

Smart Water Meter Playbook Project Presentation



Queensland
Water Regional
Alliance Program





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Agenda

- Project Overview/Purpose
- Project Objectives
- Project Approach – Planned vs. Actual
- Building the content
- Playbook demonstration
- Project findings and learnings
- Next Steps

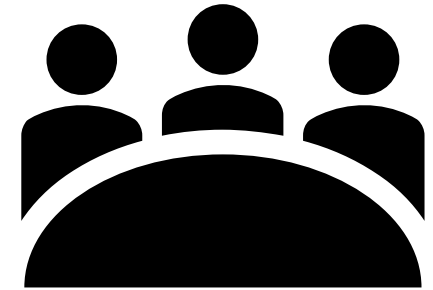
Project Overview/Purpose

- To capture and document the learnings of the WIM Water Alliance Smart Metering working group.
- Ensure critical knowledge held by each organisation is not lost if key staff leave.
- Documenting current metering practices, templates and processes to ensure consistency.
- Identify areas of opportunity to enhance and improve outcomes.
- Assist in sharing the knowledge gained in the region with other water providers across the state.



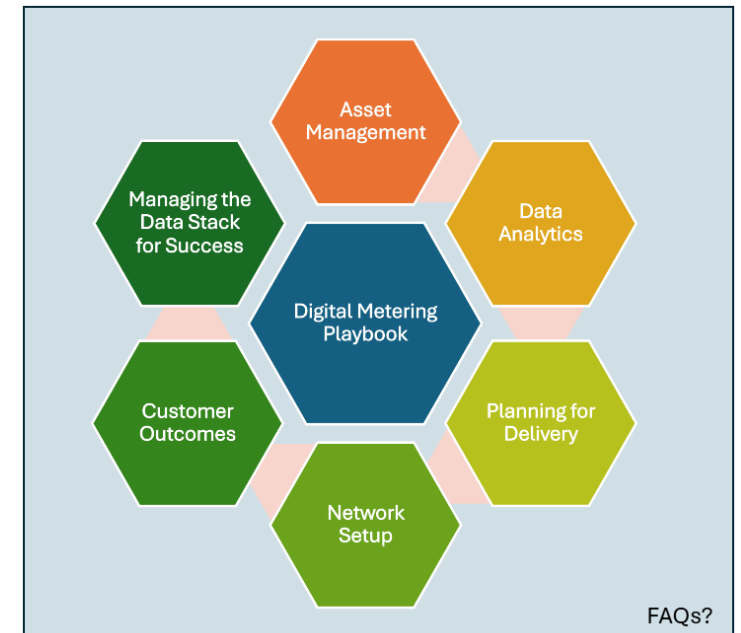
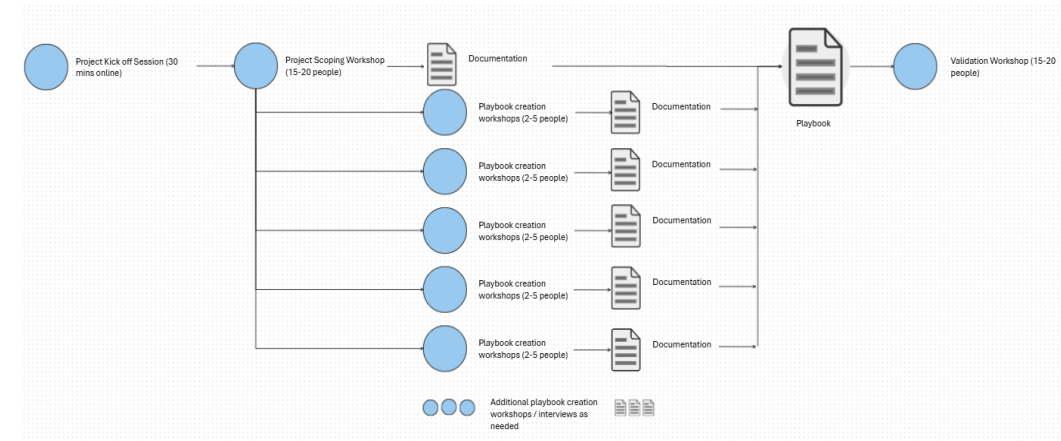
Project objectives

- Development of a best practice guidance resource to support WIM and the wider water industry
- Document the learnings of the smart water meter working group
- Identifying opportunities for enhancement to existing metering practices
- Demonstrate benefits of smart metering
- Be an accessible and easy to use information source



Project approach – planned

- Aimed to develop a PDF playbook covering key functional areas.
- Use a rapid documentation approach and workshops to develop content.
- Project approach changed after project kick-off meeting.
- Change in deliverable from a PDF to a SharePoint environment that could be configured to be a ‘living document’ – **Digital First Approach**
- Moved focus to a whole of organisation focus to deliver sustainable business improvement and realise value.
- Aligned playbook to the Institute of Asset Management (IAM) 10-box framework



Project approach – actual

Whitsunday, Isaac, Mackay Water Alliance

Smart Water Meter Playbook – Clear, consistent methodology to implement and manage smart metering

Smart Meter Playbook

- Foreword
- Introduction
- The Playbook
- The Playbook Processes (Core)
- The Playbook Processes (Advanced)
- Smart Meter Resources
- Case Studies

Playbook Advanced

- The Playbook Framework (Advanced)
- Frequently Asked Questions

Playbook

Click to search using our Framework



Keyword search...

[Provide feedback](#)



Queensland Water Regional Alliance Program

Whitsunday

Mackay

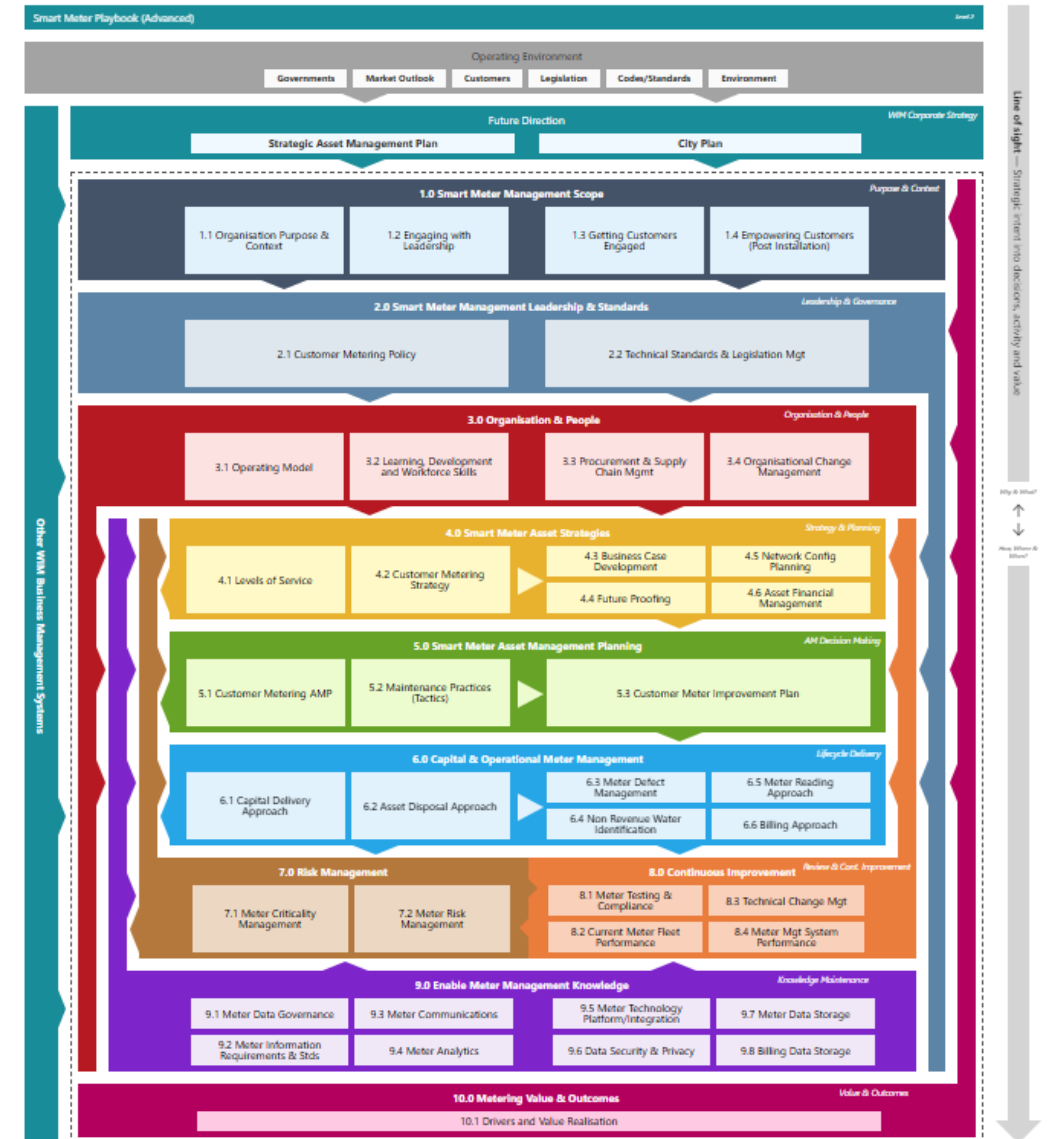
Isaac

GREATER WHITSUNDAY
COUNCIL OF MAYORS

betterAIM
Better Asset & Information Management

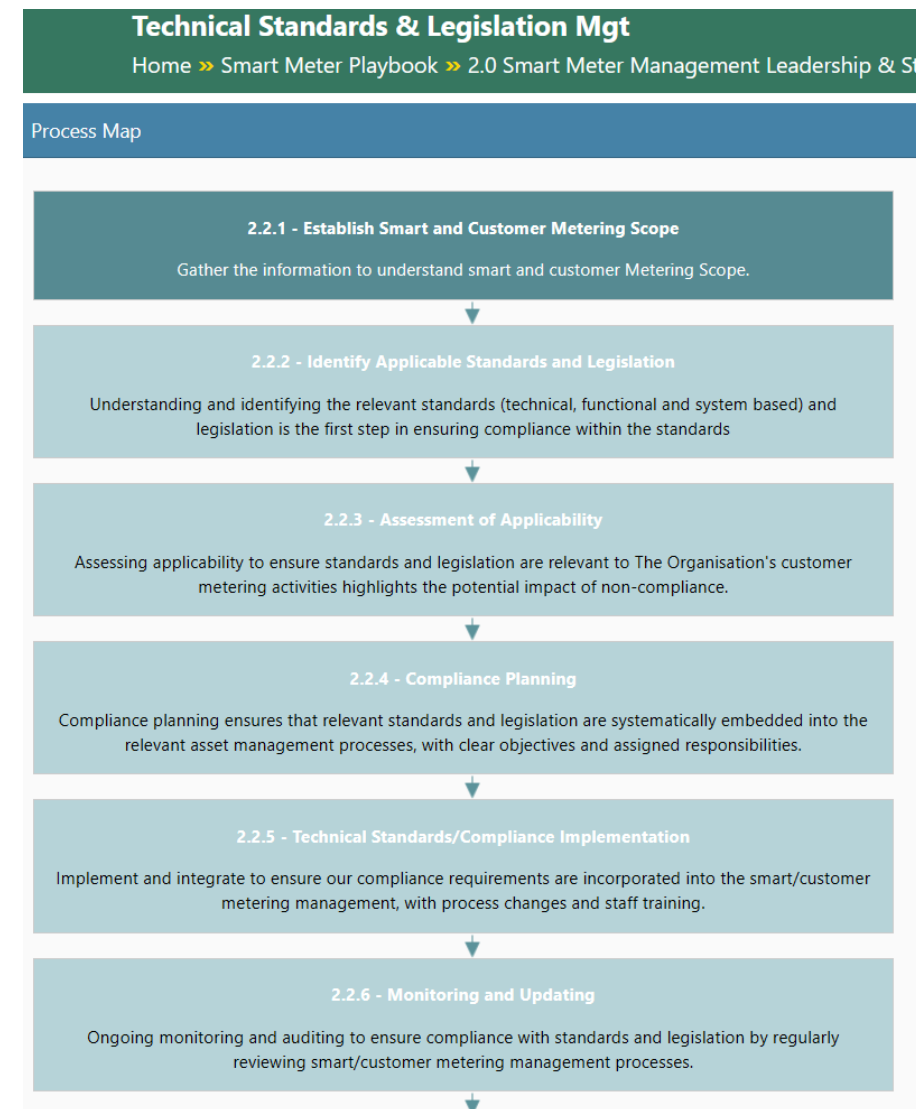
Project approach – actual

- Aligned to the IAM 10-box framework
- Provides clear line of sight from strategy to operations
- Used the BetterAMF as a starting point
- Content adjusted to reflect smart metering functions and maturity state (Core and Advanced).
- Able to be navigated by clicking on each box
- Content for each element (box) outlines “the why”, a process map (basic and detailed), key takeaways, alignment to strategy, supporting documentation and templates.



Building the content

- Structured workshops with key WIM personnel
- Document gathering across the draft Smart Meter Framework from each organisation.
- Integration of industry wide insights from Vendors (Suez and Taggle), Swan, WSAA and other water service providers.
- Integration of key process approaches from the BetterAMF framework.



Building the content

The screenshot shows a web browser displaying a SharePoint site titled "WIM Alliance Smart Meter Playbook". The browser's address bar shows the URL "betteraim.sharepoint.com/sites/WIMAllianceSmartMeterPlaybook". The site's top navigation bar includes links for "Home", "Documents", "Pages", "Case Studies", "Site contents", and "Edit". A search bar is located in the top right corner. The main content area features a large green header with the title "Whitsunday, Isaac, Mackay Water Alliance" and the subtitle "Smart Water Meter Playbook – Clear, consistent methodology to implement and manage smart metering". Below the header is a large image of a smart water meter with a map overlay showing the regions of Whitsunday, Isaac, and Mackay. The map is overlaid on a background image of a smart water meter. The meter is white and yellow, with a digital display showing "000000". The map is brown and shows the outlines of the three regions. The text "Whitsunday", "Isaac", and "Mackay" are placed over their respective regions. In the bottom left corner of the image, there is a logo for "GREATER WHITSUNDAY COUNCIL OF MAYORS". In the bottom right corner, there is a logo for "betterAIM Better Asset & Information Management". The left sidebar contains a table of contents with links to "Foreword", "Introduction", "The Playbook", "The Playbook Processes (Core)", "The Playbook Processes (Advanced)", "Smart Meter Resources", and "Case Studies". Below the table of contents is a section titled "Click to search using our Framework" with a search bar and a "Provide feedback" link. The bottom right corner of the page has an "Edit" link.

WIM Alliance Smart Meter Playbook

Home Documents Pages Case Studies Site contents Edit

Not following Site access

Published 10/14/2025 Share Edit

Whitsunday, Isaac, Mackay Water Alliance

Smart Water Meter Playbook – Clear, consistent methodology to implement and manage smart metering

Smart Meter Playbook

- Foreword
- Introduction
- The Playbook
- The Playbook Processes (Core)
- The Playbook Processes (Advanced)
- Smart Meter Resources
- Case Studies

Playbook Advanced

- The Playbook Framework (Advanced)
- Frequently Asked Questions

Playbook

Click to search using our Framework

Keyword search...

Provide feedback

GREATER WHITSUNDAY COUNCIL OF MAYORS

betterAIM Better Asset & Information Management

Edit

Project Findings and Learnings

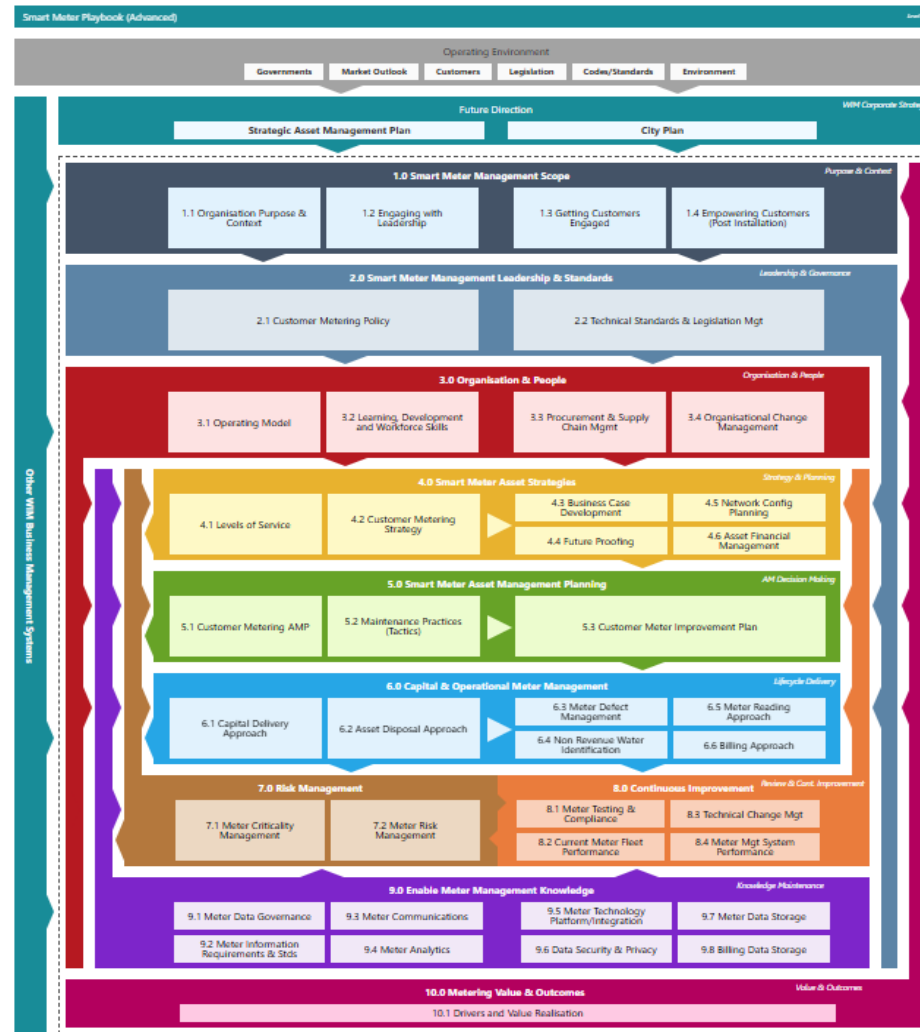
- Organisations benefit significantly through the documentation of key processes and procedures.
- Smart Metering is not just about digital metering, it's an outcome driven activity to deliver best value to customers and the organisations.
- There is more to digital metering than the meter in the ground, you need to consider a whole of lifecycle approach to deliver value.
- This is especially the case for local government with other service streams where remote data capture could be considered.
- There are many vendors who can support you, but you must understand your drivers and outcomes before applying technology and tools.
- Metering is a whole of business activity, while the initial focus is to improve data capture of consumption, a long term view/strategy will ensure the organisation is future ready.
- Digital metering value realisation doesn't end once you install meters.

What else could this be?

Maintenance
Management
Framework?

Drinking Water
Quality Framework?

Wastewater Risk
Management
Framework?



Hydraulic Modelling
Framework?

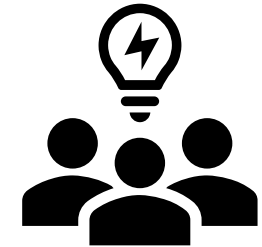
Corporate
Planning/City
Plan/Master Planning
Framework?

Asset Management
System/Framework?
(BetterAMF)

A tool, in a simple environment to lock your organisational knowledge in.

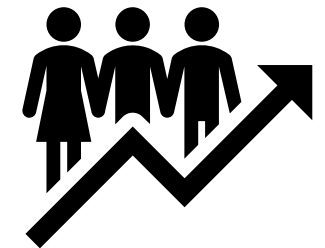
Next Steps / Recommendations

- Consideration of deployment approach and continued, sustained management of the digital playbook. (where, how often, who is responsible?)
- Communicate, engage, share and develop the content – plan for an up rev in 12-24 months.
- Consider how the wider water community can leverage and engage with the playbook.



Individual Water Service Providers

- Assess maturity or gaps to each element of the playbook.
- Identify focus areas (e.g. Policy, Strategy, Levels of Service, AMPs).



Thank you for Listening.

Any Questions?

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Smarter Together: Building a Digital Playbook for Smart Water Metering in Queensland

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Abstract The Smart Water Metering Playbook represents a collaborative initiative under the Queensland Water Regional Alliances Program (QWRAP), developed to address a critical challenge facing regional water utilities: the retention, transfer, and practical application of knowledge in smart metering programmes. Led by Mackay Regional Council in partnership with Isaac and Whitsunday Regional Councils through the WIM Alliance, and supported by BetterAIM, the Playbook moves beyond traditional static guidance by delivering a living, digital framework aligned to ISO 55001 asset management principles.

The Playbook captures operational experience, structures decision-making processes, and enables councils to progressively mature their smart metering capability. Delivered through a SharePoint-based digital environment, it integrates governance, process design, data management, and continuous improvement into a single system. This paper outlines the development approach, framework structure, and practical application of the Playbook, demonstrating how regional collaboration can accelerate implementation, reduce duplication of effort, and improve long-term asset management outcomes. The initiative provides a scalable model for knowledge-driven transformation across the water sector.

Keywords Smart metering, asset management, ISO 55001, digital framework, knowledge management, water utilities

1 Introduction

Smart water metering is no longer an emerging concept. It is now a foundational capability that underpins demand management, customer engagement, operational efficiency, and long-term planning within water utilities. Despite this, implementation across regional councils remains inconsistent. While some organisations have developed significant operational maturity, others are still navigating early-stage investigations or pilot deployments.

The primary challenge is not access to technology. The sector has demonstrated that suitable technologies exist and can be successfully deployed. The challenge lies in the ability to capture, retain, and apply the knowledge gained through implementation. In many organisations, this knowledge resides within individuals or isolated teams. As staff transition or programmes evolve, valuable insights are lost, resulting in repeated mistakes, inefficient procurement decisions, and fragmented approaches to delivery.

This issue is particularly pronounced in regional contexts, where resource constraints limit the ability to independently develop and maintain comprehensive frameworks. The result is duplication of effort across councils, inconsistent outcomes, and reduced confidence in decision-making.

The Smart Water Metering Playbook was developed to address this challenge directly. Rather than producing another static guideline, the initiative focuses on creating a structured, digital system that embeds knowledge into organisational practice. It provides a repeatable, scalable approach that enables councils to implement smart metering in a way that is aligned with asset management principles and organisational objectives.

2 Framework Design and Structure

The Playbook has been deliberately designed as an asset management framework rather than a guidance document. Its structure establishes a clear line of sight from strategic intent through to operational delivery and value realisation. This ensures that smart metering is not treated as a standalone technology initiative, but as an integrated component of the organisation's broader asset management system.

At its core, the framework aligns with key organisational drivers, including corporate strategy, city planning, and Strategic Asset Management Plans. It also reflects the broader operating environment, incorporating regulatory requirements, customer expectations, and market considerations. This alignment is critical in ensuring that smart metering initiatives deliver measurable organisational value.

The framework is structured into ten interconnected domains that collectively represent the full lifecycle of smart metering capability:

- Establishing scope and organisational context
- Defining leadership, governance, and standards
- Aligning organisation and workforce capability
- Developing asset strategies and business cases
- Embedding asset management planning
- Delivering capital and operational programmes
- Managing risk and compliance
- Driving continuous improvement
- Enabling knowledge and information governance
- Realising value and outcomes

Each domain is supported by defined processes, decision points, and supporting documentation. This structured approach ensures that all elements required for sustainable smart metering are addressed, from strategic alignment through to operational execution.

2.1 Core and Advanced Maturity Model

A defining feature of the Playbook is its maturity-based design. Recognising that councils operate at different levels of capability, the framework is structured into Core and Advanced components.

The Core Playbook establishes the minimum requirements for effective smart metering implementation. It focuses on foundational elements such as governance, process definition, data standards, and customer engagement. This ensures that organisations can achieve a stable and consistent operating model without unnecessary complexity.

The Advanced Playbook extends this foundation into optimisation and integration. It introduces more sophisticated capabilities, including data analytics, system integration, continuous improvement processes, and advanced decision support. This allows organisations to progressively mature their capability as resources and experience increase.

This tiered approach is critical for adoption. It enables councils to engage with the framework at a level that aligns with their current maturity, while providing a clear pathway for future development.

Playbook Overview

This version of the Smart Metering Playbook provides the core requirements. Should an organisation be interested in the more advanced functions, please refer to the [Advanced Smart Meter Playbook](#).

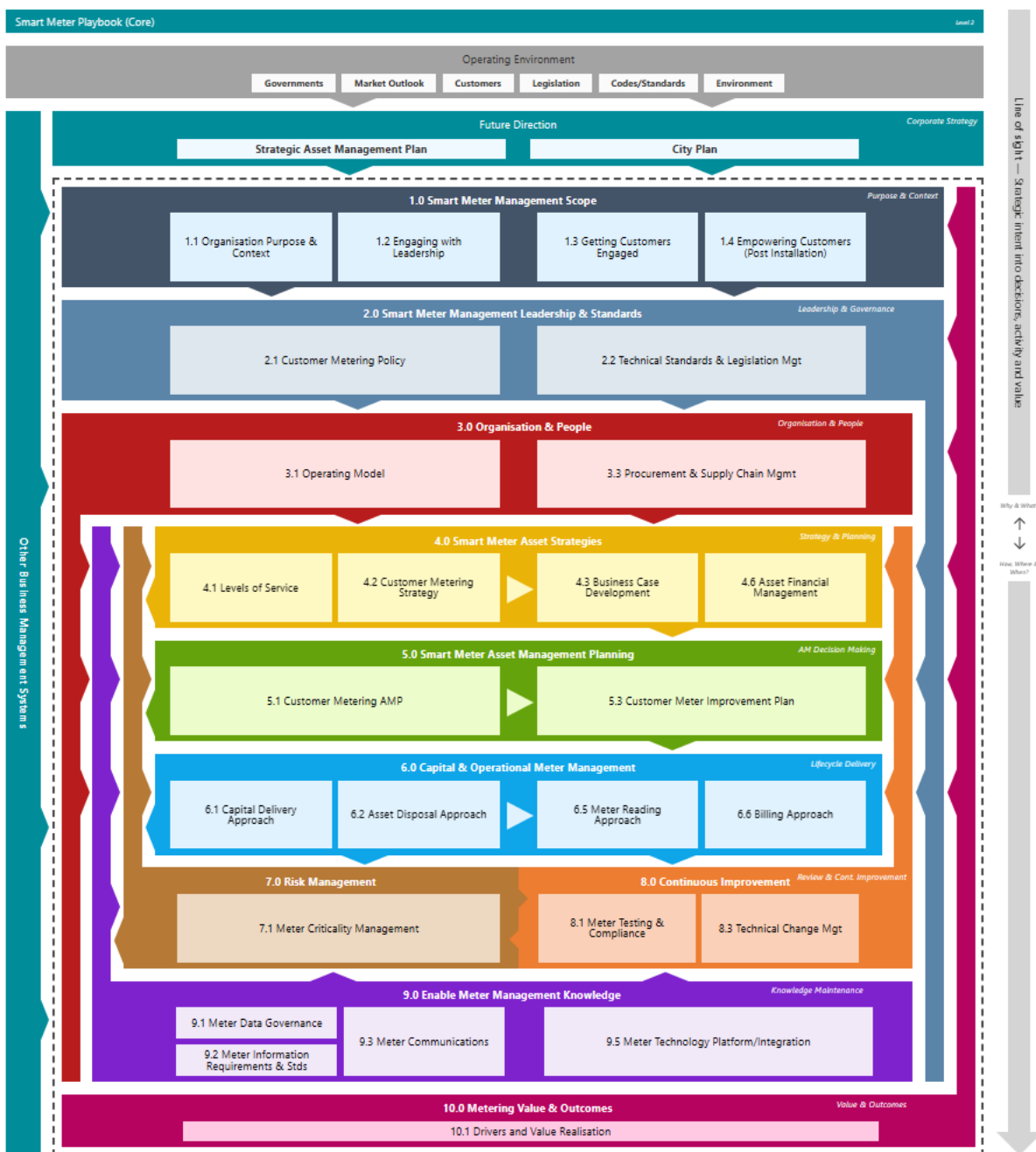


Figure 1 Core Smart Meter Playbook Framework

2.2 Process Architecture and Practical Application

The Playbook translates strategic intent into practical application through a structured process architecture. Each element within the framework is supported by clearly defined workflows that guide implementation.

These processes are designed to be:

- Repeatable across different organisational contexts
- Adaptable to local conditions and constraints
- Practical for use by operational teams

For example, the Smart Meter Management Scope process establishes the organisational foundation for smart metering. It ensures that initiatives are aligned with organisational purpose, stakeholder expectations, and customer needs. This includes engaging leadership, defining objectives, and establishing clear links to organisational outcomes.

A critical aspect of the process design is the emphasis on communication. The Playbook recognises that smart metering involves complex technical concepts that must be translated into accessible information for decision-makers. Processes are therefore structured to support the development of clear, plain-English materials that enable informed decision-making at executive and council levels.

2.3 Detailed Process Design and Execution

Each process within the Playbook is supported by detailed step-by-step guidance. This level of detail ensures that the framework can be applied consistently, regardless of the organisation's starting point.

Taking leadership engagement as an example, the process begins with defining the purpose of engagement and understanding the needs of the audience. It then progresses through the collection and distillation of technical information, development of structured communication materials, validation with subject matter experts, and presentation to decision-makers. Feedback is captured and used to refine the approach, ensuring continuous improvement.

This structured methodology ensures that organisations can effectively communicate the value, risks, and implications of smart metering. It moves beyond technical delivery and supports organisational alignment, which is often the determining factor in successful implementation.

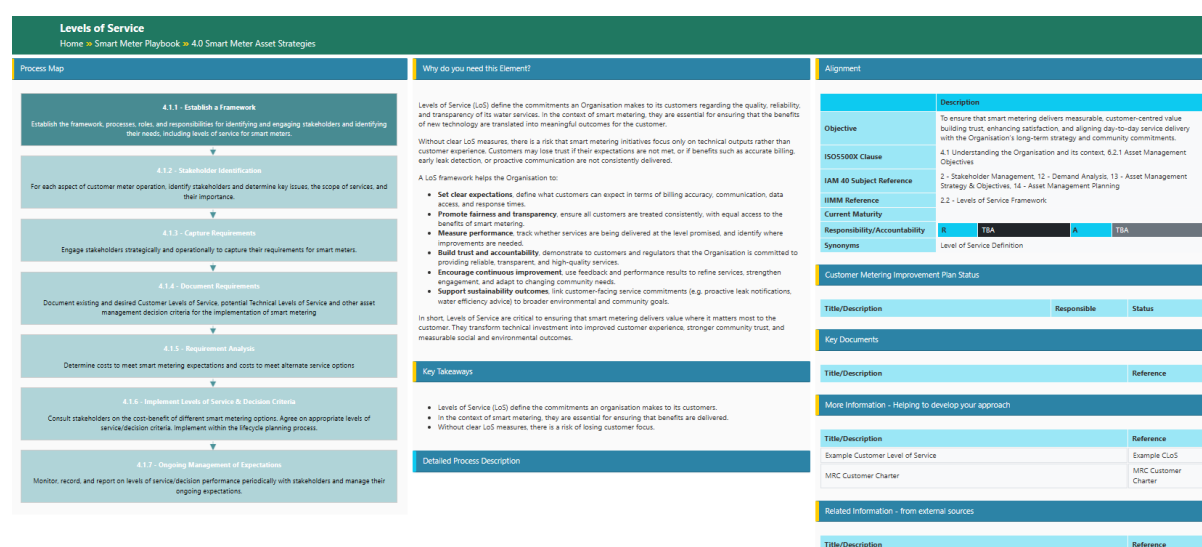


Figure 2 Smart Meter Playbook – Detailed Process Model – Levels of Service Example

2.4 Knowledge Enablement and Information Governance

One of the most significant contributions of the Playbook is its treatment of knowledge as a managed asset. This represents a fundamental shift in how information is approached within smart metering programmes.

The framework establishes a comprehensive approach to information governance, covering the entire asset lifecycle. This includes defining data requirements, establishing standards, managing communications technologies, enabling analytics capability, and ensuring data security and privacy.

By structuring knowledge in this way, the Playbook ensures that information is not only collected, but actively used to support decision-making. It enables organisations to move from data accumulation to insight generation.

This approach is directly aligned with ISO 55001 principles, which emphasise the importance of information in supporting asset management outcomes. It also reinforces the concept that digital assets, including data and knowledge, must be managed with the same rigour as physical assets.

3 Outcomes and Benefits

The implementation of the Smart Water Metering Playbook has delivered tangible benefits across participating councils. These benefits are not theoretical; they are grounded in practical application and observed improvements in capability and performance.

One of the most significant outcomes has been the improvement in consistency across organisations. By providing a common framework, the Playbook has reduced variability in approach and enabled more confident decision-making. Councils are no longer required to develop processes independently, which has reduced duplication of effort and accelerated implementation timelines.

The Playbook has also strengthened organisational capability. Staff are able to access structured, practical guidance that supports their roles, reducing reliance on individual knowledge and improving resilience to workforce changes.

From an operational perspective, the framework has supported better integration between strategic planning and day-to-day activities. This has improved alignment between investment decisions, operational delivery, and customer outcomes.

Importantly, the digital format ensures that the Playbook remains current. It can be updated as new insights emerge, supporting continuous improvement and long-term sustainability.

4 Lessons Learned

The development and implementation of the Playbook has highlighted several key lessons that are relevant to the broader sector.

The first is that knowledge must be embedded within systems rather than documents. Traditional reports quickly become outdated and are rarely used in practice. By contrast, a digital, structured framework ensures that knowledge is accessible, relevant, and actively applied.

The second lesson is the importance of governance and ownership. For the Playbook to remain effective, it must be actively maintained and managed. This requires clear accountability and ongoing engagement from participating organisations.

The third lesson is the value of translating technical complexity into accessible language. Smart metering involves a wide range of technical concepts, but successful implementation depends on the ability to communicate these concepts clearly to decision-makers and stakeholders.

Finally, the project demonstrated the importance of collaboration. The collective experience of multiple councils provided a richer and more robust foundation than any single organisation could achieve independently.

5 Scalability and Sector Implications

The Smart Water Metering Playbook provides a scalable model that has implications beyond the WIM Alliance. Its structure and digital delivery approach make it adaptable to different organisational contexts, regardless of size or maturity.

The framework demonstrates how regional collaboration can be used to address common challenges and accelerate capability development. It provides a practical example of how knowledge can be shared across organisations in a way that is structured, sustainable, and aligned with asset management principles.

At a sector level, the Playbook highlights the importance of moving beyond static guidance towards dynamic, system-based approaches. This is particularly relevant as utilities continue to adopt digital technologies and generate increasing volumes of data.

The initiative also reinforces the role of asset management frameworks in supporting digital transformation. By aligning smart metering with ISO 55001 principles, the Playbook ensures that technology adoption is integrated with governance, processes, and organisational objectives.

The Playbook provides a blueprint for how the water sector can transition towards more collaborative, knowledge-driven models of operation. It demonstrates that by working together, organisations can overcome resource constraints, reduce risk, and deliver better outcomes for their communities.

6 Conclusion

The Smart Water Metering Playbook demonstrates a practical and scalable response to one of the most persistent challenges facing the water sector: the loss and fragmentation of knowledge in the delivery of emerging technologies. While smart metering itself is well understood, the ability to consistently implement, manage, and evolve these systems remains uneven across organisations, particularly in regional contexts.

By shifting from static documentation to a structured, digital framework, the Playbook redefines how knowledge is captured and applied. It embeds operational experience, governance, and decision-making processes into a living system that supports day-to-day use, rather than periodic reference. This transition is critical. It ensures that knowledge is not only retained, but actively contributes to improved outcomes over time.

The initiative also highlights the value of collaboration. Through the WIM Alliance, councils have been able to consolidate experience, reduce duplication of effort, and accelerate capability development. This collective approach has produced a framework that is both robust and adaptable, reflecting real operational needs rather than theoretical constructs.

From an asset management perspective, the Playbook reinforces the importance of aligning digital initiatives with established frameworks such as ISO 55001. By integrating smart metering within the broader asset management system, organisations are better positioned to deliver sustainable, value-driven outcomes.

Looking forward, the Playbook provides a clear pathway for scaling this approach across the sector. Its structure, digital delivery model, and maturity-based design make it applicable beyond the initial alliance, offering a blueprint for broader adoption.

Ultimately, the Smart Water Metering Playbook demonstrates that meaningful progress in the water sector will not be driven by technology alone, but by the ability to systematically capture, share, and apply knowledge. In this context, being “smarter together” is not simply a concept, but a practical strategy for delivering resilient, efficient, and customer-focused water services.