast. Assessments of service efficiency are often carried out by benchmarking approaches. We note that the Authority does not wish to benchmark the costs of the IMO and System Management against the costs of providing similar services in other jurisdictions, as contemplated by sub-clauses 2.22.12(c) and 2.23.12(c) of the Market Rules. The Authority has advised that it considers that it is not practical to undertake such a benchmarking exercise, as there are no directly comparable entities to the IMO and System Management in other jurisdictions in terms of scale of operations, the structure of the businesses and the nature of activities.

Therefore we have considered the efficiency of the proposed expenditure in comparison to the Authority's approved AR2 allowable revenue, with additional consideration of the capex that underlies the depreciation and borrowing cost components of the allowable revenue. The Authority may wish to extend the benchmarking to the AR1 period but we believe that, given the change in market circumstances since AR1 and during AR2, an AR2 benchmark approach would be more appropriate.

The IMO's AR3 proposal does not specifically detail the step changes that have contributed to the variance in costs between those used as the basis for the Authority establishing the AR2 allowable revenue and those actually incurred. However, the submission includes detailed consideration of the changes from the AR2 actual expenditure to the proposed AR3 allowable revenue expenditure. As a consequence we have broken down our opex analysis of efficient costs into a historical comparison of AR2 expenditures and a separate consideration of AR3 comparisons with AR2 actual expenditure.

We have considered capex efficiency separately.

5.1 OPEX EFFICIENCY

5.1.1 Historical Comparison of AR2 Opex

If we compare the approved AR2 allowable revenue with the actual AR2 expenditure, we see that actual expenditure was significantly higher. This is shown in Table 7 below.

Table 7: Comparison of AR2 Approved Allowable Revenue and Actual AR2 Expenditure ($'000, nominal)

	Approved Allowable Revenue AR2 Period				AR2 Period Actuals/Budget				Increase on AR2 Approved	
	2010/11	2011/12	2012/13	Total AR2	2010/11	2011/12	2012/13	Total AR2	$'000	%
Employees Benefit Expense	4,013	4,269	4,545	**12,827**	4,649	5,093	5,394	**15,136**	2,309	18.0%
Accommodation Costs	325	0	445	**1,166**	336	358	204	**899**	(267)	(22.9%)
Supplies and Services	4,684	4,373	4,456	**13,513**	5,368	5,235	4,470	**15,074**	1,561	11.6%
Borrowing Costs	188	242	262	**692**	178	532	592	**1,303**	611	88.3%
Depreciation	1,712	2	2,046	**5,847**	1,424	2,004	5,565	**8,993**	3,146	53.8%
Total Expenditure	**10,922**	**11,369**	**11,754**	**34,045**	**11,956**	**13,223**	**16,225**	**41,405**	**7,360**	**21.6%**
Less Interest Income	(34)	(34)	(34)	**(102)**	(153)	(175)	(170)	**(498)**	(396)	388.2%
Net Expenditure	**10,888**	**11,335**	**11,720**	**33,943**	**11,803**	**13,048**	**16,055**	**40,907**	**6,964**	**20.5%**

We note that, while the actual AR2 expenditure exceeded the approved allowable revenue by more than 15%, during AR2 the IMO has only been able to recover revenue of 15% in excess of the approved amount.

We have reviewed the IMO's operational plans for 2010/11, 2011/12 and 2012/13 and other information (including staff number changes) provided by IMO as part of our consideration of the step changes that have resulted in an increase in the actual AR2 costs in comparison to the approved allowable revenue for AR2.

In its 2011/12 operational plan the IMO summarised adjustments to the approved expenditures as shown in Table 8 below.

Table 8: Additional AR2 Approved Expenditure Items ($'000, nominal)

	2010/11	2011/12	2012/13	Total AR2
AR2 Allowable Revenue	10,922	11,369	11,754	34,045
Special Projects	869			869
MEP	84	1,351	2,957	4,392
Total	**11,875**	**12,720**	**14,711**	**39,306**

The special projects line item in Table 8 relates to the Minister's approval of the IMO's 2010/11 operational plan which provided for additional funding of $869,000, to consider the recommendations flowing from Government's review of Verve Energy. The MEP expenditure was approved by the Minister as part of the modified 2010/11 operational plan following funding approval from the State Treasurer. Since the above expenditure has been approved through appropriate governance processes, we have assumed that the above total costs represent an efficient AR2 expenditure base. If we compare the total expenditure line items from Tables 7 and 8, we observe that the actual AR2 expenditure of $41.41 million is 5.3% above this base.

In its 2012/13 operational plan, the IMO sets out the basis for the additional expenditure requirements over and above those set out in Table 8. The most significant relates to depreciation associated with "regular" capital purchase, replacement and upgrade requirements for IT systems that were superseded by the more onerous requirement of having to support the MEP enhancements including a requirement for 24 x 7 operations. There was also a requirement for depreciation of additional capex arising from the extension of time to support integration with System Management systems, following the deferral of the start of the balancing and load following markets.

In comparing the non–depreciation components of total expenditure during AR2 with the Authority's approved allowable revenue, adjusted for special approval items (as set out in Table 8), the actual expenditure during AR2 might be considered to be efficient in terms of our base efficiency assumptions.

We comment on the capital related depreciation expenditures in more detail in section 5.1.2.3 of this report.

5.1.2 Comparison of Actual AR2 and Proposed AR3 Opex

The benchmarking we have undertaken in comparing AR2 actuals to AR3 proposed expenditures is broadly based on a direct comparison of costs of a recurrent nature, whilst factoring changes in any additional cost drivers emanating from sources such as such as scale and inflation impacts. In the case of step changes, we have considered these in the light of any changes in scope or service delivery mechanisms.

In order to make a valid comparison, we have escalated actual AR2 costs by known and estimated CPI and WPI factors to bring them all to 2012/13 real dollars. We have then de-escalated AR3 costs by the IMO's applied escalation factors at an aggregate level. We have made some other adjustments to factor in relevant changes, such as aligning the accommodation costs in 2012/13 with those in earlier years of AR2.

This produces the high level real dollar comparison of AR2 and AR3 costs in 2012/13 dollars shown in Table 9.

Table 9: Proposed AR3 and Estimated AR2 Normalised Allowable Revenue Comparison ($'000, real 2012/13)

	AR2				AR3				Increase for AR3	
	2010/11	2011/12	2012/13	Total	2013/14	2014/15	2015/16	Total	$'000	%
Employees Benefit Expense	5,064	5,337	5,394	15,795	5,303	5,307	5,271	15,881	86	0.55%
Accommodation Costs	352	365	372	1,089	688	688	688	2,064	974	89%
Supplies and Services	5,622	5,334	4,470	15,426	4,977	4,783	4,731	14,491	(935)	(6.1%)
Borrowing Costs	187	542	592	1,321	572	378	289	1,238	(83)	(6%)
Depreciation	1,424	2,004	5,565	8,993	3,946	4,368	4,563	12,877	3884	43%
Total Expenditure	**12,649**	**13,583**	**16,225**	**42,457**	**15,526**	**15,614**	**15,673**	**46,813**	**4356**	**10%**
Less Interest Income	(153)	(175)	(170)	(498)	(50)	(50)	(50)	(150)	(348)	(70%)
Net Expenditure	**12,496**	**13,408**	**16,055**	**41,959**	**15,476**	**15,564**	**15,623**	**46,663**	**7,870**	**11%**

Looking at these high level figures the most obvious step changes are in accommodation costs and depreciation. The IMO has identified specific step change items in its submission and we consider each of these in turn.

5.1.2.1 Property Lease

As noted in Section 2.2.4.2, there is a significant increase in accommodation costs associated with the IMO's office relocation brought about by the expiry of its previous lease, resulting in:

- a leased area increase to 860m^2, compared to an area of 477 m^2 under the previous lease. The IMO indicates that the increase in space requirement is necessary to properly accommodate the IMO staffing requirements and enable a more client friendly design layout incorporating a conference room capable of hosting market participant events and training activities.

- An increased rental rate for the new lease of $660 per m^2 compared to the previous rental rate of $396 per m^2 (an increase of 67%).

The new lease took effect from 1 July 2012 and, when fully reflected in 2013/14, will see an increase of around $380,000 per annum real.

The IMO has advised that the IMO Board determined that the search for alternative premises should be confined to reasonable proximity to the existing premises (Governor Stirling Tower) to be in proximity to a maximum number of market participants, who had their head office locations at that time in the same vicinity. The benefit of premises (generally) closely located to IMO clients supports the IMO's strategic objective of "*Building Strong Relationships*" as set out in the 2012/13 operational plan.

The IMO also notes that the layout of the new office design provides for the boardroom to be converted to a training room capable of hosting the IMO's various market training sessions. The additional space has translated into:

1. the number of participants attending IMO training sessions year to date to December 2012 exceeds budget by 138%

2. The "seminar venue hire" budget contained in the IMO's allowable revenue and forecast capex submission has been scaled back to reflect savings benefits that flow from being able to host the training sessions in-house. The detailed working papers show this line item reducing from $27,459 actual in 2011/12 to $5,000 in 2013/14.

Both the additional space and additional unit area costs associated with the new lease have contributed to the step change in accommodation costs. Whilst noting that the IMO carried out extensive property searches and was left with few choices for accommodation matching their search criteria, less restrictive search criteria could have resulted in a lower cost outcome.

The IMO has outlined qualitative reasons for the choice of a prime CBD location for its offices both within its original AR3 submission and in the provision of supporting information and additional commentary. Nevertheless, this choice may not be the most efficient choice from a cost perspective, given that fringe CBD real estate area rates are substantially less than those within the main Perth CBD. As a result we can only conclude that the accommodation cost component of the IMO's budget is not economically efficient without placing a significant premium on qualitative factors. That said, the IMO is contractually committed to incurring the lease costs for a period of five years (with a further five year option) and has made an investment in fitting out the accommodation.

5.1.2.2 Employee Benefit Expenses

Section 2.2.4.1 referred to the IMO's intention to employ two additional staff in the form of:

- a junior lawyer to assist in increases in market compliance monitoring activities, additional rule drafting and commercial legal responsibilities; and
- an additional graduate to assist in alleviating the issues associated with the difficulty in recruiting suitably qualified and experienced analysts and market operators and retaining them in a competitive labour market.

The IMO notes that while the employee additions will result in an overall increase in employee numbers, the allocation of 4.1 FTEs to gas and the allocation of corporate overhead position to gas operations will result in an actual net reduction in staff numbers allocated to electricity. FTE numbers under the allowable revenue proposal will effectively reduce from 38 as at the end of AR2 to 37.5 through AR3. This is shown in Table 10.

Table 10: Movement in FTE numbers for IMO across AR2 and AR3

	2010/11	2011/12	2012/13	AR3 Period
Base FTEs	28.7	29.1	26.6	26.6
2010/11 Operational Plan Increases	0.0	3.4	3.4	3.4
MEP Approved Positions	0.0	4.0	4.0	4.0
2012/13 Operational Plan Increases	0.0	0.0	4.0	4.0
Proposed Positions AR3 (including gas)	0.0	0.0	0.0	5.0
Less Gas Allocation	0.0	0.0	0.0	(5.5)
TOTALS	**28.7**	**36.5**	**38.0**	**37.5**

We believe that the two net additional resources requested are efficient given that:

- the scope/scale increase in compliance required with the introduction of new balancing and LFAS markets; and
- the employee turnover statistics provided by the IMO (at our request), which demonstrate a risk of loss of key personnel at senior levels and noting that appointees to all previous graduate positions have remained with the IMO and taken up roles vacated as a result of staff turnover.

The expansion of IMO activities into gas has allowed staff efficiencies to be achieved across both markets and we note the fact that there is only an estimated 0.55% real increase in employee benefit costs across AR3 as compared to AR2 even with the additional scope of operations under the new balancing and LFAS markets even allowing for the fact that there was an increase in staff numbers during AR2.

5.1.2.3 Depreciation

The depreciation increases included in AR3 are discussed in section 4.2. The increase is primarily driven by the capex requirements to support the MEP, which was introduced during AR2. In considering the step change in depreciation costs the efficiency of such costs is predicated on the efficiency of the capex spend associated with the MEP project.

We note that there was also a significant increase in expenditure on support IT systems during AR2, which were not specifically related to the MEP but incurred as a result of the requirement to operate a 24/7 market.

We also note that there was a $1.5 million overrun on budget costs in the implementation of the MEP, primarily driven by delays in market implementation as a result of System Management delays. This may well be the case but, in the absence of a detailed audit or post implementation review, we are unable to form an opinion as to whether the expenditure was efficient. Based on our discussions with both the IMO and System Management, it would appear that the original timeframe for implementation of the required IT systems to facilitate the MEP requirements was optimistic. Consequently a more considered overall planning process may have resulted in an allowance for project delays that minimised the costs of delays and ensured lower cost outcomes within a similar delivery timeframe. These observations are consistent with some of the governance improvement opportunities identified in section 3 of this report.

5.2 CAPEX EFFICIENCY

In our consideration of capex in terms of efficiency we reviewed the IMO's capex expenditure from both an historical and forecast perspective.

5.2.1 Historical Capex

The nature of IMO's overall capex spend is almost exclusively related to enhancements, replacements and additions to IT software and hardware. Given the timeframe associated with our review we are not in a position to definitively provide an opinion as to the efficiency of the IMO's historical capex.

In section 3 of our report we made some observations on the IMO's IT project governance framework and noted the budget overruns associated with the MEP balancing and load following market implementation capex. Whilst there were third party interactions affecting this particular project that may have resulted in delays beyond the control of the IMO, we believe that there may have been some historical inefficiencies in overall capex, given the scope for improvements in IT governance that we noted in Section 3.4.1.

5.2.2 Forecast Capex

As noted in section 2.3, all of the capex proposed under AR3 by the IMO relates to IT expenditure. The capex forecasts are derived from the IMO's IT roadmap.

The IMO has advised that it has specifically excluded any allowances for capex for IT enhancements to implement future MEP rule changes. The rationale behind this decision relates to uncertainty in timing and scope of rule changes and we believe that this is appropriate. There are mechanisms set out in the Market Rules that provide the IMO with the ability to have capex for additional projects approved, once the need is apparent and the projects are able to be defined more specifically in terms of timing and scope.

We note, however, that the IMO has made provision in its forecast for capex of nearly $700,000 o to cater for IT changes to accommodate non-MEP rule changes.

Table 11 below sets out the historical and proposed capex on this particular expenditure item.

Table 11: Historical and Proposed Capex related to non-MEP Rule Changes ($'000, nominal)

2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
276	373	634	206	280	213

Source: IMO AR3 Submission and additional explanatory information

We note that this capex item provides for an amount to cover changes in IT systems covering a number of market rule changes of a non-specific nature. However we do not consider this to be speculative in nature in itself because there is an observable history of such expenditure on this capex item and the proposed capex represents an amount that is less than historical averages. The IMO has advised that:

- the additional expenditure in 2012/13 relates to non-MEP rule changes that have already been identified and costed; and
- the 2014/15 forecast includes a 30% uplift factor in the expectation that there may be changes in the reserve capacity auction process and in the operation of the STEM market.

We consider that this 30% uplift factor in 2014/15 (approximately $65,000) is speculative in nature in terms of both the timing and scope of the requirement. As such we suggest that this amount be removed from the capex approved by the Authority.