

**DRAFT AUDIT
GUIDELINES:
ELECTRICITY, GAS AND
WATER LICENCES**

Economic Regulation Authority

 WESTERN AUSTRALIA

This document is available from the Economic Regulation Authority website
www.era.wa.gov.au

For further information, contact:

The Assistant Director Monitoring
Licensing, Monitoring and Customer Protection Division
Economic Regulation Authority
PO Box 8469
PERTH WA 6849

Phone: (08) 9213 1900
Facsimile: (08) 9213 1999

Email: audit.scope@era.wa.gov.au .

IMPORTANT NOTICE

This document has been compiled in good faith by the Economic Regulation Authority (the Authority). This document is not a substitute for legal or technical advice. No person or organisation should act on the basis of any matter contained in this document without obtaining appropriate professional advice.

The Authority and its staff members make no representation or warranty, expressed or implied, as to the accuracy, completeness, reasonableness or reliability of the information contained in this document, and accept no liability, jointly or severally, for any loss or expense of any nature whatsoever (including consequential loss) arising directly or indirectly from any making available of this document, or the inclusion in it or omission from it of any material, or anything done or not done in reliance on it, including in all cases, without limitation, Loss due in whole or part to the negligence of the Authority and its employees. This notice has effect subject to the *Trade Practices Act 1974* (Cwlth) and the *Fair Trading Act 1987* (WA), if applicable, and to the fullest extent permitted by law.

The summaries of the legislation, regulations or licence provisions in this document do not contain all material terms of those laws or obligations. No attempt has been made in the summaries, definitions or other material to exhaustively identify and describe the rights, obligations and liabilities of any person under those laws or licence provisions.

The scope of information outlined in this does not prevent or limit the Authority in any way from requesting any additional information for the purposes of assessing and/or reviewing an asset management plan or a performance/operational audit. This document is a guide only and should not be treated as definitive.

CONTENTS

1	Background	3
1.1	Purpose of the guideline	3
1.2	Requirement to undertake audits/reviews	4
1.3	Diagram of audit process	6
2	Appointment of Auditor/Expert	7
2.1	Selection criteria	7
2.2	Conditions of engagement	7
2.3	Auditing standards	9
3	Performance/Operational audit	10
3.1	Audit objective	10
3.2	Audit scope	10
3.3	Frequency of audit	11
3.4	Assessing risk	11
3.5	Audit conduct	15
3.6	Audit reporting	16
4	Review of the Asset Management System	20
4.1	Objective	20
4.2	Scope	20
4.3	Frequency of review	21
4.4	Conduct of review	21
4.5	Reporting	22
5	Amendments	25
	Appendix A – A Guide to the AMS Effectiveness Framework	26

Executive Summary

Introduction

Under the provisions of the *Economic Regulation Authority Act 2003* (ERA Act) section 25, the Economic Regulation Authority (Authority) is responsible for the licencing of electricity, gas and water service providers in Western Australia. The regulatory obligations imposed on the Authority by the ERA Act are undertaken primarily by way of a licensing scheme administered by the Authority.

Under the licensing scheme, providers of electricity, gas and water services must adhere to a range of conditions including:

- meeting minimum service standards;
- maintaining regular reporting requirements; and
- adhering to prescribed operating areas.

The licensing framework that covers the provision of electricity supply, gas supply and water services is governed by the following legislation:

- *Electricity Industry Act 2004 (WA)* (Electricity Act);
- *Energy Coordination Act 1994 (WA)* (Gas Act); and
- *Water Services Licensing Act 1995 (WA)* (Water Act).

This includes ensuring that licensed service providers of electricity, gas and water ('licensees') conduct the relevant audits prescribed in legislation.

The industry legislation provides for two types of audits which are specified as a 'performance/operational audit' and a 'review of the asset management system'.

Both types of audits must be undertaken not less than once every 24 months or such longer period that the Authority allows.

The general requirements of the two audits specify that:

- the format of a performance/operational audit assesses the effectiveness of measures taken by the licensee to meet the performance and quality standards referred to in the licence; and
- an asset management system review is required to set out the measures to be taken by the licensee for the proper maintenance of assets used in the provision and operation of services and where appropriate the construction or alteration of relevant assets.

Objective of audit guidelines

The audit guidelines are designed to enable the Authority to obtain independent assurance that licensees of electricity, gas and water services have in place effective systems and controls to ensure compliance with licence obligations and asset management 'best practice'.

Risk-based approach

The audit guidelines incorporate a risk-based approach to assess the risk of non-compliance with licence standards and facilitates audit planning to focus on the higher risk areas, with less intensive coverage of medium and lower risk areas.

In order to obtain greater consistency of the risk assessment across the different industries and licensees, detailed guidelines have been included on the preferred risk assessment process based on the Australian/New Zealand Standard 4360:2004 on risk management.

The risk assessment will provide input into determining the frequency of subsequent audits and the extent of audit coverage of the licensees. It is the Authority's intention that licensees that demonstrate high levels of audit compliance with licence standards will be audited less frequently than licensees where areas for improvement are identified in the audit process.

Smaller licensees

While the Authority aims to establish a consistent audit approach across all types of licensees, the Authority recognises that smaller organisations will have a different risk profile to larger organisations, depending upon factors such as the type of services provided, number of customers and maturity of systems.

An additional audit template termed 'Audit Guidelines: Electricity, Gas and Water Licensing: Audit Template for Smaller Organisations', including an audit plan, worksheets and reporting checklist has been developed to assist the auditors of smaller organisations to apply the Authority's guidelines. This document is available on the Authority's website at www.era.wa.gov.au.

Content of audit guidelines

This audit guideline includes guidance on the:

- legislative requirements for audits;
- appointment of the auditor/expert and the applicable auditing standards;
- planning, conduct and reporting of performance/operational audits; and
- planning, conduct and reporting of reviews of asset management systems.

1 Background

1.1 Purpose of the guideline

Under the provisions of the ERA Act section 25, it is a requirement that the Authority administers the licensing schemes referred to in the Electricity Act, Gas Act and Water Act.

In performing its functions, the Authority under the ERA Act section 26 must have regard to the following matters (relevant to licensees):

- the need to promote regulatory outcomes that are in the public interest;
- the long-term interests of consumers in relation to the price, quality and reliability of goods and services provided in the relevant markets;
- the need to encourage investment in relevant markets;
- the legitimate business interests of investors and service providers in relevant markets;
- the need to promote competitive and fair market conduct; and
- the need to prevent abuse of monopoly or market power.

Licences are granted subject to conditions intended to promote the objectives of the legislation including supply quality (public health and safety issues), supply reliability (connections and supply), consumer protection (customer service levels and prices) and regulatory compliance (compliance with legislation and standards). These conditions are supported by various technical and industry codes and standards.

The Authority has the responsibility for granting licences with appropriate conditions, monitoring compliance, reviewing performance reports from the licensees and enforcing compliance or revoking licences.

This guideline establishes a framework for the Authority to fulfil its audit responsibilities under the Electricity, Gas and Water Acts. The framework is designed to:

- ensure that audits are conducted and reported in a consistent, rigorous and independent manner by establishing minimum requirements for the selection of auditors and the scoping, conduct and reporting of audits;
- provide incentives for businesses to achieve compliance by:
 - minimising the risk that significant non-compliance will remain undetected and providing businesses with an opportunity to rectify non-compliance; and
 - varying the frequency of audits based on a risk assessment such that businesses that can demonstrate consistent and effective compliance will be audited less frequently than those businesses with lower levels of compliance; and
- maximise the cost-effectiveness of audits by adopting a risk-based audit approach to the frequency of audits, the scope and the depth of the audit evidence required.

1.2 Requirement to undertake audits/reviews

The industry Acts (refer Electricity Act sections 13-14, Gas Act sections 11Y & 11ZA and Water Act sections 36-37) provide that it is a condition of every licence that the licensee is to:

- provide the Authority with a performance/operational audit conducted by an independent expert acceptable to the Authority not less than once in every 24 month period (or such longer period as the Authority allows); and
- provide the Authority with a report by an independent expert acceptable to the Authority as to the effectiveness of the asset management system not less than once in every 24 month period (or such longer period as the Authority allows).

1.2.1 Performance/operational audit

A performance/operational audit assesses the effectiveness of measures taken by the licensee to meet the obligations of the performance and quality standards referred to in the licence.

The audit focuses on the systems and effectiveness of processes used to ensure compliance with the standards, outputs and outcomes required by the licence. The audit should identify areas where improvement is required and recommend corrective action as necessary.

The licence conditions for electricity licences¹ are similar to those for gas and water licences and state that:

- the licensee must, unless notified in writing by the Authority, provide the Authority with a performance audit within 24 months after the commencement date, and every 24 months thereafter;
- the licensee must comply, and must require the licensee's auditor to comply with the Authority's standard audit guidelines dealing with the performance audit, including any minimum requirements relating to the appointment of the auditor, the scope of the audit, the conduct of the audit and the reporting of the results of the audit;
- the licensee may seek a review of any of the matters in the standard audit guidelines in accordance with the general provision in the licence for review of the Authority's decisions; and
- the independent auditor must be nominated by the licensee and approved by the Authority prior to the commencement of the audit.

1.2.2 Review of the asset management system

An asset management system is required to set out the measures to be taken by the licensee for the proper maintenance of assets used in the provision and operation of services and, where appropriate, the construction or alteration of relevant assets.

The asset management system should include asset management plans for all of the licensee's assets which set out the measures that are to be taken by the licensee for the proper maintenance of assets. The plans need to convey to the

¹ Where gas and water licence conditions differ, licences shall be reviewed in an effort to standardise licence conditions.

Authority the licensee's business strategies to ensure the effective management of assets over at least a five year period.

An asset management system applies to all licences with the exception of electricity (retail) and gas (trading) licences.

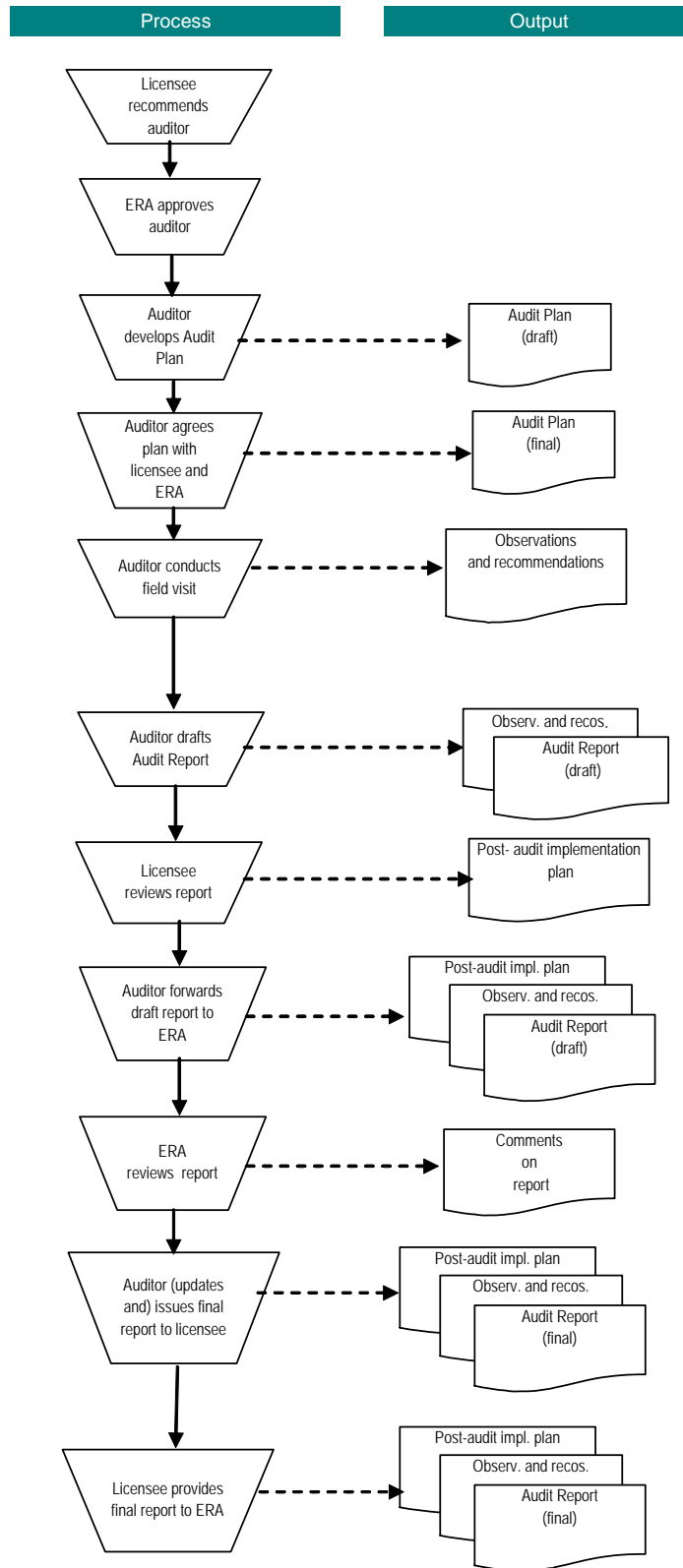
The standard licence conditions for electricity licences² are similar to those for gas and water licences and state that:

- the licensee must, unless notified in writing by the Authority provide the Authority with a report as to the effectiveness of the asset management system not less than once every 24 months calculated from the granting of the licence;
- the licensee must comply, and must require the licensee's expert to comply with the Authority's standard review guidelines dealing with the asset management system, including any minimum requirements relating to the appointment of the expert, the scope of the review, the conduct of the review and the reporting of the results of the review;
- the licensee may seek a review of any of the matters in the standard review guidelines in accordance with the general provision in the licence for review of the Authority's decisions; and
- the independent expert may be nominated by the licensee but must be approved by the Authority prior to the commencement of the review.

² Where gas and water licence conditions differ, licences shall be reviewed in an effort to standardise licence conditions.

1.3 Diagram of audit process

The overall audit process described in this Audit Guideline is shown below.



2 Appointment of Auditor/Expert

The independent auditor/consultant/expert (auditor) must be nominated by the licensee and approved by the Authority prior to the audit/review.

The licensee, in seeking the Authority's approval of their nominated auditor, must provide the Authority with the auditor's submission/tender or claims against the selection criteria.

The criteria for selection of an auditor are outlined below.

2.1 Selection criteria

The auditor's selection is to be based on the following criteria:

- substantial experience in the audit/review team in performance and compliance auditing, with a preference for experience in provision of a similar scope of services across a large organisation/utility;
- the audit/review team members':
 - audit skills;
 - engineering and technical expertise;
 - business management consulting skills, particularly in the areas of customer service measurement and development; and
 - the resource mix (i.e. the percentage of time to be undertaken by the various levels of personnel);
- the cost of providing the services;
- methodology proposed for the audit/review, which shall include a proposed program for the services demonstrating the auditor's ability to complete the services and provide the audit/review reports by the required dates;
- compliance with the Conditions of Engagement (refer section 2.2);
- compliance with Australian Auditing Standards; and
- compliance with the standard audit guidelines for performance/operational audits and/or asset management system reviews.

The auditor must address the above criteria in the quotation. The criteria are not detailed in any particular order and are not necessarily exhaustive or to be given equal weight.

2.2 Conditions of engagement

The conditions of engagement of the auditor are outlined below.

2.2.1 Independence

The auditor must be independent of the licensee and, in particular:

- the auditor must not hold office or have a commercial interest in the licensee;

- the auditor must not be currently undertaking, or has recently completed employment or contractual tasks for the licensee which would create, or could be seen to create a conflict of interest with its duty to the Authority;
- where the auditor is undertaking, or has recently completed employment or contractual obligations for the licensee, the auditor must provide supporting information demonstrating that a lack of conflict of interest is proven when tendering for the audit/review; and
- the auditor must not have any other interest, obligation or duty (whether owed to the licensee or any other person employed or holding office with the licensee) as a result of which the auditor's obligations are, or could reasonably be seen to be, influenced or in conflict with the auditor's independence in fulfilling this engagement.

2.2.2 Duty of care to the Authority

While the client for the audit/review is the licensee, the auditor has a duty of care to the Authority to conduct the audit/review independently and free of bias, and to report the findings to the Authority and licensee in a complete and unbiased manner.

Where there is any disagreement on the findings and/or recommendations between the auditor and the licensee that cannot be resolved, this must be included in the final audit report which is to be provided to the Authority.

2.2.3 Assistance to be provided by the Authority

When the contract has been awarded, the Authority may provide the auditor with the following documents (unless previously provided as part of the tender for the audit):

- a briefing on the Authority's requirements in respect of the specific audit/review;
- a copy of the latest asset management plans provided to the Authority;
- a copy of the licensee's previous performance/audits; and
- a copy of the licensee's previous asset management system reviews.

2.2.4 Assistance to be provided by the licensee

The licensee will facilitate the audit/review by providing:

- an overview of access to required materials and information sources that the auditor requires to undertake the audit/review;
- introductions to the relevant business representatives in each of the licensee's divisions being audited/reviewed;
- data, performance reports, access to records, other relevant information and employees, and entry to relevant sites to assist in the conduct and accuracy of the audit/review;
- access to all relevant material and individuals to allow the audit/review to be conducted; and
- a reasonable amount of assistance to facilitate accurate information being acquired in a timely manner by the auditor.

2.2.5 Repeat audit

The Authority may require the licensee to replicate the audit/review using a second auditor of the Authority's choosing if:

- the auditor has not observed its responsibility to the Authority; or
- the audit/review team is changed in a way which unacceptably reduces its independence or competence; or
- the auditor has otherwise not acted in accordance with the audit/review guidelines.

2.3 Auditing standards

The performance/operational audit and review of the asset management system are required to be undertaken in accordance with current Australian Auditing Standards, as outlined below.

2.3.1 AUS 806 performance auditing

AUS 806³ provides standards and guidance on the objective and general principles governing a performance audit. In particular, the auditor should:

- comply with the ethical principles governing an auditor's professional responsibilities such as independence, integrity, objectivity, professional competence, confidentiality, etc;
- conduct the audit in accordance with relevant Australian Auditing Standards;
- adopt an attitude of professional scepticism throughout the audit;
- agree with the licensee (and the Authority) on the terms of the engagement;
- plan the audit work to perform the audit in an effective manner;
- supervise and review any work delegated to an assistant and obtain adequate evidence where the work of an expert (third party) is being relied upon;
- be satisfied that sufficient suitable criteria have been identified to enable "performance" to be assessed;
- obtain sufficient appropriate audit evidence to be able to draw reasonable conclusions;
- document matters that are important to supporting the audit conclusions and to confirm the audit was carried out in accordance with relevant Australian Auditing Standards; and
- prepare the audit report on the basis of the conclusions drawn from the audit evidence.

³ AUS 806 Performance Auditing July 2002, Auditing and Assurance Standards Board.

2.3.2 AUS 808 planning performance audits

AUS 808⁴ provides standards and guidance on planning a performance audit. It requires the auditor to:

- obtain knowledge of the business sufficient to understand those factors or events that may have a significant effect on the performance information, the audit or the audit report;
- establish or assess the audit objectives and audit scope; and
- develop an audit plan based on the scope and conduct of the audit.

3 Performance/Operational audit

The guidelines for the scope, conduct and reporting of the performance/operation audit (audit) are outlined below.

3.1 Audit objective

The objective of the audit is to provide an assessment of the effectiveness of measures taken by the licensee to maintain the performance and quality standards referred to in the licence.

The audit is to apply a risk-based audit approach to focus on the systems and effectiveness of processes used to ensure compliance with the standards, outputs and outcomes required by the licence.

The audit objectives for review of internal controls over the systems and processes include:

- **completeness** – all material events are recorded;
- **accuracy** – all material events are recorded and the results of these events calculated accurately;
- **authorisation** – all material events recorded were properly authorised;
- **validity** – all material events recorded have actually occurred; and
- **regulatory controls** – all material events have complied with statutory controls and licence conditions.

The audit will identify any areas where improvement is required and recommend corrective action as necessary.

3.2 Audit scope

The scope of the audit is to cover:

- **risk assessment** – the assessment of risks posed by non-compliance with the licence standards and development of a risk-based audit plan to focus on the higher risk areas, with less intensive coverage of medium and low risk areas;

⁴ AUS 808 Planning Performance Audits October 1995, Auditing and Assurance Standards Board.

- **process compliance** - the effectiveness of systems and procedures in place throughout the audit period, including the adequacy of internal controls;
- **outcome compliance** – the actual performance against standards prescribed in the licence throughout the audit period;
- **output compliance** – the existence of the output from systems and procedures throughout the audit period (that is, proper records exist to provide assurance that procedures are being consistently followed and controls are being maintained);
- **integrity of performance reporting** – the completeness and accuracy of the performance reporting to the Authority; and
- **compliance with any individual licence conditions** - the requirements imposed on the specific licensee by the Authority or specific issues for follow-up that are advised by the Authority.

3.3 Frequency of audit

The legislation requires the Authority to conduct performance/operational audits of licensees every 24 months, unless varied by the Authority.

The Authority intends to vary the frequency of audits based on a risk assessment such that licensees that can demonstrate consistent and effective compliance through previous audit results will be audited less frequently than those licensees with lower levels of compliance.

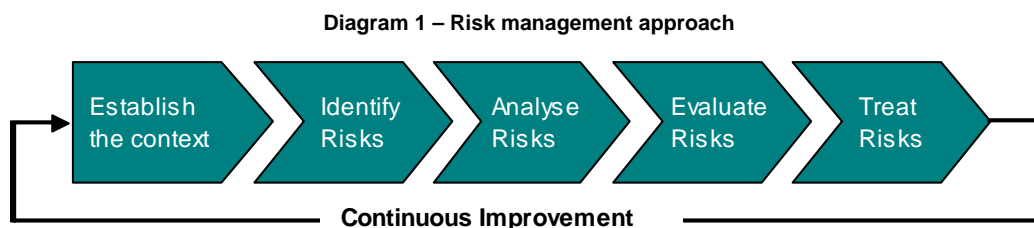
For example, an organisation that has demonstrated full-compliance in an audit and a well-developed asset management system may have the audit interval increased to three or four years whereas an organisation with only minor or moderate compliance with the licence obligations may have the next audit scheduled for one or two years.

3.4 Assessing risk

The first stage of a performance audit is to conduct a preliminary assessment of the risks of non-compliance with the licence obligations in order to focus the audit and identify higher risk areas for testing.

The preliminary risk assessment is to be documented in an audit plan to be reviewed and approved by the Authority and the licensee prior to the fieldwork commencing. This risk assessment should be updated during the fieldwork and presented in the final report.

The risk assessment is based on the Australian/New Zealand Standard AS/NZS 4360:2004 Risk Management as shown in Diagram 1.



The main elements of the risk assessment process relevant to a performance/operational audit are described below.

3.4.1 Establish the context

The context is the relevant legal and regulatory environment that applies to the particular industry, industry codes, the licence and the Authority's regulatory functions and objectives in association with the risk criteria described in this guideline.

3.4.2 Identify risks

Review the licence obligations and identify the risks that may affect compliance with these obligations. Consider where, when, why and how events could prevent, degrade or delay compliance with the licence obligations.

As described in Section 1.1, licences are granted subject to conditions intended to promote the objectives of the legislation governing the Authority. The conditions relevant to the licensing of service providers have been used to frame the types of risk as shown in Table 3.1.

Table 3.1 – Types of risk

Type of Risk	Examples
Non-compliance with supply quality	Public health and safety issues, quality not fit-for-purpose.
Non-compliance with supply reliability	Delays in new connections, disruptions to supplies, insufficient supplies.
Non-compliance with consumer protection	Customer service levels not met, higher prices charged.
Non-compliance with legislation/licence	Breach of industry Acts and regulations, other licence conditions not met eg, performance reporting to the Authority.

3.4.3 Analyse risks

The analysis is to be performed as follows:

- identify the consequences and likelihood of the inherent risks to give an overall inherent risk; and
- identify and assess the strength of the existing internal controls that mitigate the inherent risks.

These steps are explained below.

1. Identify the consequences and likelihood of the inherent risks to give an overall inherent risk

An "inherent risk" is the risk of an event assuming there are no effective controls. It is similar to the concept of materiality. For example, the inherent risk if water quality standards are not met is higher for a potable water supplier than an irrigator due to the potential direct impact on public health.

The consequences of the risk occurring are assessed using the ratings in Table 3.2. The examples indicate that the consequences of 'supply quality' and 'supply reliability' would generally be rated higher than 'consumer protection' and 'breaches of legislation' due to the risk to public safety and health.

Table 3.2 – Consequence ratings

	Rating	Examples of non-compliance			
		Supply quality	Supply reliability	Consumer protection	Breaches of legislation or other licence conditions
1	Minor	Minor public health or safety issues. Breach of quality standards minor - minimal impact on customers.	System failure or connection delays affecting only a few customers. Some inconvenience to customers.	Customer complaints procedures not followed in a few instances. Nil or minor costs incurred by customers.	Licence conditions not fully complied with but issues have been promptly resolved.
2	Moderate	Event is restricted in both area and time eg, supply of service to one street is affected for up to one day. Some remedial action is required.	Event is restricted in both area and time eg supply of service to one street is affected for up to one day. Some remedial is required.	Lapse in customer service standards is clearly noticeable but manageable. Some additional cost may be incurred by some customers.	Clear evidence of one or more breaches of legislation or other licence conditions and/or sustained period of breaches.
3	Major	Significant system failure. Life-threatening injuries or widespread health risks. Extensive remedial action required.	Significant system failure. Extensive remedial action required.		

The likelihood of the risk occurring is assessed using the ratings in Table 3.3.

Table 3.3 – Likelihood ratings

	Level	Criteria
A	Likely	Non-compliance is expected to occur at least once or twice a year
B	Probable	Non-compliance is expected to occur once every three years
C	Unlikely	Non-compliance is expected to occur once every 10 years or longer

The overall inherent risk is then determined using Table 3.4.

Table 3.4 – Risk evaluation

Likelihood	Consequence		
	1. Minor	2. Moderate	3. Major
A. Likely	Medium	High	High
B. Probable	Low	Medium	High
C. Unlikely	Low	Medium	High

A description of each risk rating is included in Table 3.5.

Table 3.5 – Description of risk levels

Level	Description
High	Likely to cause major damage, disruption or breach of licence obligations
Medium	Unlikely to cause major damage but may threaten the efficiency and effectiveness of service

Low	Unlikely to occur and consequences are relatively minor
------------	---

2. Identify and assess the strength of the existing internal controls that mitigate the inherent risks

The next step is to identify and assess the strength of the existing internal controls that mitigate the inherent risks.

‘Internal control’⁵, consists of the following components:

- the control environment (corporate governance, organisation structure, assignment of authority and responsibility, documentation of policies and procedures, human resource practices, records management, etc);
- the licensee’s risk assessment process;
- the information system, including the related business processes relevant to the licence obligations;
- control activities (authorisation, segregation of duties, physical controls and security, etc); and
- monitoring of controls (management review, internal audit, other audits, etc).

The adequacy of controls is assessed using the ratings in Table 3.6.

Table 3.6 – Adequacy of existing controls

	Level	Description
3	Strong	Strong controls that are sufficient for the identified risks
2	Moderate	Moderate controls that cover significant risks; improvement possible
1	Weak	Controls are weak or non-existent and have minimal impact on the risks

A preliminary assessment of controls is made during the planning stage of the audit. The risk assessment is revised during the audit as evidence is gathered on the effectiveness of the controls in place, with the updated assessment forming part of the final audit report.

3.4.4 Evaluate risks

The risk analysis enables decisions to be made on the scope and depth of audit testing to be performed as shown in Table 3.7.

Table 3.7 – Assessment of audit priority

		Adequacy of existing controls		
		Weak	Moderate	Strong
Inherent Risk	High	Audit priority 1	Audit priority 2	
	Medium	Audit priority 3	Audit priority 4	
	Low	Audit priority 5		

The assessment of audit priority is used to determine the audit objectives and the nature and extent of audit testing required for an opinion on the audit objective.

For example, an Audit Priority 1 is a ‘high risk’ area and would usually require extensive controls and/or substantive testing to provide adequate assurance that

⁵ Auditing and Assurance Standard AUS 402 February 2004, Auditing and Assurance Standards Board.

no major breaches of the relevant licence obligation had occurred during the audit period.

Conversely, an Audit Priority 5 is a 'low risk' area and would only require confirmation by discussion and desktop review of documented procedures to confirm that adequate controls exist to comply with the licence obligation.

3.4.5 Treat risks

The auditor will assess compliance with the licence obligations and recommend any corrective action or improvements required.

Where significant issues are reported, the Authority may seek a management and/or Board response from the licensee.

3.5 Audit conduct

The audit approach is a matter for professional judgment of the auditor and will necessarily be specific to the audit and the licensee.

However, to ensure consistency across audits and industries, the authority would normally expect the audit approach to include the steps outlined below.

3.5.1 Planning

Prior to the commencement of the audit, copies of any previous audit report, the latest management plans and performance reporting statistics for the audit period must be obtained by the auditor.

The auditor is required to perform a risk assessment of the licence requirements in respect of the type of service provider (in tabular form against each licence obligation). A suggested approach is included in section 3.4 above. This usually requires contact with the licensee to gain an understanding of the business, relevant management plans, systems, inherent risks and control risks prior to the audit visit.

A draft audit plan, including the risk assessment and proposed audit approach, must be submitted to the licensee and the Authority for review and approval prior to the audit visit.

For smaller organisations, a draft Audit Plan including a pre-determined risk assessment is included in the Authority approved document 'Audit Guidelines: Electricity, Gas and Water Licensing: Audit Template for Smaller Organisations'. The plan should be reviewed and updated for the specific licensee before submitting the plan to the Authority.

3.5.2 Fieldwork

The auditor will undertake the audit visit to the licensee's organisation to personally assess compliance through the following audit activities:

- confirmation of action taken on any previous audit recommendations;
- an analysis of documented procedures to assess whether they are consistent with regulatory requirements or arrangements under the licence;
- a review of systems and procedures to assess whether they reflect compliance obligations and performance standards;

- an analysis of information systems, procedures and controls for recording and assuring the quality of performance information provided to the Authority (this usually also requires audit testing of the completeness and accuracy of performance reporting to the Authority);
- an assessment of compliance with the licence obligations over the audit period; and
- an assessment of any obligations, requirements, issues specific to the individual licensee.

There should be more extensive audit testing of higher risk areas to provide sufficient assurance of compliance. For example, for higher risk areas where the volume of services or relevant transactions is large, sampling techniques may need to be utilised to provide adequate assurance that test results are representative of the licensee's operations.

It may be sufficient for lower risk areas to be covered by discussion and observation rather than detailed testing.

The auditor will update the risk assessment with any new information obtained in the course of the audit testing and, in instances of significant non-compliance, assess the licensee's plan to ensure compliance and recommend any further improvements to achieve compliance.

3.6 Audit reporting

3.6.1 Content of report

The auditor should provide a comprehensive report including the details described below.

Executive Summary

An executive summary should include:

- brief background on the type of licence and any major changes since the previous audit;
- a summary of key issues arising from the audit;
- the overall inherent and control risks assessment;
- the overall assessment of compliance with the licence obligations;
- a statement signed by the lead auditor that these guidelines have been complied with in the conduct of the audit and the preparation of the report; and
- that the audit findings reflect the professional opinion of the auditor.

Detailed Report

Background

The report should provide a brief outline of the licensee's services and any significant or planned changes since the previous review.

Audit Approach

The report information should specify:

- a description of the audit objectives, scope and methodology;
- the period covered by the audit and the dates on which it was conducted;
- a list of the licensee's representatives participating in the audit;
- a list of key documents examined; and
- a list of the audit team and hours utilised.

Compliance Summary

The report should provide a table that summarises the licence obligation, the updated risk assessment and the compliance rating using the compliance rating scale in Table 3.8.

Table 3.8 - Compliance ratings

Name	Rating	Description
FULLY COMPLIANT	5	Compliant - no further action required
COMPLIANT	4	Compliant apart from minor issues and recommendations
PARTIALLY COMPLIANT	3	Meets minimum requirements in most areas but improvements are required to maintain compliance
NON-COMPLIANT	2	Does not meet minimum requirements
SIGNIFICANTLY NON-COMPLIANT	1	Significant weaknesses and/or serious action required

An example of the format of the table is shown in Table 3.9.

Table 3.9 – Example of Compliance Summary

Operating area	Operating Licence reference (Cl.=clause, Sch.=schedule)	Consequence (1=minor, 2=moderate, 3=major)	Likelihood (A=likely, B=probable, C=unlikely)	Inherent Risk (Low, Medium, High)	Adequacy of existing controls (S=strong, M=moderate, W=weak)	Compliance Rating (1=significantly non-compliant, 2=non-compliant, 3=partially compliant, 4= compliant, 5=fully compliant)				
						1	2	3	4	5
SERVICE DELIVERY										
Water services in designated areas	Cl.2(b), Sch.1	1	C	Low	Strong					
Availability / connection of services	Cl.12(b)	2	C	Medium	Strong					
etc										

Status of Previous Audit Recommendations

The report should provide a summary of the action taken to rectify findings in the previous audit report and any further recommendations for improvement in these issues.

Observations and Recommendations

The report should provide a table showing for each licence obligation:

- an outline of the licence obligation;
- the systems and procedures that have been established to comply with the licence obligation, including relevant documents and responsible positions;
- details of any non-compliance or breaches of the licence obligations, including the potential impact/materiality and the action (if any) being undertaken by the licensee to rectify them and an assessment of the adequacy of this action;
- any recommendations for improvement; and
- the compliance rating.

Integrity of Performance Reporting

The report should provide an opinion on the integrity of performance reporting to the Authority.

Changes to the Licence

The report should note any recommended changes to the licence where the auditor considers the existing licence does not adequately address the risks.

Post-Audit Implementation Plan

The final report should include a post-audit implementation plan from the licensee that advises the action to be taken on each recommendation including the priorities assigned to each action and a schedule or timeframe to complete each action. If the auditor develops the post audit implementation plan, the licences must agree to the actions proposed. The post audit implementation plan can be either a separate document attached to the audit report or incorporated into the audit report.

Conclusion

The report should provide a conclusion on the overall level of compliance and the effectiveness of measures taken by the licensee to maintain the performance and quality standards referred to in the licence.

3.6.2 Reporting procedures

The auditor must carry out the following reporting procedures:

- prior to the conclusion of the audit visit, discuss any observations and recommendations with the representative of the licensee to confirm understanding of the issues and, if possible, to agree upon the action to be taken;
- provide a draft report to the licensee for review and response to the recommendations in a 'post-audit implementation plan', including the proposed corrective action and timeframe;
- provide a final draft report, including the post-audit implementation plan, to the Authority for final review and acceptance of the report no later than two weeks before the final report is due;
- upon acceptance by the Authority, provide a copy of the final report (electronic in Word or PDF format) to the licensee who will then provide an electronic copy and three printed copies of the report to the Authority;
- keep a record of all contacts with the licensee on the audit, all changes made to the report and reasons for the changes. (Note: The licensee may not require the auditor to change a finding and may not withhold payment or terminate the contract in respect of an adverse finding which has been competently made. The auditor or licensee must also advise the Authority of the nature of any significant changes to the draft report);
- the auditor may be required to make a presentation to the Authority on the final audit report;
- the Authority may request access to the working papers and/or further work be undertaken if not satisfied that the audit has been performed in accordance with the Authority's audit guidelines and/or has not adequately covered the objectives and scope of the audit;
- the Authority may make and publicly distribute copies of the final report and publish audit results in their entirety or in a comparative report. The Authority will make the audit report publicly available on the ERA website after the Authority has fulfilled its statutory functions (for example, advising the relevant Minister on the outcome of the audit); and
- the Authority will use the overall results of the audit to determine the time interval to the next audit of the licensee. The Authority intends to vary the frequency of audits based on a risk assessment such that licensees that can demonstrate consistent and effective compliance through audit results

will be audited less frequently than those licensees with lower levels of compliance.

4 Review of the Asset Management System

The guidelines for the scope, conduct and reporting of the review of the asset management system are outlined below.

4.1 Objective

The objective of the review is to assess the adequacy and effectiveness of the asset management system in place for the planning, construction, operation and maintenance of the licensee's assets.

The review should identify areas where improvement is required and recommend corrective action as necessary.

4.2 Scope

The review is to address the adequacy and effectiveness of the asset management system ('AMS') by considering the key processes of:

- asset planning;
- asset creation/acquisition;
- asset disposal;
- environmental analysis;
- asset operations;
- asset maintenance;
- asset management information system;
- risk management;
- contingency planning;
- financial planning;
- capital expenditure planning;
- review of AMS.

Further information on the key processes, effectiveness criteria and the effectiveness ratings scale to be applied is provided in Appendix A.

4.3 Frequency of review

The Authority anticipates that reviews will be conducted no more than once every 24 months.

The Authority may vary the frequency of reviews based on a risk assessment such that businesses that can demonstrate highly developed asset management systems through previous review results will be reviewed less frequently than those businesses with systems that require improvements (refer Section 3.3 for further details).

4.4 Conduct of review

The approach to the review is a matter for professional judgment of the auditor and will necessarily be specific to the review and the licensee.

However, to ensure consistency across reviews and industries the Authority would normally expect the review approach to include the steps outlined below.

4.4.1 Planning

Prior to the commencement of the review, copies of any previous asset management system reviews, the latest management plans and performance reporting statistics for the review period will be provided to the auditor.

A draft review plan, including the proposed approach to the review, must be submitted to the Authority and the licensee for review and approval prior to the review visit.

Where an integrated audit/review is to be completed, covering both the operational audit of licence compliance (refer Section 3) and review of the asset management system, a single audit/review plan may be provided.

4.4.2 Fieldwork

The approach will vary depending upon the different circumstances but the areas of consistency required from the auditor are to:

- analyse the licensee's documented procedures and processes for the planning, construction, operation and maintenance of assets to assess whether they are consistent with regulatory requirements and arrangements under the licence;
- interview key personnel to assess whether they understand and comply with the documented processes and procedures;
- provide detailed comments on the effectiveness of the key processes of the asset management system (refer Appendix A – Table A.3); and
- assess the licensee's plan for improvement in instances of significant deficiency and recommend any further improvements considered necessary.

An example of the review approach is included in Appendix A – Table A.3.

4.5 Reporting

4.5.1 Content of report

The auditor should provide a comprehensive report including the details described below.

Executive Summary

An executive summary should include:

- brief background on the type of licence and any major changes since the previous audit;
- a summary identifying key issues arising from the review and the overall assessment of the effectiveness of the asset management system; and
- a statement signed by the lead auditor that these guidelines have been complied with in the conduct of the review and the preparation of the report and that the findings reflect the professional opinion of the auditor.

Detailed Report

Background

The report should provide a brief outline of the licensee's services and any significant or planned changes since the previous review.

Review Approach

The report information should specify:

- a description of the review objectives, scope and methodology;
- the period covered by the review and the dates on which it was conducted;
- a list of the licensee's representatives participating in the review;
- a list of key documents examined; and
- a list of the review team and hours utilised.

Effectiveness Ratings Summary

The report should provide a table that summarises the auditor's assessment of the effectiveness ratings for each key process in the licensee's asset management system. The effectiveness ratings scale for key processes is shown in Table 4.1.

Table 4.1 - Asset management system effectiveness ratings

Name	Rating	Description
Continuously improving	5	Continuously improving organisation capability and process effectiveness
Quantitatively controlled	4	Measurable performance goals established and monitored
Well-defined	3	Standard processes documented, performed and coordinated
Planned and tracked	2	Performance is planned, supervised, verified and tracked
Performed informally	1	Base practices are performed
Not performed	0	Not performed (indicate if not applicable)

An example of the format of the table is shown in Table 4.2.

Table 4.2 - Summary of effectiveness of asset management system

ASSET MANAGEMENT SYSTEM		Not performed	Performed informally	Planned and tracked	Well defined	Quantitatively controlled	Continuously improving
Process	Effectiveness rating	0	1	2	3	4	5
Asset planning							
Asset creation/ acquisition							
Asset disposal							
Environmental analysis							
Asset operations							
Asset maintenance							
Asset Management Information System							
Risk management							
Contingency planning							
Financial planning							
Capital expenditure planning							
Review of AMS							

Status of Previous Review Recommendations

The report should provide a summary of the action taken to rectify findings in the previous review report and any further recommendations for improvement in these issues.

Observations and Recommendations

The report should provide a table showing for each of the key processes in the asset management system ('AMS'):

- the effectiveness criteria considered;
- observations on the systems and procedures that have been established in the AMS, including key documents and responsible positions;
- details of any deficiencies identified, recommended improvements;
- any action being taken already by the licensee to rectify the deficiencies and an assessment of the adequacy of this action; and
- the audit assessment of the effectiveness rating for the process.

Changes to the Licence

The report should note any recommended changes to the licence where the auditor considers the existing licence does not adequately address the risks.

Post-Review Implementation Plan

The final report should include a post-review implementation plan from the licensee that advises the action to be taken on each recommendation including the timeframe. This could be a separate document or incorporated into this report.

Conclusion

The report should provide a conclusion on the overall adequacy and effectiveness of the asset management system in place for the planning, construction, operation and maintenance of the licensee's assets.

4.5.2 Reporting procedures

The auditor must carry out the following reporting procedures:

- prior to the conclusion of the review visit, discuss any observations and recommendations with the representative of the licensee to confirm understanding of the issues and, if possible, to agree upon the action to be taken;
- provide a draft report to the licensee for review and response to the recommendations in a 'post-review implementation plan', including the proposed corrective action and timeframe;
- provide a final draft report, including the post-review implementation plan, to the Authority for final review and acceptance of the report no later than two weeks before the final report is due;
- upon acceptance by the Authority, provide a copy of the final report (electronic in Word or PDF format) to the licensee who will then provide an electronic copy and three printed copies of the report to the Authority;
- keep a record of all contacts with the licensee on the review, all changes made to the report and reasons for the changes. (Note: The licensee may not require the auditor to change a finding and may not withhold payment or terminate the contract in respect of an adverse finding which has been competently made. The auditor or licensee must also advise the Authority of the nature of any significant changes to the draft report);
- the auditor may be required to make a presentation to the Authority on the final review report;
- the Authority may request access to the working papers and/or further work be undertaken if not satisfied that the review has been performed in accordance with the Authority's audit guidelines and/or has not adequately covered the objectives and scope of the review;
- the Authority may make and publicly distribute copies of the final report and publish results in their entirety or in a comparative report. The Authority will make the review report publicly available on the ERA website after the Authority has fulfilled its statutory functions (for example, advising the relevant Minister on the outcome of the review); and
- the Authority will use the overall results of the review to determine the time interval to the next review of the licensee. The Authority intends to vary the frequency of reviews such that licensees that can demonstrate consistent and effective asset management systems will be reviewed less frequently than other licensees with less effective systems.

5 Amendments

The Authority may amend or revoke this guideline.

Any amendments will be made available to licensees and interested parties for comment prior to an updated version being issued.

Appendix A – A Guide to the AMS Effectiveness Framework

An asset management system comprises the processes of planning and monitoring physical assets used for the provision of services during their useful lives to the licensee.

Assets should only exist to support the service delivery, therefore a key starting point is to establish the links between assets and service delivery. The extended life of assets means that an acquisition based on the lowest purchase price but which ignores potential operating costs over the life of the asset, may result in a higher overall cost over the asset's life. It is therefore essential to consider the asset life-cycle.

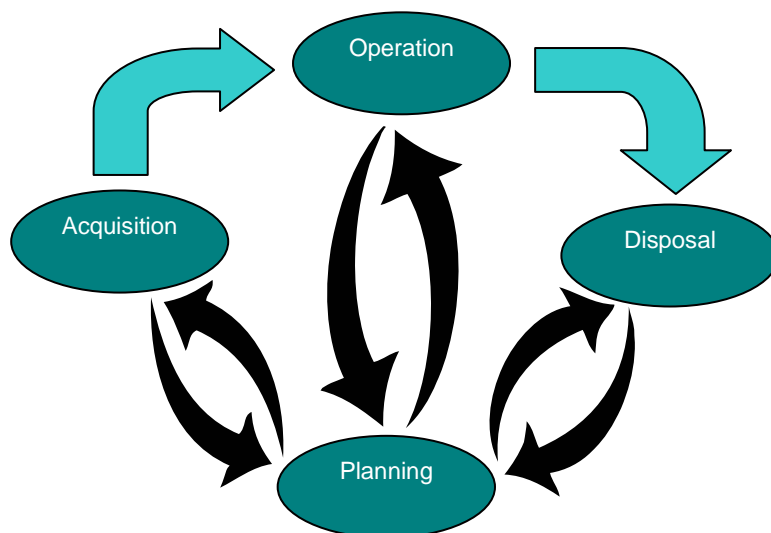
1 Asset life-cycle

The fact that assets have a life-cycle distinguishes them from other program resource inputs. The physical life-cycle of an asset or group of assets has three distinct phases - acquisition, operation and disposal.

Typically, those responsible for acquisition decisions in an organisation differ from those responsible for operating and maintaining assets, and these groups often differ from those responsible for their disposal. Problems may arise as a consequence of this fragmentation of management over the asset life-cycle.

A fourth phase, planning, is a continuous process where the information outputs from each phase are used as an input to planning. The four phases are shown in Diagram A.1.

Diagram A.1 - Asset Life Cycle



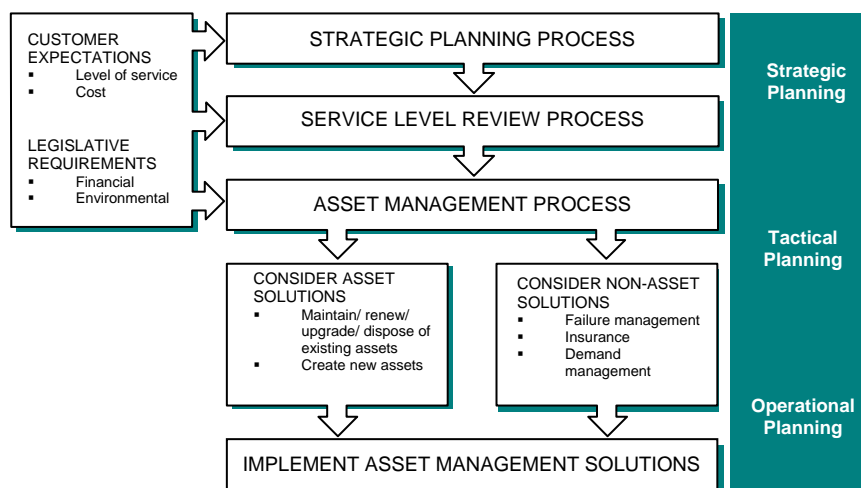
Source: Better Practice Guide – Asset Management Handbook June 1996, Australian National Audit Office

2 Asset management framework

In order to effectively control the four phases in the asset life-cycle, the process as a whole needs to be planned and managed.

Diagram A.2 provides an example of a total asset management framework, from planning to implementation.

Diagram A.2 – Total asset management framework



Source: International Infrastructure Management manual – Version 2.0,2002, Association of Local Government Engineering NZ Inc and the Institute of Public Works Engineering of Australia.

2 AMS key processes

The key asset management system processes to be considered in the AMS review of a licensee are:

- asset planning (including development and maintenance of an asset management plan);
- asset creation and acquisition;
- asset disposal;
- environmental analysis (all external factors that affect the system);
- asset operations;
- asset maintenance;
- asset management information system;
- risk management;
- contingency planning;
- financial planning;
- capital expenditure planning; and
- review of AMS.

Table A.3 provides an indicative guide of the key AMS processes, effectiveness criteria and a suggested review approach for the AMS review.

The suggested review approach is intended to provide an example only and should be adapted by the auditor to suit AMS reviews for specific licensees.

Table A.3 – AMS Key Processes and Audit Approach

Key process	Outcome	Effectiveness criteria	Example of review approach
<p>1. Asset planning</p> <p>Asset planning strategies are focused on meeting customer needs in the most effective and efficient manner (delivering the right service at the right price).</p>	<p>Integration of asset strategies into operational or business plans will establish a framework for existing and new assets to be effectively utilised and their service potential optimised.</p>	<ul style="list-style-type: none"> ▪ Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning ▪ Service levels are defined ▪ Non-asset options (eg demand management) are considered ▪ Lifecycle costs of owning and operating assets are assessed ▪ Funding options are evaluated ▪ Costs are justified and cost drivers identified ▪ Likelihood and consequences of asset failure are predicted ▪ Plans are regularly reviewed and updated 	<ul style="list-style-type: none"> ▪ Assess the adequacy of the asset planning process ▪ Assess the adequacy of the asset management plan ▪ Assess whether the asset management plan is up-to-date and implemented in practice ▪ Assess whether the plan clearly assigns responsibilities and whether these have been applied in practice
<p>2. Asset creation and acquisition</p> <p>Asset creation/acquisition means the provision or improvement of an asset where the outlay can be expected to provide benefits beyond the year of outlay.</p>	<p>A more economic, efficient and cost-effective asset acquisition framework which will reduce demand for new assets, lower service costs and improve service delivery.</p>	<ul style="list-style-type: none"> ▪ Full project evaluations are undertaken for new assets, including comparative assessment of non-asset solutions ▪ Evaluations include all life-cycle costs ▪ Projects reflect sound engineering and business decisions ▪ Commissioning tests are documented and completed ▪ Ongoing legal/environmental/safety obligations of the asset owner are assigned and understood 	<ul style="list-style-type: none"> ▪ Assess the adequacy of policies and procedures covering the creation and acquisition of assets ▪ Select a sample of creations/ acquisitions over the review period and confirm that adequate procedures have been followed and actual costs are as predicted
<p>3. Asset disposal</p> <p>Effective asset disposal frameworks incorporate consideration of alternatives for the disposal of surplus, obsolete, under-performing or unserviceable assets. Alternatives are evaluated in cost-benefit terms.</p>	<p>Effective management of the disposal process will minimise holdings of surplus and under-performing assets and will lower service costs.</p>	<ul style="list-style-type: none"> ▪ Under-utilised and under-performing assets are identified as part of a regular systematic review process ▪ The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken ▪ Disposal alternatives are evaluated ▪ There is a replacement strategy for assets 	<ul style="list-style-type: none"> ▪ Assess the adequacy of policies and procedures covering the identification of under-performing assets, disposal of assets and replacement strategy ▪ Determine whether a regular review of the usefulness of assets is performed ▪ Select a sample of disposals over the review period and confirm that adequate procedures have been followed

Key process	Outcome	Effectiveness criteria	Example of review approach
<p>4. Environmental analysis Environmental analysis examines the asset system environment and assesses all external factors affecting the asset system.</p>	<p>The asset management system regularly assesses external opportunities and threats and takes corrective action to maintain performance requirements.</p>	<ul style="list-style-type: none"> ▪ Opportunities and threats in the system environment are assessed ▪ Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved ▪ Compliance with statutory and regulatory requirements ▪ Achievement of customer service levels 	<ul style="list-style-type: none"> ▪ Review achievement of performance and service standards over the audit period ▪ Investigate any breaches and assess corrective action taken ▪ Review the adequacy of reporting and monitoring tools
<p>5. Asset operations Operations functions relate to the day-to-day running of assets and directly affect service levels and costs.</p>	<p>Operations plans adequately document the processes and knowledge of staff in the operation of assets so that service levels can be consistently achieved.</p>	<ul style="list-style-type: none"> ▪ Operational policies and procedures are documented and linked to service levels required ▪ Risk management is applied to prioritise operations tasks ▪ Assets are documented in an Asset Register including asset type, location, material, plans of components, an assessment of assets' physical/structural condition and accounting data ▪ Operational costs are measured and monitored ▪ Staff receive training commensurate with their responsibilities 	<ul style="list-style-type: none"> ▪ Assess the adequacy of policies and procedures covering operations functions ▪ Assess the adequacy of staff resourcing and training ▪ Confirm the policies and procedures have been followed during the review period by testing of asset register, observation of operational procedures, analysis of costs, etc ▪ Assess the significance of exceptions identified and whether adequate corrective action has been taken
<p>6. Asset maintenance Maintenance functions relate to the upkeep of assets and directly affect service levels and costs.</p>	<p>Maintenance plans cover the scheduling and resourcing of the maintenance tasks so that work can be done on time and on cost.</p>	<ul style="list-style-type: none"> ▪ Maintenance policies and procedures are documented and linked to service levels required ▪ Regular inspections are undertaken of asset performance and condition ▪ Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule ▪ Failures are analysed and operational/maintenance plans adjusted where necessary ▪ Risk management is applied to prioritise maintenance tasks ▪ Maintenance costs are measured and monitored 	<ul style="list-style-type: none"> ▪ Assess the adequacy of policies and procedures covering maintenance functions ▪ Confirm the policies and procedures have been followed during the review period by testing of maintenance schedules, analysis of costs, etc ▪ Assess the significance of exceptions identified and whether adequate corrective action has been taken

Key process	Outcome	Effectiveness criteria	Example of review approach
<p>7. Asset Management Information System (MIS) An asset management information system is a combination of processes, data and software that support the asset management functions.</p>	<p>The asset management information system provides authorised, complete and accurate information for the day-to-date running of the asset management system. The focus of the review is the accuracy of performance information used by the licensee to monitor and report on service standards.</p>	<ul style="list-style-type: none"> ▪ Adequate system documentation for users and IT operators ▪ Input controls include appropriate verification and validation of data entered into the system ▪ Logical security access controls appear adequate, such as passwords ▪ Physical security access controls appear adequate ▪ Data backup procedures appear adequate ▪ Key computations related to licensee performance reporting are materially accurate ▪ Management reports appear adequate for the licensee to monitor licence obligations 	<ul style="list-style-type: none"> ▪ Assess the adequacy of policies and procedures covering the general control and security of the computer systems used to provide management information on service standards/licence obligations ▪ Confirm that management reports on service standards/licence obligations are being reviewed and significant exceptions to service standards are promptly followed up and actioned
<p>8. Risk management Risk management involves the identification of risks and their management within an acceptable level of risk.</p>	<p>An effective risk management framework is applied to manage risks related to the maintenance of service standards</p>	<ul style="list-style-type: none"> ▪ Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system ▪ Risks are documented in a risk register and treatment plans are actioned and monitored ▪ The probability and consequences of asset failure are regularly assessed 	<ul style="list-style-type: none"> ▪ Assess the adequacy of policies and procedures covering risk management and contingency planning ▪ Assess whether the risk management policies and procedures have been applied in practice ▪ Assess the adequacy of staff understanding and training on risk management
<p>9. Contingency planning Contingency plans document the steps to deal with the unexpected failure of an asset.</p>	<p>Contingency plans have been developed and tested to minimise any significant disruptions to service standards.</p>	<ul style="list-style-type: none"> ▪ Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks 	<ul style="list-style-type: none"> ▪ Determine whether contingency plans have been developed and are current ▪ Determine whether contingency plans have been tested. If so, review the results to confirm that any improvements identified have been actioned.

Key process	Outcome	Effectiveness criteria	Example of review approach
<p>10. Financial planning The financial planning component of the asset management plan brings together the financial elements of the service delivery to ensure its financial viability over the long term.</p>	<p>A financial plan that is reliable and provides for the long-term financial viability of the services.</p>	<ul style="list-style-type: none"> ▪ The financial plan states the financial objectives and strategies and actions to achieve the objectives ▪ The financial plan identifies the source of funds for capital expenditure and recurrent costs ▪ The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets) ▪ The financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period ▪ The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services ▪ Significant variances in actual/budget income and expenses are identified and corrective action taken where necessary 	<ul style="list-style-type: none"> ▪ Obtain an understanding of the financial planning, budgeting and reporting process and assess its effectiveness ▪ Obtain a copy of the current financial plan (including budget/actual) and assess whether the process is being followed
<p>11. Capital expenditure planning The capital expenditure plan provides a schedule of new works, rehabilitation and replacement works, together with estimated annual expenditure on each over the next five or more years. Since capital investments tend to be large and lumpy, projections would normally be expected to cover at least 10 years, preferably longer. Projections over the next five years would usually be based on firm estimates.</p>	<p>A capital expenditure plan that provides reliable forward estimates of capital expenditure and asset disposal income, supported by documentation of the reasons for the decisions and evaluation of alternatives and options.</p>	<ul style="list-style-type: none"> ▪ There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates ▪ The plan provide reasons for capital expenditure and timing of expenditure ▪ The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan ▪ There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned 	<ul style="list-style-type: none"> ▪ Obtain an understanding of the capital expenditure planning process and assess its effectiveness ▪ Obtain a copy of the capital expenditure plan for the current year and assess whether the process is being followed

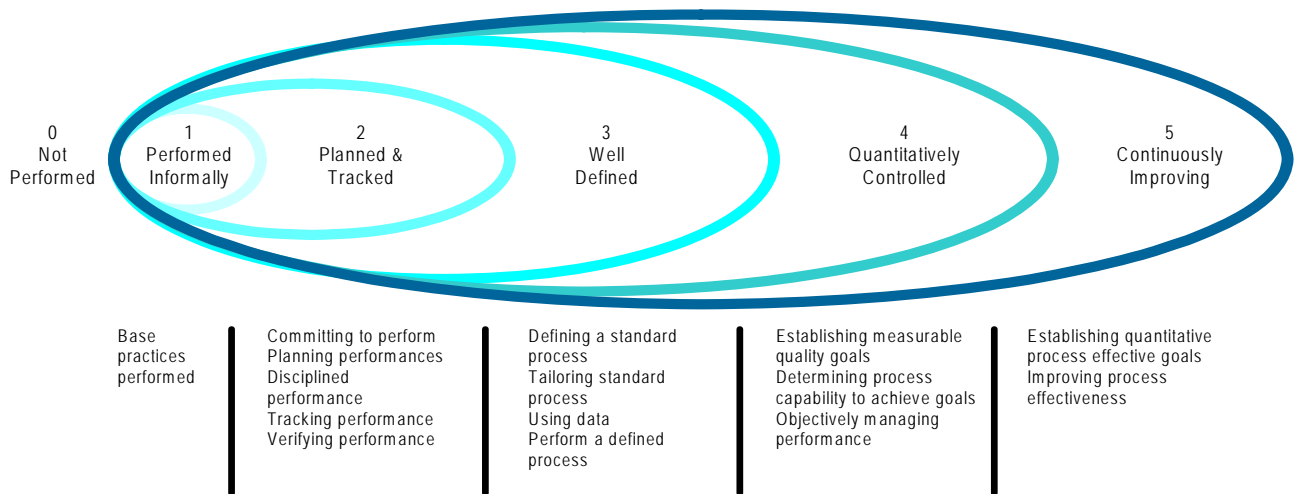
Key process	Outcome	Effectiveness criteria	Example of review approach
<p>12. Review of AMS The asset management system is regularly reviewed and updated.</p>	<p>Review of the Asset Management System to ensure the effectiveness of the integration of its components and their currency.</p>	<ul style="list-style-type: none"> ▪ A review process is in place to ensure that the asset management plan and the asset management system described therein are kept current ▪ Independent reviews (eg internal audit) are performed of the asset management system 	<ul style="list-style-type: none"> ▪ Determine when the asset management plan was last updated and assess whether any significant changes have occurred ▪ Determine whether any independent reviews have been performed. If so, review results and action taken ▪ Consider the need to update the asset management plan based on the results of this review

3 AMS effectiveness ratings

The capability maturity model shown in Diagram A.3 describes the stages through which processes progress as they are defined, implemented, and improved.

The model provides a rating method that may be used to assess the existence and institutionalisation of the processes that comprise an effective asset management system.

Diagram A.3 –Asset management system – Capability maturity model



END OF DOCUMENT