

Tertiary Education CAM Workshop

AM Assessment Tool

17 February 2011

- Based on the 2011 International Infrastructure Management Manual (IIMM)
- Aligned with The Treasury AM Assessment Tool
- Approach is consistent with the:
 - 2004 International Infrastructure Management Manual (IIMM)
 - 2006 NAMS Property Manual
 - 2010 TEC CAM Standard
- Excel spreadsheet covering the following aspects:
 - Context of AM in the organisation
 - Assess current and planned performance
 - Summary output

Section 2 Asset Management Maturity Assessment Tool			Assessment Criteria				Overall Score	Overall Rating
Criteria	Sub-criteria	Weight	1-10	11-20	21-30	31-40		
2.1	AM Policy and Strategy	10%	1-10	11-20	21-30	31-40	10	
2.2	Context and Performance Management	20%	1-10	11-20	21-30	31-40	20	
2.3	Asset Forecasting	20%	1-10	11-20	21-30	31-40	20	
2.4	Asset Register Data	10%	1-10	11-20	21-30	31-40	10	

- Three broad areas of assessment:
 - Understand and Define Requirements (IIMM, Section 2)
 - Developing Asset Management Lifecycle Strategies (IIMM, Section 3)
 - Asset Management Enablers (IIMM, Section 4)

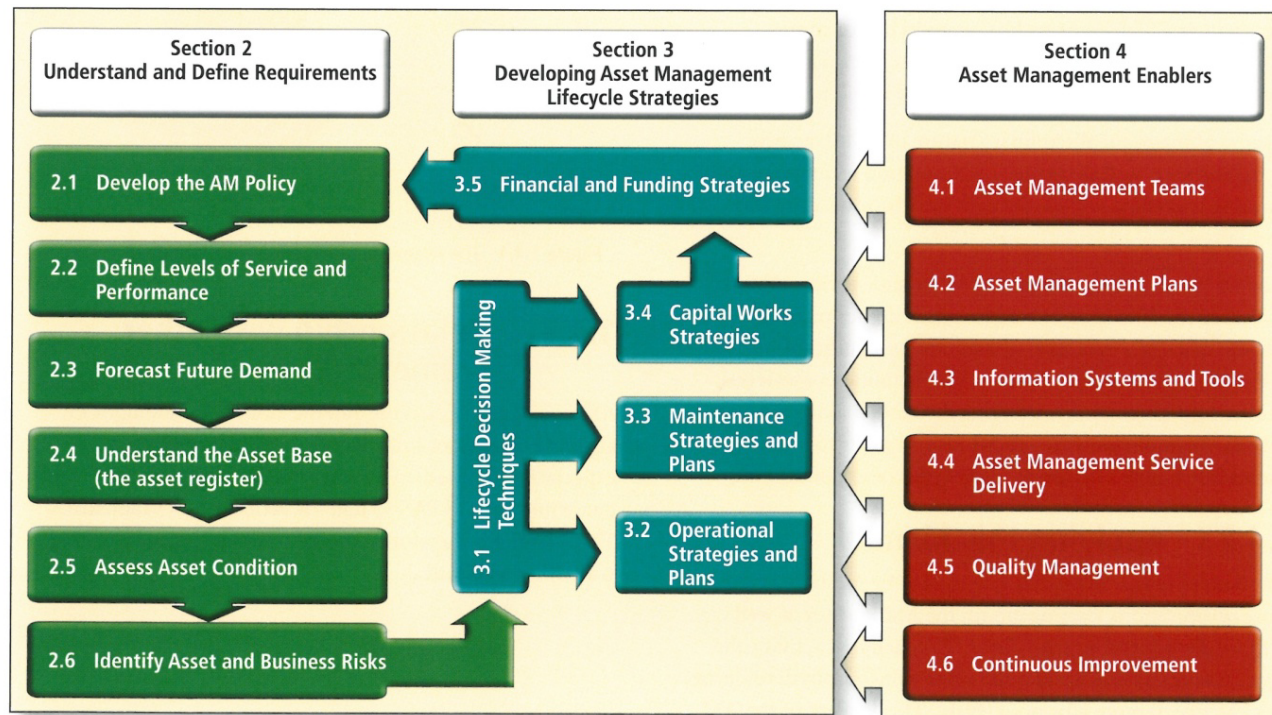


Figure 1.3.1: The Asset Management Process

Reference: 2011 International Infrastructure Management Manual

Understanding and Defining Requirements

- AM Policy and Strategy
- Level of Service and Performance Management.
- Demand Forecasting
- Asset Register Data
- Asset Condition Assessment
- Risk Management

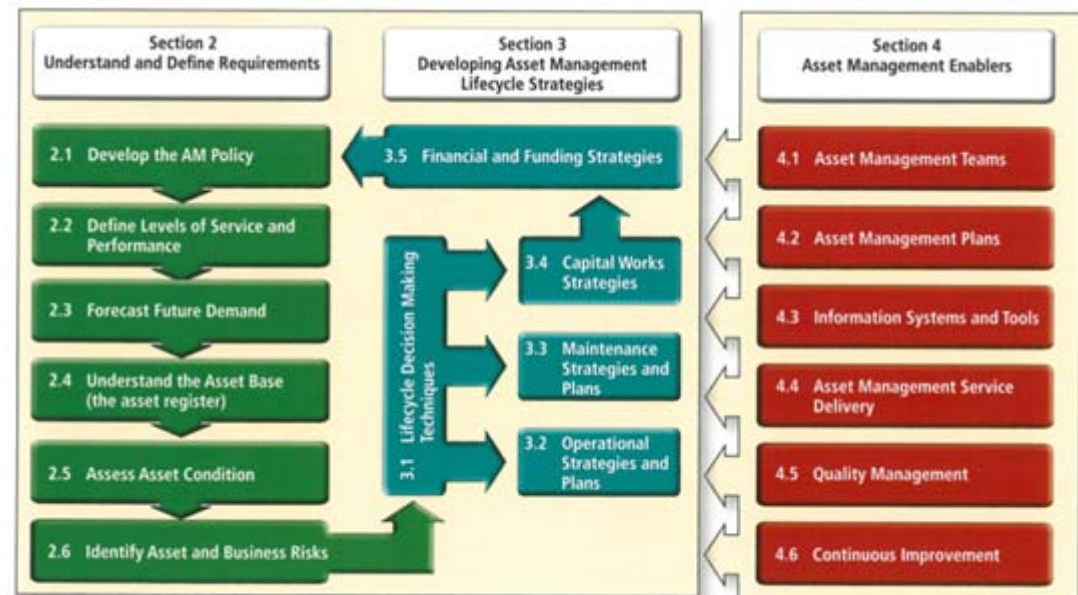


Figure 1.3.1: The Asset Management Process

Developing AM Lifecycle Strategies

- Decision Making
- Operational Planning and Reporting
- Maintenance Planning
- Capital Investment Strategies
- Financial and Funding Strategies

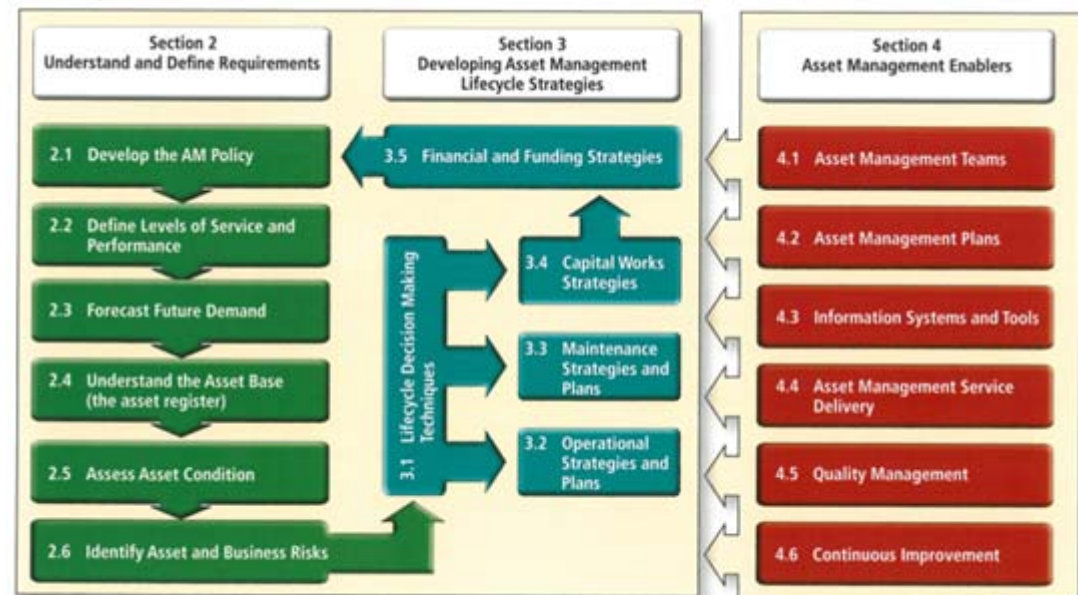


Figure 1.3.1: The Asset Management Process

Asset Management Enablers

- Asset Management Teams
- Asset Management Plans
- Information Systems
- Service Delivery Models
- Quality Management
- Improvement Planning

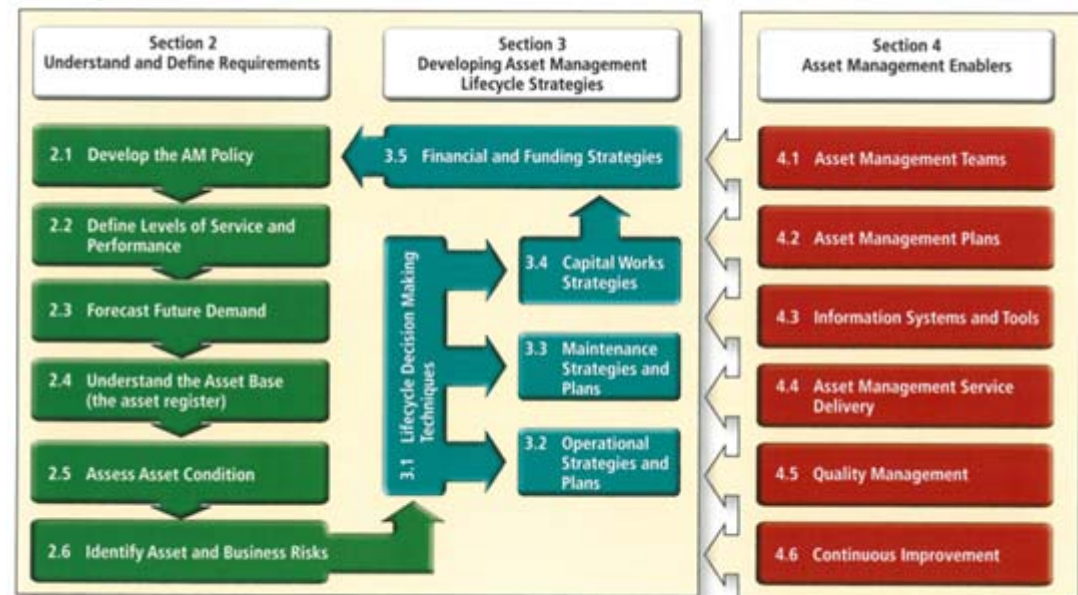


Figure 1.3.1: The Asset Management Process



Generic CAM Standard	Initial TEC AM Capability Assessment	Proposed TEC AM Capability Assessment
Core	Unawareness	0
	Awareness	Aware (5 – 20)
		Minimum (25 – 40)
Moderate	Systematic Approach	Core (45 – 60)
	Competent	Intermediate (65 – 80)
Advanced	Excellence	Advanced (85 – 100)

- Outcomes and outputs over the next 3-5 years
- Nature and scale of the physical assets required
- Change pressures and the impact service delivery
- AM governance and management
- AM improvement initiatives
- AM Maturity Assessment

Reference No.	Question	Section	Questions	Minimum	Core	Intermediate	Advanced	Current Score	Appropriate Target
				25-40	45-60	65-80	85-100		
Understanding and Defining Requirements									
IIM M 2.1	1	AM Policy and Strategy	To what extent has your institution's AM Policy and AM Strategy been articulated, approved, communicated and acted on? How consistent is this policy and strategy with current government policies?	Corporate expectations are expressed informally and simply, e.g. "all departments must update AMPs every three years".	There are defined policy statements for all significant business activities. There is a clear linkage to corporate goals. AM Policy is supported by high level action plans with defined responsibilities for delivery.	Expectations of each business activity are supported by detailed action plans, resources, responsibilities and timeframes. AM Policy and Strategy is reviewed and adopted by Executive Team each year.	AM Policy and Strategy is fully integrated into the organisation's business processes and subject to defined audit, review and updating procedures.	25	40
IIM M 2.2	2	Levels of Service and Performance Management	How does your institution determine what is the appropriate level of service for its customers and then ensure that asset performance is appropriate to those service levels?	Basic levels of service have been defined and agreed, along with the contribution of asset performance to the institution's objectives.	Customer Groups have been defined and requirements understood. Levels of service and performance measures are in place covering a range of service attributes. There is annual reporting against targets.	Customer Group needs have been analysed and costs of delivering alternate levels of service have been assessed. Customers are consulted on significant service levels and options.	There is formal consultation over levels of service. Customer levels of service and technical (ie asset performance) levels of service are an integral part of to decision making and business planning.	30	40
IIM M 2.3	3	Demand Forecasting	How robust is the approach your institution uses to forecast demand for its services and the possible impact on its asset portfolios?	Demand forecasts are derived by experienced staff (rather than data models), taking account of past demand trends and likely future growth patterns.	Demand Forecasts are based on robust projections of a single primary demand factor (e.g. population growth) and extrapolation of historic trends. Risk associated with changes in demand is broadly understood and documented.	Demand forecasts are based on mathematical analysis of past trends and primary demand factors. A range of demand scenarios is developed (e.g.: high/medium/ low).	As for intermediate, plus there is an assessment of risks associated with different demand scenarios, and mitigation actions are identified.	30	50
IIM M 2.4	4	Asset Register Data	What sort of asset-related information does the organisation collect, and how does it ensure the information has the requisite quality (accuracy, consistency, reliability)?	Basic physical information recorded in a spread sheet or similar (e.g. location, size, type), but may be based on broad assumptions or not complete.	Sufficient information to complete asset valuation – as above plus replacement cost and asset age/ life. Asset hierarchy, asset identification and asset attribute systems documented.	A reliable register of physical and financial attributes recorded in an information system with data analysis and reporting functionality. Systematic and documented data collection process in place. High level of confidence in critical asset data.	Information on work, history type and cost, condition, performance, etc. recorded at asset component level. Systematic and fully optimised data collection programme. Complete data-base for critical assets; minimal assumptions for noncritical assets.	20	50

Levels of Service and Performance Management (IIMM 2.2)

<p>Aware (5 – 20)</p>	<p>The organisation recognises the benefits of defining levels of service but has yet to implement guidelines for development of these.</p>
<p>Minimum (25 – 40)</p>	<p>Basic levels of service have been defined and agreed, along with the contribution of asset performance to the institution's objectives.</p>
<p>Core (45 – 60)</p>	<p>Customer Groups have been defined and requirements understood. Levels of service and performance measures are in place covering a range of service attributes. There is annual reporting against targets.</p>
<p>Intermediate (65 – 80)</p>	<p>Customer Group needs have been analysed and costs of delivering alternate levels of service have been assessed. Customers are consulted on significant service levels and options.</p>
<p>Advanced (85 – 100)</p>	<p>There is formal consultation over levels of service. Customer levels of service and technical (ie asset performance) levels of service are an integral part of to decision making and business planning.</p>

Demand Forecasting (IIMM 2.3)

Aware (5 – 20)	The organisation recognises the benefits of demand forecasting but has yet to implement processes to forecast demand.
Minimum (25 – 40)	Demand forecasts are derived by experienced staff (rather than data models), taking account of past demand trends and likely future growth patterns.
Core (45 – 60)	Demand Forecasts are based on robust projections of a single primary demand factor (e.g. population growth) and extrapolation of historic trends. Risk associated with changes in demand is broadly understood and documented.
Intermediate (65 – 80)	Demand forecasts are based on mathematical analysis of past trends and primary demand factors. A range of demand scenarios is developed (e.g.: high/medium/ low).
Advanced (85 – 100)	As for intermediate, plus there is an assessment of risks associated with different demand scenarios, and mitigation actions are identified.

Asset Register Data (IIMM 2.4)

<p>Aware (5 – 20)</p>	<p>The organisation recognises the benefits of capturing asset data but has yet to implement systems to capture the data.</p>
<p>Minimum (25 – 40)</p>	<p>Basic physical information recorded in a spread sheet or similar (e.g. location, size, type), but may be based on broad assumptions or not complete.</p>
<p>Core (45 – 60)</p>	<p>Sufficient information to complete asset valuation – as above plus replacement cost and asset age/ life. Asset hierarchy, asset identification and asset attribute systems documented.</p>
<p>Intermediate (65 – 80)</p>	<p>A reliable register of physical and financial attributes recorded in an information system with data analysis and reporting functionality. Systematic and documented data collection process in place. High level of confidence in critical asset data.</p>
<p>Advanced (85 – 100)</p>	<p>Information on work history type and cost, condition, performance, etc. recorded at asset component level. Systematic and fully optimised data collection programme. Complete data-base for critical</p>

- New assessment tool aligns with Treasury's CAM assessment tool and the approach adopted across government
- New assessment tool aligns with the 2010 TEC assessment tool
- Previously identified improvement activities and the associated work remains valid and relevant
- Improvement plans are a key component of both assessments
- Previous work provided ITPs and wananga with prioritised improvement plans – a key part of CAM maturity assessment