The Institute of Asset Management

SUBJECT SPECIFIC GUIDELINES

LIFE CYCLE DELIVERY

INCIDENT MANAGEMENT & RESPONSE

VERSION 1 | JUNE 2025


PRECAUCION
PRECAUCION
PRECAUCION
PRECAUCION
PRECAUCION

ABOUT THE IAM

The Institute of Asset Management (the IAM) is a not-for-profit professional body. We are owned and controlled by our Members and committed to remaining independent from commercial and trade associations. We exist to advance the discipline of Asset Management, not only for people and organizations involved in the acquisition, operation, and care of physical assets but also for the benefit of the general public. Our priorities are to promote the generation and application of knowledge, training, and good practice and to help individuals become demonstrably competent.

COPYRIGHT

DISCLAIMER

ACKNOWLEDGMENTS

The development of this SSG on behalf of the IAM has been made possible through the significant efforts of many individuals and organizations. The Institute would like to thank the following in particular for their contributions:

Lead

- Ross Scott, *Jacobs*
- Robert M Zinatsa, *UK Power Networks Services*

Drafting Team

- Odili Aliboh, *Jacobs*
- Nilmino Roberts, *WSP*
- Ryan Wilson, *Troup Bywaters + Anders LLP*
- Sundar N.P, *Stellar InnoStrat Consulting*

Peer Review

- Sarah Vine, *AMCL*
- Wayne Francisco, *GHD*

IN THIS SSG

LIFE CYCLE DELIVERY
INCIDENT MANAGEMENT & RESPONSE

CONTENTS

IN THIS SSG

LIFE CYCLE DELIVERY
INCIDENT MANAGEMENT & RESPONSE

FIGURES

TABLES

1 PREFACE

1.1 INTRODUCION TO SUBJECT SPECIFIC GUIDANCE

This Subject Specific Guideline (SSG) is part of a suite of documents designed to expand and enrich the description of the Asset Management discipline as summarized in the IAM's document 'Asset Management – an Anatomy' Version 4 (referred to throughout this document as 'The Anatomy").

The SSGs cover the Subjects in The Anatomy directly as a 'one to one' (where a subject is very broad) or grouped (where subjects are very closely related).

1.2 PURPOSE OF THE SSGS

This document provides guidance for good asset management.

ISO 55001 sets out the requirements necessary for establishing, implementing, maintaining, and improving a management system for asset management. The Global Forum on Maintenance and Asset Management (GFMAM) Asset Management Landscape establishes a globally shared understanding of the subjects which comprise the asset management discipline, emphasizing its wide-ranging nature and breadth of scope. Neither ISO55001 nor the GFMAM Asset Management Landscape explains how to implement asset management.

The Anatomy is a good introduction for people seeking to understand asset management. It is intended to:

- Explain the asset management approach and introduce the asset management subjects;
- Help individuals see how asset management can assist their professional development, and integrate their contribution with the work of colleagues and other teams; and
- Help organizations decide whether to adopt asset management and how to improve their asset management capabilities.

The SSGs develop the next level of detail for each subject in the Anatomy. They are guidance intended to help individuals and organizations by providing a consolidated view of good practice drawn from experienced practitioners across many sectors and geographies.

The SSGs include guidance for simple and complex operational environments, together with real examples from different geographies and sectors, to support the explanatory text. This is because there are widely different operational environments, constraints, cultures and opportunities in asset management. In particular, levels of sophistication, refinement and optimization that are worthwhile and possible in one environment may not represent either a possibility or a worthwhile investment in another. In addition, organizations will be at different stages of adoption of asset management; some may be relatively mature while others are at the beginning of the journey.

The guidance in this SSG recognizes each organization needs the flexibility to adopt its own 'fit-for-purpose' practical approaches and solutions that are economic, viable, understandable, and usable and that organizations will adapt their asset management approaches as part of continual improvement.

1.3 THE SSGs IN CONTEXT

The SSGs are a core element within the IAM Body of Knowledge. They have been peer-reviewed by subject matter experts identified by the IAM Knowledge Leadership Group. They align fully with the IAM's values and beliefs, which relate to the development of excellence in the asset management discipline and the provision of support to those who seek to achieve that level of excellence.

1.4 SSGs AND COMPLEXITY VERSUS MATURITY

It is important to understand and contrast these terms. Put simply:

- The complexity of the organization's operational environment will drive the complexity of the solution required; and
- The maturity of the organization will determine its ability to recognize and implement an appropriate solution.

A mature organization may choose a simple solution, while a naive organization may think that a complex solution will solve all its problems. In truth, there is no universal best practice in asset management - only good practice appropriate for the operating context of any particular organization. What is good practice for one organization may not be good practice for another.

For example, an organization that is responsible for managing 100 assets, all in the same location, could use a spreadsheet-based solution for an asset register and work management system. This is arguably good practice for that organization. However, for a utility business with thousands of distributed assets, this is unlikely to represent a good practice solution.

It is important to understand the organization's complexity and maturity to best apply the guidance in this SSG.

1.5 FURTHER READING

In addition to the Anatomy and SSGs, the IAM provides a range of knowledge and professional development resources, which can be accessed through the IAM website.

2 SCOPE OF THIS SSG

This document provides guidance for the following subject of asset management:

- **Incident Management & Response**

Purpose & Context
- Organizational Purpose and Context
- Stakeholder Management

Leadership & Governance
- Asset Management Leadership
- Asset Management Policy
- Asset Management System
- Asset Management Assurance and Audit
- Technical Standards and Legislation

Organization & People
- Organizational Arrangements
- Organizational Culture
- Competence Management
- Organizational Change Management

Strategy & Planning
- Demand Analysis
- Sustainable Development
- Asset Management Strategy and Objectives
- Planning
- Shutdown & Outage Strategy & Planning
- Contingency Planning & Resilience Analysis
- Resource Strategy and Management
- Supply Chain Management
- Life Cycle Value Realization
- Asset Costing and Valuation

Asset Management Decision-Making
- Decision-Making

Life Cycle Delivery
- Asset Creation and Acquisition
- Systems Engineering
- Integrated Reliability
- Asset Operations
- Maintenance Delivery
- Incident Management & Response
- Asset Repurposing & Disposal

Information Management
- Asset Management Data and Information Strategy
- Knowledge Management
- Asset Management Data and Information Standards
- Asset Management Data and Information Management
- Asset Management Data and Information Systems
- Configuration Management

Risk
- Risk Management

Review & Continual Improvement
- Monitoring
- Continuous Improvement
- Management of Change

Value & Outcomes
- Outcomes and Impacts

Figure 1 Context of this SSG in relation to the IAM 10-Box Capabilities Model

Figure source: Asset Management – an anatomy (Version 4), The Institute of Asset Management, July 2024

2.1 PURPOSE OF THIS SSG IN PARTICULAR WITH REFERENCE TO ITS 'GROUP'

This SSG specifically pertains to Incident Management & Response, which sits within the Life Cycle Delivery area of the Asset Management Subject Groups, see Figure 1. It will become part of a full series of SSGs covering all subjects and a smaller series of Sector Specific Guidelines (where these are desired by a particular sector). These are not designed as textbooks or course material but as reference documents for professionals working in or requiring guidance in this field. We would expect everybody involved in asset management to have a working knowledge of the subjects, but the degree to which they might need deep, or specialist knowledge will depend on the job or task they perform.

The subjects within Life Cycle Delivery implement the asset management plan(s) developed in the Strategy & Planning Subject Group. Good control of the activities, and associated risks, to acquire/create, operate, maintain and renew/dispose of assets is essential for the successful delivery of the asset management plan(s).

Organizations incur the majority of their asset-related expenditure through the activities in Life Cycle Delivery. A focus on integration of activities across the life cycle can enable organizations to reduce avoidable life cycle costs.

2.2 NAVIGATING THIS DOCUMENT

The following descriptions provide a high-level overview of each section in this document.

3. **What does 'Incident Management & Response' mean?** Overview of scope and key terminology	
4. **Concepts, Principles and Key Factors** High level summary of the important considerations, concepts, principles and key factors	
5. **Guidance for Fault Management & Response** Builds on Chapter 4, and provides guidance	
6. **Guidance for Incident Management & Response** Builds on Chapter 4, and provides guidance	
7. **Taking an Integrated Approach** Introduces the benefits of integrating fault and incident response and management.	
8. **Case Studies and Worked Examples** Provides case studies of fault and incident response	

Table 1 Overview of each section within this document

2.3 OVERVIEW

Incident Management and Response is a broad topic, and these terms are commonly used in various fields to describe different aspects of issues or problems in many environments.

Incident Management and Response encompasses responding to failures and incidents of an organization's assets or its asset management system in a systematic manner. The process includes incident detection and identification, fault analysis, use of standard responses, temporary and permanent repair procedures, site access and handback, reporting and updating of asset information systems.

Failures and incidents can have a wide range of consequences for an organization and its stakeholders. The response arrangements an organization

employs to handle failures and incidents should be commensurate with the consequences of the failures and include mechanisms to escalate control of the response to the appropriate level of management.

For example, following the detection or identification of an asset-related failure or incident, the initial response is geared towards mitigating the consequence and evaluating whether the production or service can be safely restored. In larger and more complex environments, it is common to have resources available at all times to provide the initial response. The initial response may include appropriate elements of the rectification process.

An organization's ability to respond to, and the time within which it can restore service following a failure or incident will be dependent on the availability of competent people, specialist tools and equipment necessary to effect temporary or permanent repairs, along with the availability of and access to the appropriate spares (which can range from sub-components to complete assets).

The development of emergency plans to respond to major unplanned events would usually be addressed through contingency planning and resilience analysis (see SSG - Contingency Planning & Resilience).

As with maintenance delivery and asset operations (see SSG - Maintenance Delivery & Asset Operations), fault and incident response includes the capture of all relevant information for investigations of failures and incidents to ascertain their root causes. By reviewing the response to faults and incidents, valuable lessons can be learned to improve processes and practices.

Please note, the guidance contained within this SSG does not focus on general faults that could lead to nonconformances in an asset management system.

2.4 DEFINITIONS

This section defines some of the key terms used within this document.

2.4.1 FAULTS

A fault is any abnormal condition or non-conformity which has resulted in or has the potential to cause an undesired outcome. A fault can be seen as a defect or an abnormal situation that may cause a reduction in, or a loss of, the capability of an asset or functional unit to perform its intended task.

2.4.2 INCIDENTS

An Incident is something that happens that is unpleasant (Collins English Dictionary). In terms of