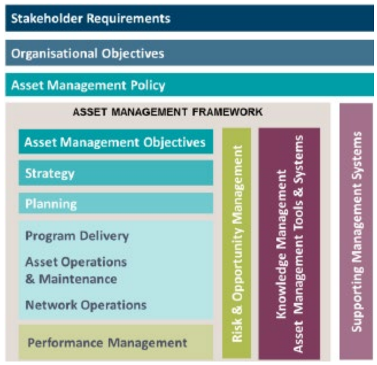
Introduction of Assets to Service

Guideline



DOCUMENT HIERARCHY

This document resides within the Planning component of Western Power's Asset Management System (AMS).

DOCUMENT DATE

This document was last updated in February 2025

IMPLEMENTATION DATE

This document came into service in January 2024

DOCUMENT CONTROL

Record of endorsement, approval, stakeholders, and notification list is provided in ID05-1343104688-193687.

RESPONSIBILITIES

Western Power's Asset Performance Function is responsible for this document

CONTACT

Western Power welcomes your comments, questions, and feedback on this document, which can be emailed to standards.excellence@westernpower.com.au

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Revision Details

Version	Date	Summary of change	Section
0	15/09/2022	Initial release	
1	11/2023	WP internal to public facing with new template with minor changes	Section 1, Section 1.1, Section 2
2	02/2025	Review of structure of checklist, expansion to initiation phase and introduction of process workflow	All

1 Introduction

This guideline assists Western Power gathering and recording the required evidence to support the introduction of a new asset into service.

Any new investment in Western Power's Network follows Western Power's Investment Governance Framework (IGF), including investments to connect Customers. This guideline identifies the introduction to service deliverables at each phase of the investment. Section 1.5 explains the relation between the IGF and the Introduction to Service guideline.

1.1 Purpose and scope

Western Power uses this guideline for any new asset class, type, group, component, or modifier installed in the Western Power network. This document defines the considerations for project teams when introducing a new asset in a trial and in normal operations.

For this purpose, the network includes all assets owned by Western Power regardless of its connectivity to the grid, that are installed in the network or that perform a function in the network. This guideline considers technical, cost, and effort elements through the introduction process, which also engages all relevant stakeholders at the appropriate time. All criteria are mandatory except where not applicable.

The following advice applies to this guideline when introducing new assets for trial.

- The requirement for new assets under trial is less onerous (please refer the checklist) only if there is a plan to remove the new asset(s) at the end of the trial or if there is no definitive plan for a full-scale implementation at the start of the trial.
- As and when the project team decides to proceed to full-scale implementation, or that assets under trial would remain installed after completion of the trial, all criteria in the checklist becomes mandatory.

1.2 Accountability

The team accountable for introducing the new asset into the network is accountable for completing the checklist. For internal projects, this accountability is from the sponsor of the investment. For 'Customer' projects, the 'Customer' is accountable for completing the checklist. In both situations, the project's joint planning team supports completion of the checklist according to each team members expertise and role

Sponsor or the 'Customer' must complete the checklist in Appendix-A at each investment phase for internally driven projects and externally driven projects respectively. The Customer must liaise with the Access Consultant and the project's Joint Planning Team (JPT) to complete the introduction to service checklist.

In case of an asset introduced outside the purview of Investment Governance Framework (including through a change of specification), the Head of Function (or delegate) of the project team is accountable for completion of the checklist.

1.3 Acronyms

Acronym	Definition
AP	Asset Performance
COM	Constructability, Operability, Maintainability

Acronym	Definition
FMEA	Failure Mode and Effects Analysis
FPT	Field Protection and Telecom
HOF	Head of Function
IGF	Investment Governance Framework
JPT	Joint Planning Team
KPI	Key Performance Indicator
MST	Maintenance Scheduled Task
N/A	Not Applicable
NO	Network Operations
O & M	Operational Maintenance
RBD	Reliability Block Diagram
RCM	Reliability Centred Maintenance

1.4 Definitions

Term	Definition
Gated Process	The process defining the lifecycle of a single Investment divided into phases separated by Gates. Each Gate requires a decision on whether to progress to the next phase.
Investment	An expense for which the primary purpose is to achieve objectives relating to an Investment Portfolio. An investment may be delivered through existing business activities (non-project work), a set of related Projects (a Program), or a single Project.
Sponsor	Accountable owner of an investment committing to deliver the net benefits
Standard	Refined statements of principle within a specific area covered by a Policy Framework that assist with the achievement and implementation of the stated outcomes of that Policy.

1.5 Investment Governance Framework and Introduction to Service

The Investment Governance Framework (IGF) describes the structure and approach that Western Power uses when making Investment decisions, which involves allocating and managing financial capital to deliver specific and measurable business outcomes aimed at achieving corporate objectives.

The purpose of investment management is to monitor and manage the progress of an individual investment through its lifecycle to ensure it meets its objectives. The investment management lifecycle is a gated process which has six phases and six control gates. Between each phase, a control gate sets the mandatory deliverables and approvals that must be in place before the Investment can progress to the next phase.

The introduction to service checklist in Appendix-A defines the specific introduction to service deliverables at each phase of the investment lifecycle. Each deliverable is due by the end of each phase, or at each Gate.

2 Checklist Instructions

Western Power created a checklist that project teams fill as the investment goes through IGF's Gated Process. The checklist is available in Appendix-A of this document.

Certain requirements have an asterisk (*) sign. This sign only applies to assets introduced as a trial and denotes a criterion that can be waved for assets that will be removed from the network upon conclusion of the trial or when there is no definitive plan for a full-scale implementation. However, if the asset custodian, strategy custodian or network operator deem necessary to fulfill any criterion for assets under trial (typically due to strategic or operational risks), it becomes mandatory regardless of it having an asterisk (*) sign.

The following instructions apply to correctly fill in the checklist:

- Identify and map the relevant stakeholders while progressing in each phase.
- Complete the checklist and obtain relevant approvals as the project progresses through IGF's gates.
- Include justification/explanations for every criterion filled as 'N/A' (Not Applicable)
- Provide documented evidence that fulfills each criterion.
- Implement this guideline in conjunction with WP's Network Operations Operationalisation Standard and Western Power's Operationalisation Guideline. Consult WP's operational teams for advice on operationalisation requirements.
- For additional information or clarification about the application of this document for internal projects, contact the Asset Management System mailbox. For Customer-driven projects, consult your Access Consultant.

Appendix-A: Introduction to Service Checklist

Initiation (gate 0 to gate 1)

Asset introduced to service:	
Brief description (class, type, group, component, modifier):	
Project:	

Phases (Gates)	Gate Review Criteria	Response	
		Doc Ref	N/A
Gate 0	OPPM investment number		
Initiation (Gate 0 to Gate 1)	Request Asset Performance representative be included in the project's JPT (including WO)		
	Set the scene for requirements: ○ A new Preventive Routine program ○ A new Preventive Condition-Based program ○ If the asset requires refurb within 15y, also consider Capex expenditure ○ Account for a full unit spare (one spare for each new type of asset) ○ Account for cost to develop a strategy (6m, 12m, 18m depending on level of complexity) ○ Account for training of crews, technicians and engineers (maintenance crews, fault crews, construction crews, asset and strategy custodians) ○ Account for adding the asset to WP) systems – seek indicative costing from DP or use cost from previous projects		
	JPT decision to scope new asset option: Progress ☐ Discard ☐		
	Asset Performance representative confirmation that scene was set and acknowledgment of JPT decision to progress or discard option		

Asset Performance Representative (Name/ Role)		Signature/Ref		Date	

Scoping (gate 1 to gate 2)

Asset introduced to service:	
Brief description (class, type, group, component, modifier):	
Project:	

Phases (Gates)	Gate Review Criteria	Response	
		Doc Ref	N/A
Scoping (Gate 1 to Gate 2)	Functional requirements are defined & documented. * (To include Reliability, Availability, Maintainability, & Supportability requirements)		
	Function of the asset in the network defined		
	Asset hierarchy, type of information that needs to be recorded, systems that need to be modified identified and high-level cost estimate for system changes completed		
	Strategy complexity level agreed with Asset performance representative and cost and schedule accounted for in scoping		
	Preliminary maintenance requirements are defined and agreed with Western Power's Asset Performance (AP) Function and documented.		
	Maintenance tasks scoped and cost estimate complete (Preventive Routine and Preventive Condition-Based)		
	Refurbishment and Renewal requirements scoped and cost estimate complete *		
	Preliminary operational requirements are defined, agreed with Western Power's Network Operations (NO) and documented. (For Automation and Control assets Field Protection & Telecom - FPT shall replace NO)		
	Training requirements are defined, agreed with AP, NO (or FPT), & Operational Maintenance (O & M) and documented Consider: • Familiarisation of asset, technology • Inspection procedures * • Data capture and data entry • Maintenance procedure • Operating procedure • Fault response • Customer service centre * • Field crew awareness		
	High-level training plan developed and cost and schedule accounted for in scoping		
	Options assessment includes demonstrated rigour on whole of life cycle considerations (e.g., service life, cost, risk, future requirement) for all options. * Optioneering aligned with requirements of the Asset Management Strategy Standard (Assess Life Cycle Options requirements)		
	New Asset is the recommended Option? Yes ☐ No ☐		

Confirmation that Checklist is complete, scope of works document and cost estimate include known Introduction to Service Requirements					
Asset Performance Representative (Name/ Role)		Signature/Ref		Date	
Introduction to Service Scoping Endorsement (Area Manager in Asset Performance or delegate)					
Area Manager (Name/ Area)		Signature/Ref		Date	

If a New asset is the recommended option, fill in the checklist for Planning (gate 2 to gate 3), Execution (gate 3 to gate 4) and Close-out (gate 4 to gate 5) phases.

If a New asset is NOT the recommended option, Asset Performance will record the checklist filled up to gate 2 to reassess if a new potential opportunity to introduce this asset arises in the future.

Planning (gate 2 to gate 3)

Asset introduced to service:	
Brief description (class, type, group, component, modifier):	
Project:	

Phases (Gates)	Gate Review Criteria	Response	
		Doc Ref	N/A
Planning (Gate 2 to Gate 3)	Operations & Maintenance (O&M) requirements are included in the functional specification. * (To include consideration of standardisation where applicable)		
	Maintenance Task Analysis for Preventive Routine Maintenance (K1) complete - program(s) of work and frequency defined, scope complete and unit rate estimated		
	Maintenance Task Analysis for Preventive Condition-Based Maintenance (K2) complete - program(s) of work defined, scope complete and unit rate estimated		
	When applicable, Refurbishment high-level scope and cost estimate complete		
	Spare assessment complete (strategic/insurance and operational spares) in lines with the Network Assets Spares Management Standard. Storing location of spares defined. Rotation and spares maintenance defined. Cost of acquiring and maintaining spares estimated		
	Business Requirements Document (BRD) for integration of the asset with Western Power systems is endorsed by the enterprise architect, strategy custodian and data steward (requirements for trials only can be less onerous but at a minimum stakeholders will need to know where the assets are installing and what is their function in the network).		
	Investment includes an IT project to implement the asset information in Western Power systems and DP has committed to support the project (Systems Project Management plan or equivalent complete)		
	Investment includes an allocation to develop the asset management strategy (allocation endorsed by SI&O or S&T Area Manager)		
	Training plan developed (trainees and trainer defined, training scheduled and on track). Training costs and schedule included in the investment		
	O&M costs (including introduction to service costs) are included in Net Present Cost assessment (Investment Evaluation Model includes costs for Preventive Maintenance (Routine and Condition-Based), Refurbishment (if within the evaluation period), spare acquisition and storing, strategy development, systems updates, and training)		
	Costs to introduce asset in service are considered & endorsed by AP and included in Business Case.		
	O&M costs are agreed with AP & NO (or FPT) and included in budget / network plan.		

Confirmation that Checklist is complete, Business or Investment Case includes cost and schedule to deliver all Introduction to Service Requirements					
Asset Performance Representative (Name/ Role)		Signature/Ref		Date	
Confirmation that O&M costs are included in budget / network plan as applicable (if gate 3 is outside the monthly forecast or Network Plan cycles, AP Sponsor will take an action to complete this task and record date of completion					
Asset Performance Sponsor (Name)				Date of Acknowledgement of the action	
First Financial Year of expenditure updated in the plan		First Network Plan that includes expenditure		Date expenditure was added to the Network Plan	
Introduction to Service Planning Endorsement (Area Manager in Asset Performance or delegate)					
Area Manager (Name/ Area)		Signature/Ref		Date	

Execution (gate 3 to gate 4)

Asset introduced to service:	
Brief description (class, type, group, component, modifier):	
Project:	

Phases (Gates)	Gate Review Criteria	Response	
		Doc Ref	N/A
Execution (Gate 3 to Gate 4)	Details of operations, maintenance, spares & disposal requirements are included in Technical specification.		
	Asset operation and maintenance manual is reviewed by AP & NO (or FPT) and made available for use.		
	Standard jobs for Preventive Maintenance (Routine and Condition-Based) created in the system		
	Maintenance Schedule Tasks for Preventive Routine Maintenance Created in the system (or ready and waiting for asset to be in the system, when systems cannot be updated before In-Service Date)		
	Spares ordered and storage location ready or confirmed ready by Supply-Chain (or Area responsible for storing the spares) by the time the spares arrive		
	Asset management information systems changes are implemented in line with approved BRD Note: If the time to implement the asset in the systems is longer than the execution timeframe, the Business Unit responsible for introducing the new asset will maintain ownership and manage of the in-service asset until the asset is available in Western Power systems in line with BRD		
	Asset Management Strategy approved (or on track if execution timeframe if shorter than time required to develop the strategy)		
	Training Plan progressing as planned (On Track). Note: By the time the asset is energised, as a minimum fault and maintenance crews must have been trained in how to maintain and repair the asset. When achieving this is not practical, the project team must develop a contingency plan for an asset failure scenario, for maintaining the new asset and the other assets in the vicinity		
	Asset maintenance and operation is integrated to existing processes (or new process created) in place. * Consider: • Inspection and/or test tools • Warranty information • O&M Contract • Work Practice		
	'As-Built' drawings and documentation is made available to all applicable stakeholders (including Engineering & Design, audience for training, IT serviced, data management, asset and strategy custodian) Consider: • Technical Specification • As-built drawings		

Confirmation that Checklist is complete, all Introduction to Service Requirements were met					
Asset Performance Representative (Name/ Role)		Signature/Ref		Date	
Asset Custodian acknowledges custodianship of the asset. Asset is in the system; maintenance activities are ready; training is complete or scheduled					
Asset Custodiam (Name/ Area)		Signature/Ref		Date	
Introduction to Service Execution Endorsement (Area Manager in Asset Performance or delegate)					
Area Manager (Name/ Area)		Signature/Ref		Date	

Close-out (gate 4 to gate 5)

Asset introduced to service:	
Brief description (class, type, group, component, modifier):	
Project:	

Phases (Gates)	Gate Review Criteria	Response	
		Doc Ref	N/A
Close-out (Gate 4 to Gate 5)	Asset is operating and performing to functional requirements (performance targets met or action plan in place to recover) – confirmation is required from NO (or FPT) and AP. * (Consider Reliability, Availability, Maintainability, Supportability)		
	All relevant operational information, documentation, contracts, systems, training requirements are completed, reviewed, approved, and made available to NO (or FPT).* (Consider details from Gate 4 requirement list)		
	All applicable systems are updated (as per BRD); data quality metrics and monitoring in place		
	All relevant training, operation and maintenance work practice, procedures are completed, reviewed, approved and made available to O&M * (Consider details from Gate 4 requirement list)		

Confirmation that Checklist is complete, all Introduction to Service Requirements were met					
Asset Performance Representative (Name/ Role)		Signature/Ref		Date	
Introduction to Service Close-out Endorsement (Area Manager in Asset Performance or delegate)					
Area Manager (Name/ Area)		Signature/Ref		Date	