

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

AUDIT GUIDELINES: ELECTRICITY, GAS AND WATER LICENCES.....	1
1 Purpose of the guideline	3
2 Mandatory auditing requirements.....	3
3 The licensing framework for electricity, gas and water licences.....	4
3.1 The role of the Authority	4
3.2 Legislation governing electricity, gas and water licensing	5
3.3 Licence conditions related to audits and reviews.....	5
4 Australian audit standards.....	5
5 Audit/review purpose, scope and frequency	6
5.1 Operational/performance audit	6
5.2 Asset management system review	7
5.3 Risk based approach to auditing	7
5.4 Frequency of audit/review.....	8
6 The audit process.....	8
6.1 Auditor selection	8
6.1.1 Auditor selection criteria	9
6.1.2 Professional independence	9
6.1.3 Conditions of engagement for audits/reviews.....	10
6.2 Developing the audit plan	10
6.2.1 Approval of the audit plan by the Authority	10
6.2.2 General requirements for audit plans	10
6.2.3 Specific requirements for operational/performance audit plans.....	11
6.2.4 Asset management system review audit plans.....	11
6.2.5 Assistance to be provided by the Authority.....	12
6.3 Conducting the audit/review	12
6.3.1 Assistance to be provided by the licensee.....	12
6.3.2 Professional scepticism	12
6.3.3 Deviation from the approved audit plan	12
6.3.4 Fieldwork	13
6.3.5 AUS 502 - Audit evidence.....	13
6.3.6 General guidance on the conduct of audits/reviews	13
7 Audit/review reporting	14
7.1 Executive Summary	15
7.2 Audit/review scope.....	15
7.3 Licensee's response to previous audit recommendations	15
7.4 Performance summary	16
7.4.1 Operational/performance audit compliance summary	16
7.4.2 Asset management review effectiveness summary.....	17
7.5 Recommendations.....	18
7.5.1 Operational/performance audit	18

7.5.2	Asset management system review.....	18
7.6	Observations	18
7.7	Changes to the Licence.....	19
7.8	Signature of the auditor	19
7.8.1	Post-Audit Implementation Plan	19
7.8.2	Disagreement between the auditor and the licensee	20
7.9	Reporting to the Authority.....	20
7.10	Repeat audit	20
8	Reporting on the audit/review by the Authority	21
9	Commercial confidentiality	21
10	Amendments.....	21
	Appendix 1 – Risk based approach to operational/performance audits	22
	Appendix 2 – Process flowchart for performance/operational audits and asset management system reviews	27
	Appendix 3 – A Guide to the AMS Effectiveness Framework	28

1 Purpose of the guideline

The purpose of the guideline is to inform electricity, gas and water service providers licensed by the Authority and external auditors about the Authority's requirements regarding the conduct of performance/operational audits and asset management system reviews of licensees.

The guideline is designed to promote consistency of performance/operational audits and asset management system reviews through:

- Informing licensees and auditors about the legislative framework applicable to auditing licensee's compliance with licence conditions.
- Describing a framework for the conduct of audits/reviews based on Australian Auditing Standards.
- Adopting a risk based approach to planning audits and reviews using the risk assessment process in AS/NZS 4360:2004.
- Promoting consistency of reporting on the performance/operational audit by mandating a 5-point compliance rating scale.
- Promoting consistency of reporting on the effectiveness of asset management processes by mandating a 6-point effectiveness rating scale.
- Providing a framework for:
 - The criteria the Authority will consider when approving auditors.
 - The format and content of audit plans.
 - The conduct of the audit/review with reference to the audit standards.
 - The format and content of the audit/review report to be provided to the Authority.

The use of common rating scales to measure compliance with licence conditions and effectiveness of asset management processes enables the Authority to benchmark individual licensees and groups of licensees over time. The Authority intends to reduce the frequency of audits and reviews for licensees that can demonstrate consistent and effective compliance with licence requirements. This approach will benefit the licensee through reducing the costs and resources needed for audit activities over time.

2 Mandatory auditing requirements

In order to promote consistency of reporting on performance/operational audits and asset management system reviews the Authority has identified a number of mandatory requirements in respect of:

- Adopting a risk based approach to auditing with a preference for the risk evaluation model set out in AS/NZS 4360:2004.
- The compliance rating scale to be used to assess compliance with licence conditions.

- The effectiveness rating scale to be used to assess effectiveness of asset management processes.
- The terms and conditions of engagement for auditors employed to undertake audits/reviews of licensees.
- The format and content of an audit plan for audits/reviews.
- The format and content of the auditor's report.
- The format and content of the post-audit implementation plan.

The Authority has identified the mandatory requirements through the use of the words “must” and “requires” in the text.

3 The licensing framework for electricity, gas and water licences

3.1 *The role of the Authority*

Under the provisions of the *Economic Regulation Authority Act 2003* (ERA Act) section 25, it is a requirement that the Authority administers the licensing schemes for the provision of electricity services, gas services and water services.

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

- 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.
- Encourage investment in relevant markets.
- The legitimate business interests of investors and service providers in relevant markets.
- Promote competitive and fair market conduct.
- 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.

3.2 *Legislation governing electricity, gas and water licensing*

The legislation (Industry Acts) that governs the licensing of providers of electricity services, gas services and water services respectively is:

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

There are two types of audits prescribed under the Industry Acts (refer to sections 13-14, 11Y & 11ZA and 36-37 of the Electricity, Gas and Water Acts, respectively):

- Licensed service providers must 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).
- 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).

Regular audits of a licensee by independent auditors/experts provides the Authority with a level of assurance that the licensee is complying with its obligations with regard to supply quality, supply reliability, consumer protection and regulatory compliance.

Conditions in respect of audits/reviews are included in all licences except electricity retail licences and gas trading licences, which are not subject to conditions regarding the review of asset management systems.

3.3 *Licence conditions related to audits and reviews*

The Authority has developed licences for electricity, gas and water licences that are consistent with the corresponding legislation. There are some differences in the structure of these licences, particularly electricity licences, which reflect the structure and content of the corresponding legislation. However, the licence conditions dealing with the conduct of an audit in respect of the appointment of auditors and the frequency of audits for electricity licences¹ are similar to those for gas and water licences.

The reader is referred to the Authority's website (www.era.wa.gov.au) for more information on licence conditions.

4 Australian audit standards

The following sections of the guide refer to the principles outlined in the Australian Auditing Standards (Standards)². While the Standards have been developed by the accountancy profession, the audit principles in the Standards apply equally well to operational/performance audits and asset management system reviews of licensees.

¹ The Authority intends to review water and gas licences with a view to standardising licence conditions where possible.

² Auditing and Assurance handbook 2004 – Jeffrey Knapp & Stephanie Kemp, ISBN 1741032792

The Authority acknowledges that the audits/reviews of smaller licensees are more likely to be undertaken by specialist engineering consultants rather than professional auditors. However, auditors conducting audits/reviews of a licensee's compliance with licence conditions are advised to familiarise themselves with the standards that are identified in this guideline.

The Authority expects the audits/reviews of licensees to be conducted in accordance with the principles described in the standards that are identified in this guideline. However, it is left to the professional judgement of the auditor to determine how to apply the principles to a particular audit.

5 Audit/review purpose, scope and frequency

Section 3.2 identified two types of audits: operational/performance audits and asset management system reviews. Each type of audit has a separate and distinct purpose and scope as described below.

5.1 Operational/performance audit

The purpose of the operational/performance audit is to assess 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 scope of the audit must include the adequacy and effectiveness of performance against the requirements of the licence by considering:

- a) **Process compliance** - the effectiveness of systems and procedures in place throughout the audit period, including the adequacy of internal controls.
- b) **Outcome compliance** – the actual performance against standards prescribed in the licence throughout the audit period.
- c) **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).
- d) **Integrity of performance reporting** – the completeness and accuracy of the performance reporting to the Authority.
- e) **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.

5.2 Asset management system review

The purpose of the asset management system review is to assess the measures taken by the licensee for the proper management of assets used in the provision and operation of services and, where appropriate, the construction or alteration of relevant assets.

The asset management system review focuses on the asset management system, including asset management plans, which set out the measures that are to be taken by the licensee for the proper operation and maintenance of assets. The plans must convey the licensee's business strategies to ensure the effective management of assets over at least a five year period.

The scope of the asset management system review must include an assessment of the adequacy and effectiveness of the asset management system by evaluating 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 the asset management system.

The effectiveness criteria and effectiveness rating scale that is to be used in the review is described in sections 2 and 3 of Appendix 3 respectively.

5.3 Risk based approach to auditing

The primary purpose of an audit/review is to assess the effectiveness of measures taken by the licensee to ensure compliance with licence conditions or effectively manage its assets respectively. This guideline incorporates a risk-based approach to assessing the appropriate risk factors in order to focus the audit on higher risk areas, with less intensive coverage of medium and lower risk areas. The Authority requires all operational/performance audits to utilise a risk based approach to planning and conducting the audit/review.

In order to obtain greater consistency of risk assessment across the different industries and licensees, detailed guidelines (refer to Appendix 1) have been included on the Authority's preferred risk evaluation model, which is based on Australian/New Zealand Standard 4360:2004 (Risk Management). Applying this methodology results in audits/reviews providing a greater focus and depth of testing for higher risk areas

compared to medium and lower risk areas. There should be more extensive audit testing of higher risk areas to provide sufficient assurance of compliance or effective control.

The auditor has scope to evaluate risk using an alternative approach to that set out in Appendix 1. If this is the case, the auditor is required to specify the risk evaluation method in the audit report. The auditor is also required to map the audit priority ratings derived from their method onto the 5-point scale identified in Table 11 (Appendix 1) in the audit plan that is submitted to the Authority for approval.

5.4 Frequency of audit/review

Electricity, gas and water licences include conditions that specify the minimum period of time, usually 24 or 36 months, which can elapse between audits/reviews, subject to the Authority being able to extend these time periods at its discretion. It is the Authority's intention to vary the audit period for licensees depending on the level of compliance with licence conditions. Under this approach the audit/review period for each type of licence will be set at the standard interval. Licensees who are able to demonstrate high levels of compliance with licence conditions may be audited less frequently than the standard period. Conversely licensees who are demonstrating less favourable levels of compliance with licence conditions may be audited more frequently than the standard period for some or all of their licence conditions.

The outcomes of each audit/review will be used by the Authority to set the timing of subsequent audits/reviews. This approach will benefit the licensee through reducing the costs and resources needed for audit activities over time.

6 The audit process

Please refer to the flowchart in Appendix 2 for an overview of the process for conducting operational/performance audits and asset management reviews. The following sections discuss each stage of the process in more detail.

6.1 Auditor selection

The audit framework contemplated by the Industry Acts places the onus on the licensee to demonstrate compliance with the conditions of their licence by engaging independent experts (auditors) to conduct audits/reviews and report to the licensee and the Authority.

Under the Industry Acts the Authority must approve the auditor nominated by the licensee prior to their appointment by the licensee to undertake the audit/review. The Authority must be satisfied that an auditor nominated by a licensee has the required expertise and experience to conduct the audit/review to an acceptable standard.

It is anticipated the licensee will undertake a selection/tendering process to identify an auditor that is able to conduct the audit/review to a satisfactory standard in a cost effective manner. 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.

6.1.1 Auditor selection criteria

When considering the suitability of an auditor the Authority will give consideration to:

- The 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.
- The resource mix, i.e. the allocation of tasks to the team members with a breakdown of the hours of work to be undertaken by each team member.
- Proposed program for the audit/review, which demonstrates the auditor's ability to complete the audit/review and provide the audit/review report by the required date.

Licensees are encouraged to ensure the submission to the Authority seeking approval of an auditor addresses the items listed above as well as any other items considered relevant.

6.1.2 Professional independence

During the appointment process consideration will be given to the professional independence of the auditor, particularly where the auditor undertakes other professional work for the licensee.

The principles outlined in the Joint Code of Professional Conduct (professional statement F.1 in the Standards) relating to professional independence provide a sound basis for conducting audits/reviews in an independent and impartial manner. The key principles of professional independence articulated in the statement require the auditor to:

- a) Approach the audit/review with integrity and objectivity.
- b) Be seen to be free from any interest which is incompatible with objectivity.
- c) Carry out the audit in an objective manner and avoid any situations where personal relationships or financial involvements might threaten their objectivity.

The Authority requires licensees to provide complete information regarding other professional work that:

- 1) Has been undertaken by the auditor for the licensee within the previous 12 months.
- 2) The auditor is currently undertaking for the licensee.
- 3) The auditor has submitted an offer, or intends to submit an offer, to undertake for the licensee within the next 6 months.

6.1.3 Conditions of engagement for audits/reviews

Standard AUS 204 provides a framework for defining the terms of engagement for an audit/review. Consistent with AUS 204 the Authority requires the auditor and licensee to document the terms of the audit/review engagement in the form of a letter of appointment addressing:

- a) The objective of the audit/review.
- b) Licensee's responsibility for the subject matter of the audit.
- c) The scope of the audit, including reference to applicable legislation, regulations and codes.
- d) Arrangements regarding the planning of the audit.
- e) Unrestricted access to whatever records, documentation and other information requested by the auditor in connection with the audit/review.
- f) Arrangements concerning the involvement of the licensee's staff.
- g) The form of any reports or other communication of results of the audit/review.
- h) The final audit/review report is to be provided to the licensee and the Authority.
- i) The basis on which fees are computed and billing arrangements.

The letter of appointment is to be made available to the Authority on request.

6.2 Developing the audit plan

6.2.1 Approval of the audit plan by the Authority

The audit plan is developed by the auditor and the licensee in the first instance. When the auditor and the licensee have agreed a final draft of the audit plan it is then submitted to the Authority for approval. The remainder of this section provides information on the Authority's approach to developing the audit plan.

6.2.2 General requirements for audit plans

Prior to undertaking an audit/review the auditor is required to develop an audit plan and agree it with the licensee and the Authority. AUS 302 defines the audit plan as a document "*describing the expected scope and conduct of the audit*". AUS 302 refers to an audit plan being sufficiently detailed to guide the development of the audit program recognising the "*form and content will vary depending on the size of the licensee, the complexity of the audit and the specific methodology and technology used by the auditor*".

The audit plan for audits/reviews must include:

- a) Audit objectives.
- b) Scope of the audit/review:
 - i) Risk and materiality assessment (refer to Appendix 1 for details of the Authority's approach to risk assessment).
 - ii) System analysis.

- iii) Fieldwork.
- iv) Review of actions taken in response to recommendations in previous audit/review.
- c) Reporting (refer to section 7 for information about the Authority's reporting requirements).
- d) Key contacts.
- e) Staffing.
- f) Timing and schedule of the audit/review.

6.2.3 Specific requirements for operational/performance audit plans

The audit plan for an operational/performance audit must reflect a risk based approach to conducting the operational/performance audit. AUS 402 and AUS 808 provide a framework for planning audits that is based on an assessment of materiality and risk.

Australian/New Zealand Standard 4360:2004 describes the preferred methodology for assessing risk, which is discussed in more detail in Appendix 1. In summary the methodology utilises a risk rating scheme based on types of risk, risk consequences and the likelihood of the risk occurring to quantify the inherent risk based on a 3-point scale. The adequacy of the internal controls of the licensee to mitigate these risks will then used to determine audit priority on a 5-point scale. The assessment of audit priority is used to determine the nature and extent of audit testing required for each licence condition.

The final draft of the audit plan must include for each licence condition:

- a) A table that identifies:
 - Audit priority.
 - Risk consequence rating.
 - Likelihood rating.
 - Inherent risk rating.
 - Adequacy of existing controls.
- b) A brief description of the tests that will be undertaken to assess compliance with the licence condition.
- c) Where an alternative approach to assessing risk has been adopted by the auditor, information about the risk assessment methodology is to be included in the audit plan.

6.2.4 Asset management system review audit plans

The audit plan for an asset management system review must include a risk assessment of the control procedures in place for the effective management of the licensee's assets. AUS 402 and AUS 808 provide a framework for planning audits of asset management systems that is based on an assessment of materiality and risk and Attachment 3 provides a framework for evaluating the effectiveness of each of the asset management processes. The auditor should use their professional judgement to assess the effectiveness rating for each component of the asset management system based on the principles outlined in Attachment 3. The final draft of the audit plan should include for each component of the asset management system:

- a) A table that identifies the risk assessment and audit priority rating along with a discussion of the rationale for determining the audit priority rating.
- b) A brief description of the tests that will be undertaken to assess the effectiveness of the management and control processes in place.

6.2.5 Assistance to be provided by the Authority

Following the appointment of the auditor by the licensee, the Authority may provide the auditor with the following (unless previously provided as part of the tender for the audit/review):

- 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 by the licensee.
- A copy of the licensee's previous audit/review report.

6.3 Conducting the audit/review

There are a number of components to the conduct of a successful audit/review in a thorough and timely manner. These components are discussed in the following sections.

6.3.1 Assistance to be provided by the licensee

The Authority expects licensees to facilitate the audit/review by providing, as needed:

- 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 that are being audited.
- Data, performance reports, access to records, other relevant information and employees, and entry to relevant sites to assist in the conduct of the audit/review.
- Access to all relevant material and individuals to allow the audit/review to be conducted efficiently, effectively and in a timely manner.

6.3.2 Professional scepticism

The auditor is expected to adopt an attitude of professional scepticism throughout the audit/review. The principle of professional scepticism is defined in the Standards as "*the auditor neither assumes that management (licensee) is dishonest nor assumes unquestioned honesty. Rather the auditor recognises that audit evidence needs to be obtained needs to be objectively evaluated to determine whether the report is free from material misstatement*".

6.3.3 Deviation from the approved audit plan

When the audit plan has been finalised the auditor will then conduct the audit/review in accordance with the audit plan. However, as the audit progresses there may be a need to

revise the audit plan based on the findings of the audit to date. The Authority requires revisions to an audit plan that are, in the judgement of the auditor, substantial in nature to be submitted to the licensee and the Authority for their approval prior to the auditor acting on them.

6.3.4 Fieldwork

During the audit/review the auditor is required to undertake one or more visits, as needed, to the licensee's organisation to access information and conduct interviews with staff. The auditor should assess compliance with the requirements of the licence through assessing and testing:

- **The control environment** – licensee's management philosophy and operating style, organisational structure, assignment of authority and responsibilities, the use of internal audit, the use of information technology and the skills and experience of the key staff members.
- **The information system** – the appropriateness of the licensee's information systems to record the information needed to comply with the licence, accuracy of data, security of data and documentation describing the information system.
- **Control procedures** – the presence of systems and procedures to ensure compliance with the licence, effectiveness of the licensee's internal control structure to detect and correct non-compliance.
- **Compliance attitude** - the action taken by the licensee in response to any previous audit/review recommendations. This should include an assessment of the licensee's attitude towards compliance.

6.3.5 AUS 502 - Audit evidence

AUS 502 provides guidance on the quantity and quality of audit evidence to be obtained when conducting an audit/review. The standard states an auditor should "*obtain sufficient appropriate audit evidence to be able to draw reasonable conclusions on which to base the audit opinion*".

It is left to the auditor to use their professional judgement to determine what constitutes sufficient audit evidence for the audit/review they are conducting. However, the Authority requires the auditor to develop a comprehensive set of working papers throughout the audit/review. The working papers need to be sufficiently detailed to provide a high standard of evidence to support the auditor's opinions and recommendations that are included in the audit report. The auditor is required to make the working papers available to the licensee and/or the Authority on request.

6.3.6 General guidance on the conduct of audits/reviews

This section provides some general guidance to auditors conducting audits/reviews of licensees. It is left to the professional judgement of the auditor to determine the extent of application of the principles discussed in this section to the conduct of a specific audit/review.

6.3.6.1 AUS 806 - Performance auditing

AUS 806 provides a general framework for the conduct of a performance audit. The objective of a performance audit is *“to enable the auditor to express an opinion whether, in all material respects, all or part of an entity’s activities have been carried out economically and/or efficiently and/or effectively. In the case of a direct reporting audit, the objective also includes the provision of relevant and reliable information about performance”*.

The auditor should undertake sufficient testing of the available information throughout the audit to provide the licensee and the Authority with reasonable assurance that the information relating to performance against the licence conditions is accurate and represents a true picture of the licensee’s compliance.

The audit/review of licensees is to be conducted in accordance with the risk based audit approach with more extensive audit testing of higher risk areas to provide sufficient assurance of compliance. 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, but this is left to the judgement of the auditor.

The auditor may 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.

6.3.6.2 AUS 810 - Reporting on the effectiveness of control procedures

AUS 810 provides guidance on producing special purpose reports on the effectiveness of control procedures. The standard scope includes reporting to, among others, a regulator on whether the control procedures for a specified area of activity are effective. AUS 810 references AUS 402 (Risk Assessments and Internal Controls) for detailed information on factors to be considered when reporting on the internal control procedures.

When conducting the audit/review the auditor is expected to understand the internal control structure (control environment, information system and control procedures) of the licensee as it applies to achieving compliance with the requirements of the licence.

7 Audit/review reporting

The auditor is required to provide a comprehensive report to the licensee and the Authority that clearly expresses the opinion of the auditor in respect of the findings of the audit/review. AUS 810 provides a useful reference framework of the structure and content of reports on the effectiveness of control procedures.

The remainder of this section sets out the minimum information to be provided to the Authority in an audit/review report. This does not preclude the auditor from including other information in the report that they deem relevant to their audit opinion.

7.1 *Executive Summary*

The executive summary must include:

- A statement that the audit has been conducted in order to assess the licensee's level of compliance with the conditions of its licence.
- Brief description of the type of licence held by the licensee, the system that has been audited and any major changes since the previous audit.
- Summary of issues and recommendations arising from the current audit in a tabular form (licence condition reference, issue, recommendation and post-audit action plan by the licensee) and a review of the actions taken by the licensee in response to the previous post-audit plan.
- Summary opinion of the auditor on the control environment operated by the licensee.
- Overall assessment of compliance with the licence including the identification of any significant non-compliance events and the integrity of the licensee's reporting to the Authority and other statutory organisations.
- Any other information the auditor considers relevant to the audit.

7.2 *Audit/review scope*

The audit/review scope must include:

- Description of the audit/review objectives, scope and methodology used to conduct the audit/review.
- Time period covered by the audit/review and the previous audit/review.
- The time period over which the audit/review has been conducted.
- Details of the licensee's representatives participating in the audit.
- Details of key documents and other information sources examined by the auditor during the course of the audit.
- Details of the audit team members and hours utilised by each member.
- Any other information the auditor considers relevant to the audit scope.

7.3 *Licensee's response to previous audit recommendations*

The report must provide a tabular summary of:

- a) The recommendations from the previous audit report.
- b) Action taken by the licensee to address the recommendations.
- c) Any further action needed to address the issues identified in recommendations that have not been satisfactorily resolved.

The auditor is required to provide an assessment of the licensee's overall response to the recommendations in the previous audit report.

7.4 Performance summary

As discussed in section 5 the purpose and scope of operational/performance audits is different to those of an asset management system review. The performance summary of the audit/review report must report according to the appropriate rating framework described in the following sections.

7.4.1 Operational/performance audit compliance summary

The operational/performance audit report must provide a table that summarises the compliance rating for each licence condition using the 5-point rating scale described in Table 1.

Table 1: Operational/performance compliance rating scale

Compliance status	Rating	Description of compliance
COMPLIANT	5	Compliant with no further action required to maintain compliance
COMPLIANT	4	Compliant apart from minor or immaterial recommendations to improve the strength internal controls to maintain compliance
COMPLIANT	3	Compliant with major or material recommendations to improve the strength of internal controls to maintain compliance
NON-COMPLIANT	2	Does not meet minimum requirements
SIGNIFICANTLY NON-COMPLIANT	1	Significant weaknesses and/or serious action required

The overall compliance rating applied to each licence condition is left to the judgement of the auditor. However, the auditor is required to tabulate the risk ratings and the overall compliance rating for each licence condition in a single table.

Table 2 provides an example of an operational/performance audit compliance summary table that must to be used in audit reports. The auditor is required to replicate this table in order to facilitate comparison and benchmarking of audit outcomes.

Table 2: An example of an operational/performance audit 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 (Refer to the 5-point rating scale in Table 1 for details)				
						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										

The auditor may include additional information into the compliance assessment section of the audit report that is considered relevant.

7.4.2 Asset management review effectiveness summary

The asset management review report must provide a table that summarises the auditor's assessment of the effectiveness ratings for each key process in the licensee's asset management system using the 6-point scale described in Table 3 (refer to Attachment 3 for more information). The overall effectiveness rating applied to each asset management process is left to the judgement of the auditor.

Table 3: Asset management review effectiveness rating scale

Effectiveness	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)

The overall effectiveness rating for each licence condition is based on an assessment of the effectiveness of the licensee's existing control procedures to manage its assets.

Table 4 provides a sample of a summary table that is to be used to report effectiveness in asset management review reports. The auditor is required to replicate this table in order to facilitate comparison and benchmarking of audit outcomes.

Table 4: An example of an asset management effectiveness summary

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						

The auditor may include additional information into the effectiveness assessment section of the audit report that is considered relevant.

7.5 Recommendations

The auditor is required to provide detailed recommendations on the actions to be taken by the licensee to address non-compliance (operational/performance audits) or asset management effectiveness issues (asset management system reviews).

7.5.1 Operational/performance audit

The recommendations must identify:

- a) The licence condition.
- b) The compliance rating.
- c) The issue(s) identified that have resulted in the nominated compliance rating.
- d) The recommended action(s) to improve compliance to an acceptable level.

7.5.2 Asset management system review

The recommendations must identify:

- a) The asset management process.
- b) The effectiveness rating.
- c) The issue(s) identified that have resulted in the nominated effectiveness rating.
- d) The recommended action(s) to improve the effectiveness of the asset management process to an acceptable level.

7.6 Observations

The observations section of the audit/review report expands on the findings presented in the compliance summary (operational/performance audits) or effectiveness summary (asset management reviews). The observations should be detailed enough to inform the Authority of the basis for the auditor arriving at the findings and recommendations contained in the report including:

- Key findings of the audit fieldwork.

- Sources of information used to assess compliance/effectiveness.
- Tests undertaken to assess compliance/effectiveness.
- Review of systems and/or procedures.
- Interviews with licensee's staff and/or external experts.
- The overall level of compliance/effectiveness demonstrated by the licensee during the time period covered by the audit/review.

The use of a tabular format to present the observations and recommendations with linkage to the summary findings, to facilitate cross-referencing, is preferred but other methods of presentation are also acceptable.

7.7 Changes to the Licence

Where the auditor is of the opinion the existing licence conditions do not adequately address risks that are identified in the compliance summary, the report may recommend changes to the licence conditions. The recommendation should clearly identify the licence condition(s) affected and nominate alternative wording for an existing condition or nominate a new condition.

7.8 Signature of the auditor

The auditor is required to confirm their approval of the content of the audit/review report by:

- a) Including a statement to the effect that the audit/review report is an accurate presentation of their findings and opinions.
- b) Attaching the signature of a person authorised to make the above statement on behalf of the auditor.
- c) The address of the auditor.
- d) The date on which the signature was attached to the report.

7.8.1 Post-Audit Implementation Plan

The licensee must include a post-audit implementation plan in the audit/review report for the Authority to approve. The post-audit implementation plan must identify for each of the recommendations (refer to section 7.5) made by the auditor:

- a) The action(s) to be taken to address the action(s) recommended by the auditor.
- b) The person(s) or position(s) that will be responsible for undertaking the nominated action(s).
- c) The date by which the nominated action(s) will be completed.

The post audit implementation plan can be either a separate document attached to the audit/review report or incorporated into the report.

It is a matter for the licensee and the auditor to agree the responsibility for developing the plan. However, if the auditor has developed the plan on behalf of the licensee then this

must be stated in the plan and the licensee must indicate their approval of the plan prior to submitting it to the Authority for approval.

7.8.2 Disagreement between the auditor and the licensee

There may be circumstances where the auditor and licensee are not able to agree on some aspect of the audit findings and/or the auditor's recommendations. Should this situation arise the auditor and licensee are encouraged to take all reasonable steps to resolve the issue. If it is not possible for the auditor and licensee to reach a resolution, the audit report must include a clearly labelled section that provides details of the points of disagreement. This section must identify:

- The auditor's original opinion and/or recommendation
- The licensee's response to the auditor's opinion and/or recommendation
- If applicable, the amendment to the audit report requested by the licensee

7.9 Reporting to the Authority

The auditor and licensee are required to develop a draft audit/review report, including a post-audit implementation plan. The draft report is to be submitted to the Authority for approval, for the licensee to provide to the Authority for approval. The licensee must provide an electronic copy of the report using the Microsoft Word or Adobe Acrobat format on a CD-ROM or transmitted by email. The licensee may also choose to provide a printed copy of the report in addition to the electronic copy.

The Authority will either approve the draft report or request changes to the report that are conditional to the Authority granting its approval. If changes to the report are required, the Authority or the licensee may convene a meeting to discuss the required changes prior to the licensee submitting a revised report. The Authority or the licensee may request the auditor attend the meeting. The licensee is responsible for amending the report and re-submitting it to the Authority for approval.

When the Authority has approved the draft report, it is submitted to the Authority as a final report comprising:

- 1) An electronic copy of the report using the Microsoft Word or Adobe Acrobat format on a CD-ROM or transmitted by email.
- 2) 3 printed, bound copies of the report delivered to the Authority's postal address.

7.10 Repeat audit

The Authority may require the licensee to repeat the audit/review using the same auditor, or an alternative auditor of the Authority's choosing, in the event:

- The auditor has not conducted the audit in accordance with the approved audit plan, subject to reasonable variation based on audit findings.
- The audit team is changed during the course of the audit in a way that, in the view of the Authority, unacceptably compromises the conduct of the audit.

- The auditor has not observed its responsibility to the Authority by withholding relevant information in the audit report.
- The audit/review report does not comply with the mandatory components of these guidelines or the report is deemed to be of an unacceptable quality by the Authority.

8 Reporting on the audit/review by the Authority

When the audit/review report has been finalised, the Authority will:

- 1) Provide a copy of the report to the relevant Minister within 2 months of the receipt of the final report
- 2) Subsequent to the report being provided to the Minister, the Authority will publish a copy of the report on its website www.era.wa.gov.au

9 Commercial confidentiality

In performing its licensing functions under the Industry Acts, the Authority has an obligation to promote transparent decision making functions and public consultation. Consistent with these aims, the Authority will publish each audit/review report received from a licensee.

Where, in the licensee's reasonable opinion, the audit/review report contains confidential or commercially sensitive information, the licensee should clearly identify the information that is claimed to be confidential or commercially sensitive. "Confidential or commercially sensitive information" is information of the type that would ordinarily be covered by the *Freedom of Information Act 1992* Schedule 1, clause 4. That is, information such as trade secrets or sensitive commercial information that would cause detriment to the organisation if disclosed.

A licensee must not make a blanket claim of confidentiality or commercial sensitivity in relation to an audit/review report but clearly state the exact information claimed to be confidential and the reasons for the claim. Where, in the Authority's view, a claim is excessive or not justified, the Authority may request the licensee to review the claim. Accordingly, licensees are encouraged to carefully review any claim of confidentiality or commercial sensitivity before submitting it to the Authority.

10 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.

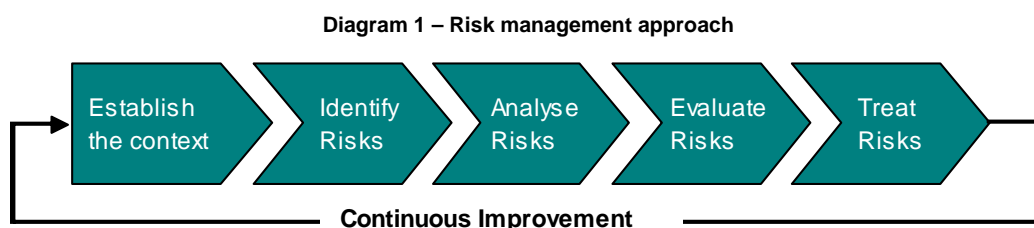
Appendix 1 – Risk based approach to operational/performance audits

1 Assessing risk

The first stage of an operational/performance audit or an asset management system review is to conduct a preliminary assessment of the risks of non-compliance with the licence conditions or ineffective management of assets respectively in order to identify higher risk areas for testing and focus the audit accordingly.

The preliminary risk assessment is to be documented in the audit plan, which is then presented to the Authority and the licensee for approval prior to the fieldwork commencing. The risk assessment should be reviewed during the fieldwork phase of the audit and may need to be updated in accordance with the audit findings.

The risk assessment approach to the conduct of operational/performance audits and asset management system reviews 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.

2 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 Identify risks

For operational/performance audits review the licence conditions and identify the risks that may affect compliance with these conditions. Consider where, when, why and how events could prevent, degrade or delay compliance with the licence obligations.

For asset management system reviews review the asset management processes and identify the risks that may adversely impact on the process and result in ineffective asset management.

The following steps in the risk evaluation process are common to operational/performance audits and asset management system reviews. It is left to the auditor to identify apply the principles to the audit/review based on their knowledge of the licensee's business and the

relevant regulatory framework. For the purposes of illustration the remainder of this section focuses on operational/performance audits.

Licences are granted by the Authority 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 5.

Table 5: Types of compliance 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.

4 Analyse risks

An approach to analysing the compliance risks involves a two-stage process:

- 1) Identify the consequences and likelihood of the inherent risks to give an overall inherent risk rating.
- 2) Identify and assess the strength of the existing internal controls that mitigate the inherent risks.

These steps are explained in more detail below.

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

An “inherent risk” is the risk of an event assuming there are no effective controls. It is similar to the concept of materiality as set out in the audit standards. 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 of supplying potable water.

The consequences of the risk occurring is assessed using the 3-point rating scale described in Table 6. The examples indicate that the consequences of ‘supply quality’ and ‘supply reliability’ would generally be rated higher than ‘consumer protection’ and ‘breaches of legislation’ because of the risk to public safety and health.

Table 6: 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 action 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 next step towards assessing inherent risk is to determine the likelihood of the risk occurring. This likelihood is assessed using the 3-point rating scale described in Table 7.

Table 7: 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 combination of consequence rating and likelihood rating is used to arrive at an overall inherent risk rating using a 3-point rating scale, which is quantified in Table 8.

Table 8: Inherent risk rating

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

The 3 inherent risk ratings, low, medium and high, are described in Table 9.

Table 9: Description of inherent risk ratings

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

Once the inherent risks have been identified and classified it is important to assess the strength of the existing internal controls that mitigate each inherent risks. Licensees who have recognised risk events that carry a high inherent risk and put in place appropriate controls to mitigate these risks carry a lower risk of the event being realised than licensees that have not. There are a number of internal control components that need to be examined to assess the licensee's ability to manage its risks. Internal control,³ as it applies to a licensee, consists of the following components:

- Control environment (corporate governance, organisation structure, assignment of authority and responsibility, documentation of policies and procedures, human resource practices, records management, etc)
- Licensee's risk assessment process
- Information systems, including the related business processes relevant to the licence conditions
- Control activities (authorisation, segregation of duties, physical controls and security, etc)
- Monitoring of controls (management review, internal audit, other audits, etc)

The adequacy of controls is assessed using the 3-point rating scale described in Table 10.

Table 10: Adequacy ratings for 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 usually made during the planning stage of the audit/review. 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/review report.

5 Evaluate risks

The next stage in the audit planning process is to evaluate the depth of audit of each licence condition based on the combined rating for inherent risk and control adequacy. Table 11 identifies a 5-level audit priority scale to inform the audit testing process.

³ Auditing and Assurance Standard AUS 402 February 2004, Auditing and Assurance Standards Board.

Table 11: 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, the nature of the audit testing and the extent of audit testing required.

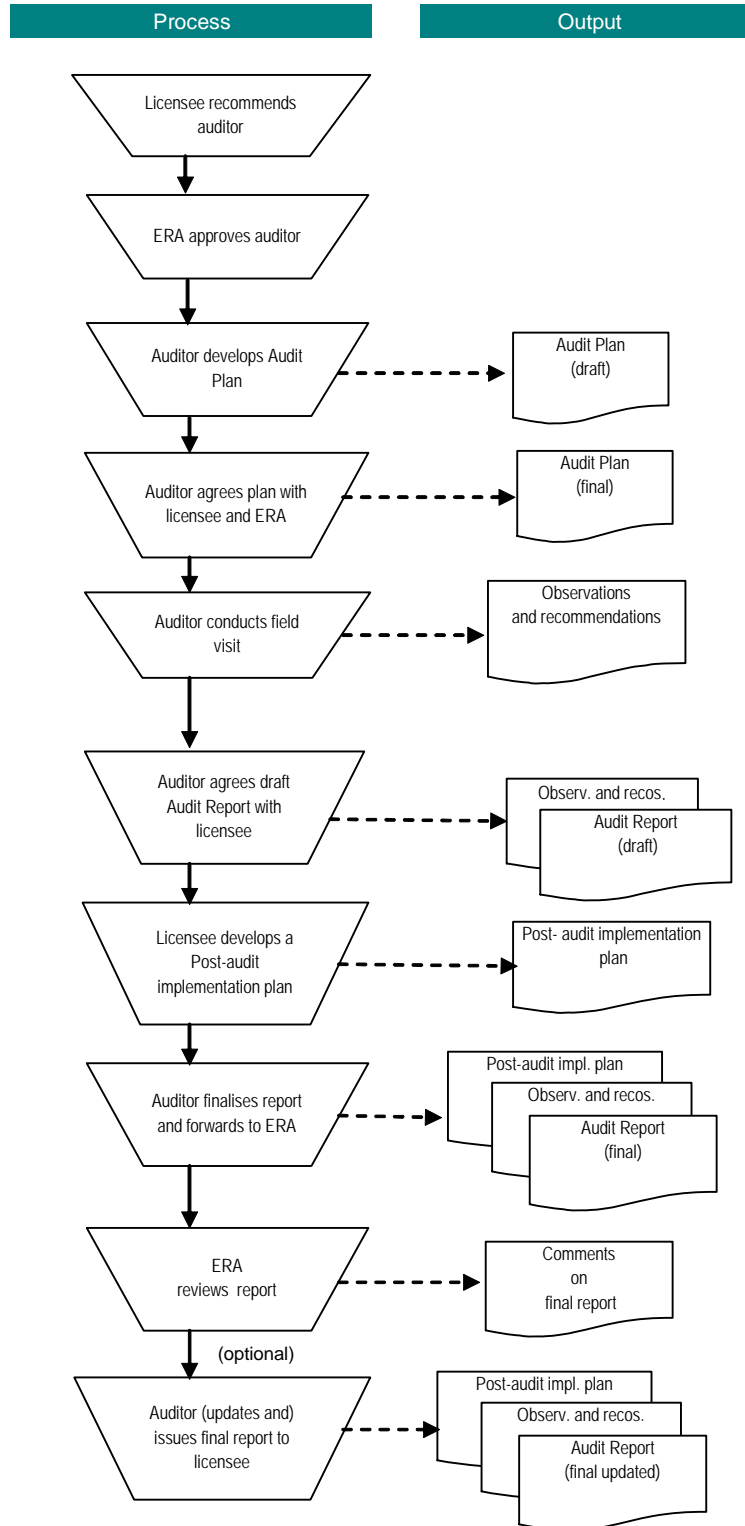
It is left to the professional judgement of the auditor to determine the testing requirements for each of the licence conditions, but it is anticipated an Audit Priority 1 is a 'high risk' area and would usually require extensive controls and/or substantive testing to provide adequate assurance that 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.

6 Treat risks

The auditor will assess compliance with the licence obligations and recommend any corrective action or improvements required to minimise risk. The auditor is expected to include recommendations in the audit report to address each risk item that requires corrective action or improvement.

In extreme cases where significant risk issues are identified the Authority may seek a direct response from the management and/or Board of the licensee.

Appendix 2 – Process flowchart for performance/operational audits and asset management system reviews



Appendix 3 – A Guide to the AMS Effectiveness Framework

An asset management system comprises the processes and plans needed to ensure the physical assets continue to provide a specified level of service in a cost-effective manner throughout their useful life.

Assets should only exist to support service delivery objectives. When a service is in the planning stage it is necessary to identify the assets that are needed to meet a specified level of service. The extended life of assets involved in the deliver of electricity, gas and water services requires the decisions involving asset acquisition to take account of the full operating costs over the asset's design life. It is therefore essential to consider the asset life-cycle.

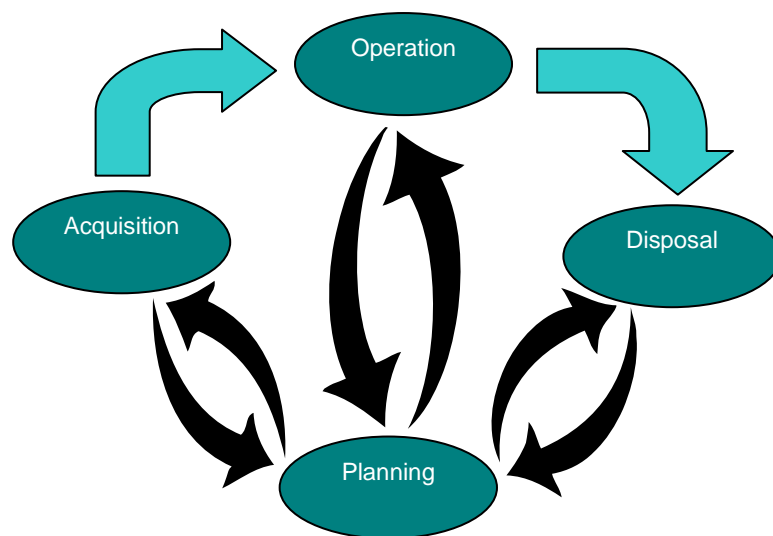
1 Asset life-cycle

The fact that assets have a life-cycle distinguishes them from other program resource inputs. The 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 1

Diagram 1 - Asset Life Cycle



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

2 AMS key processes

The key processes in the asset management life-cycle are:

- 1) Asset planning (including development and maintenance of an asset management plan).
- 2) Asset creation and acquisition.
- 3) Asset disposal.
- 4) Environmental analysis (all external factors that affect the system).
- 5) Asset operations.
- 6) Asset maintenance.
- 7) Asset management information system.
- 8) Risk management.
- 9) Contingency planning.
- 10) Financial planning.
- 11) Capital expenditure planning.
- 12) Review of AMS.

Table 12 examines each of these asset management processes in more detail and provides auditors and licensees with guidance for each process the desirable outcomes, effectiveness criteria and an approach to reviewing the effectiveness. The suggested review approach is intended to provide an example only and should be adapted to each review by the auditor based on their professional judgement.

Table 12: Asset management system key processes and effectiveness criteria

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</p> <p>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</p> <p>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</p> <p>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 	<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
		<ul style="list-style-type: none"> Risk management is applied to prioritise maintenance tasks Maintenance costs are measured and monitored 	
<p>7. Asset Management Information System (MIS)</p> <p>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.</p> <p>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</p> <p>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</p> <p>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

Key process	Outcome	Effectiveness criteria	Example of review approach
			actioned.
<p>10. Financial planning</p> <p>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</p> <p>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.</p> <p>Since capital investments tend to be large and lumpy, projections would normally be expected to</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

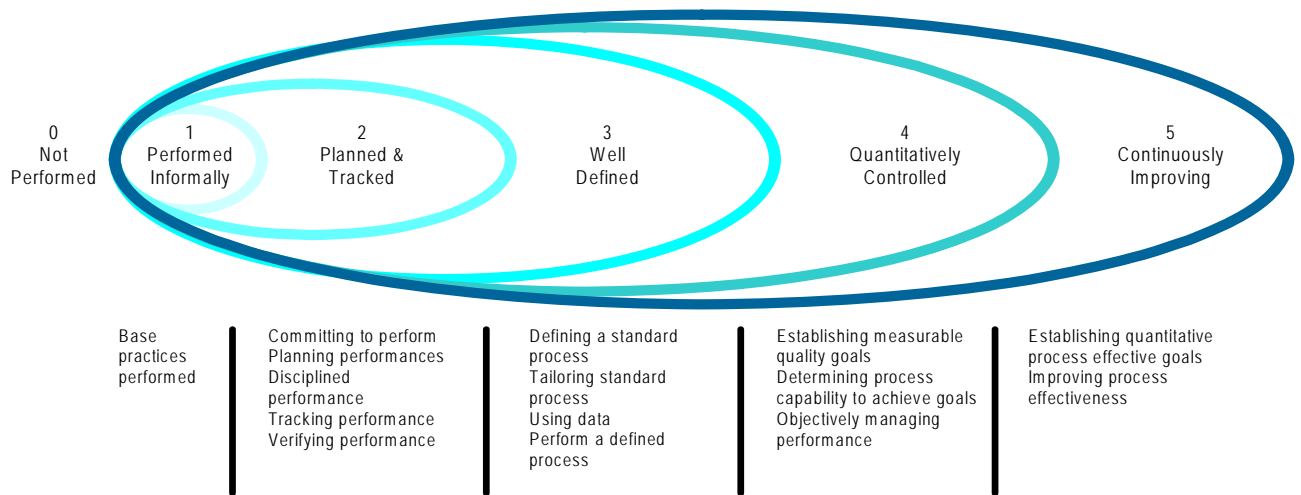
Key process	Outcome	Effectiveness criteria	Example of review approach
cover at least 10 years, preferably longer. Projections over the next five years would usually be based on firm estimates.			
12. Review of AMS The asset management system is regularly reviewed and updated.	Review of the Asset Management System to ensure the effectiveness of the integration of its components and their currency.	<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 Asset management system effectiveness ratings

The capability maturity model shown in Diagram 3 describes the stages through which processes progress as they are defined, implemented, and improved. The Authority has adopted the 6-point rating scale associated with the capability maturity model as the basis for rating the effectiveness of asset management system effectiveness.

Auditors may elect to utilise an alternative model against which to audit the effectiveness of asset management system processes. In this event the Authority requires the auditor to provide information regarding the methodology utilised and provide a mapping of effectiveness ratings onto the 6-point scale described in Diagram 3 in the review report.

Diagram 3 –Asset management system – Capability maturity model



END OF DOCUMENT