



Unison's Asset Management Journey & ISO 55001 Certification

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Asset Management in a Fast Changing World

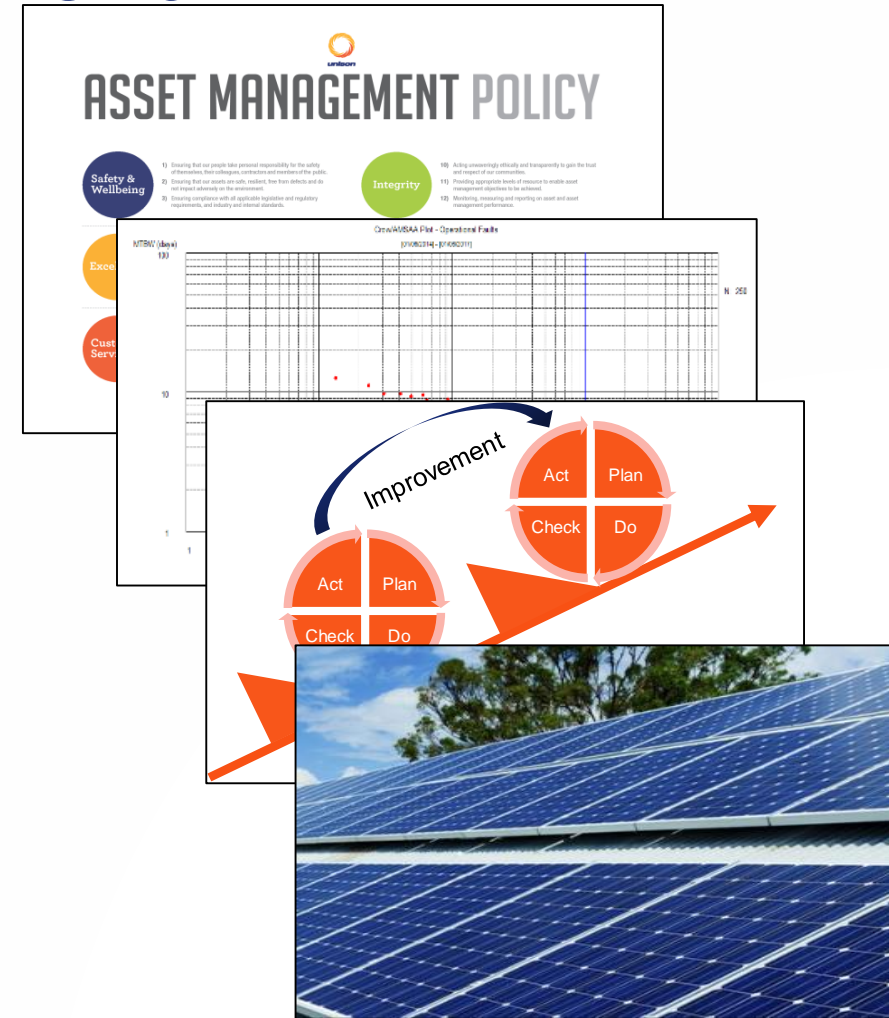


- Return on investment
- Affordability of the service
- Environmental sustainability
- Ageing infrastructure
- Digital technology
- Disruption?!

Is asset management keeping up?

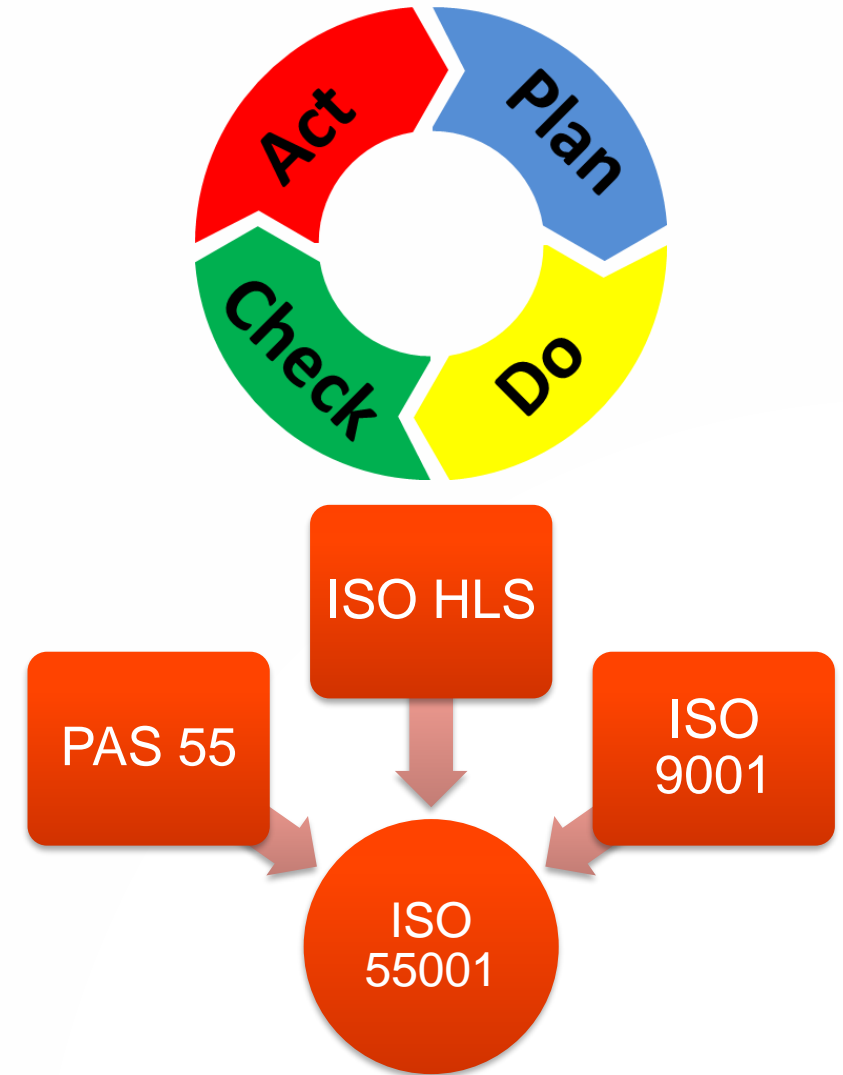
Unison's Motivation for Improvement

1. Strategy driving asset management decision-making
 2. Better understanding of the condition of assets to manage risk
 3. Excising waste and doing more with less
 4. Future requirements of the assets and asset management
- ISO 55001 as a framework



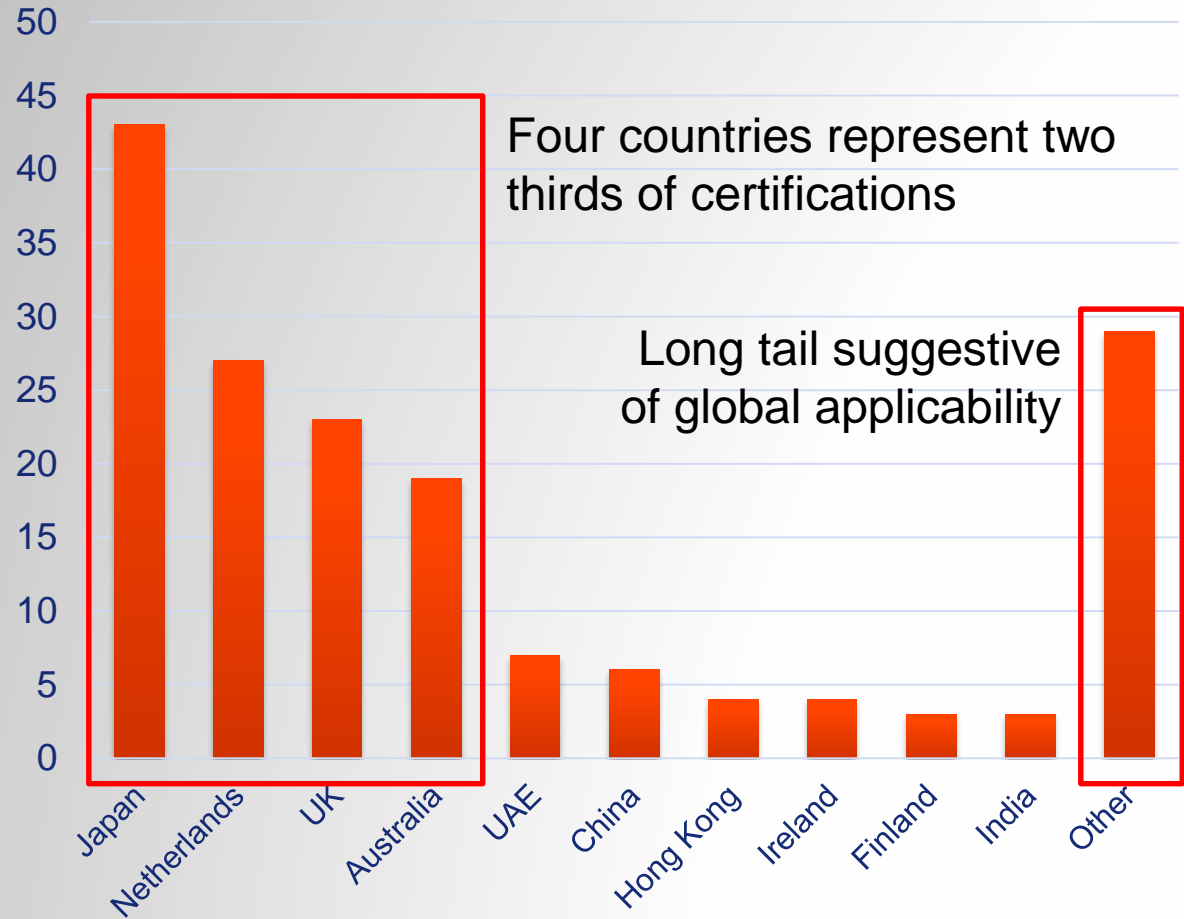
Why ISO 55001?

- Whole of system approach
- Not prescriptive of how asset management will be done
- Can be independently certified
- Successor to PAS 55
- Consistency with other management systems standards

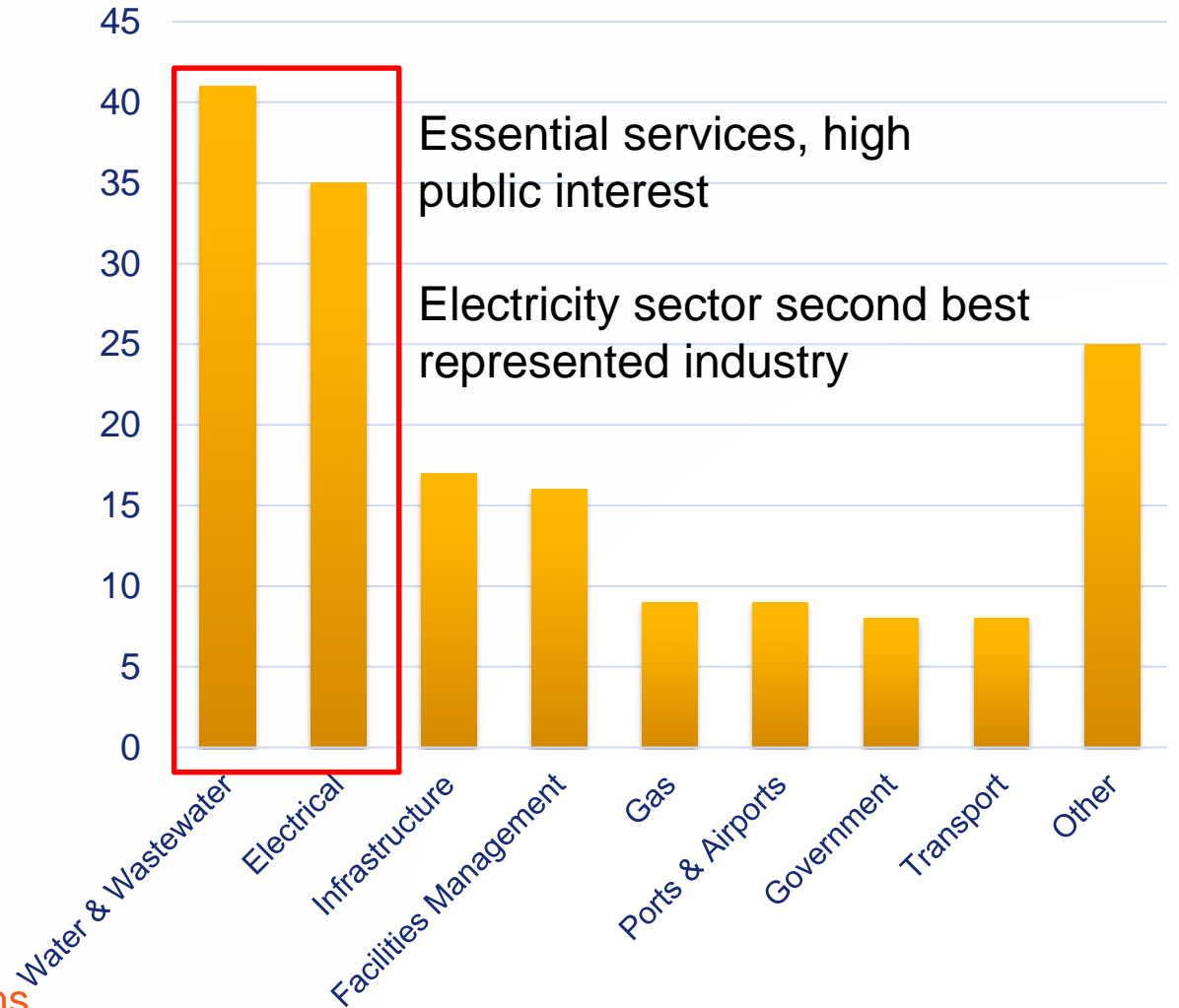


International Uptake

ISO 55001 Certifications - by Country

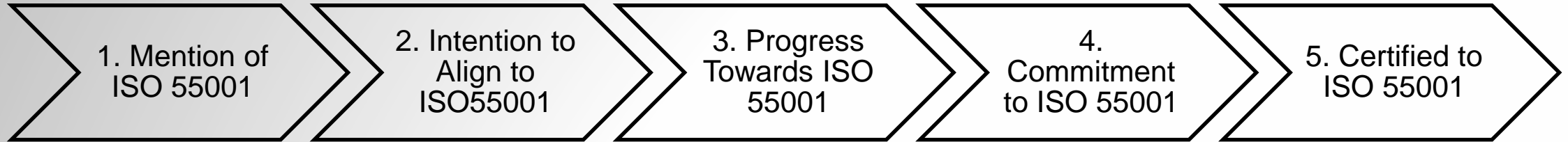


ISO 55001 Certifications - by Sector

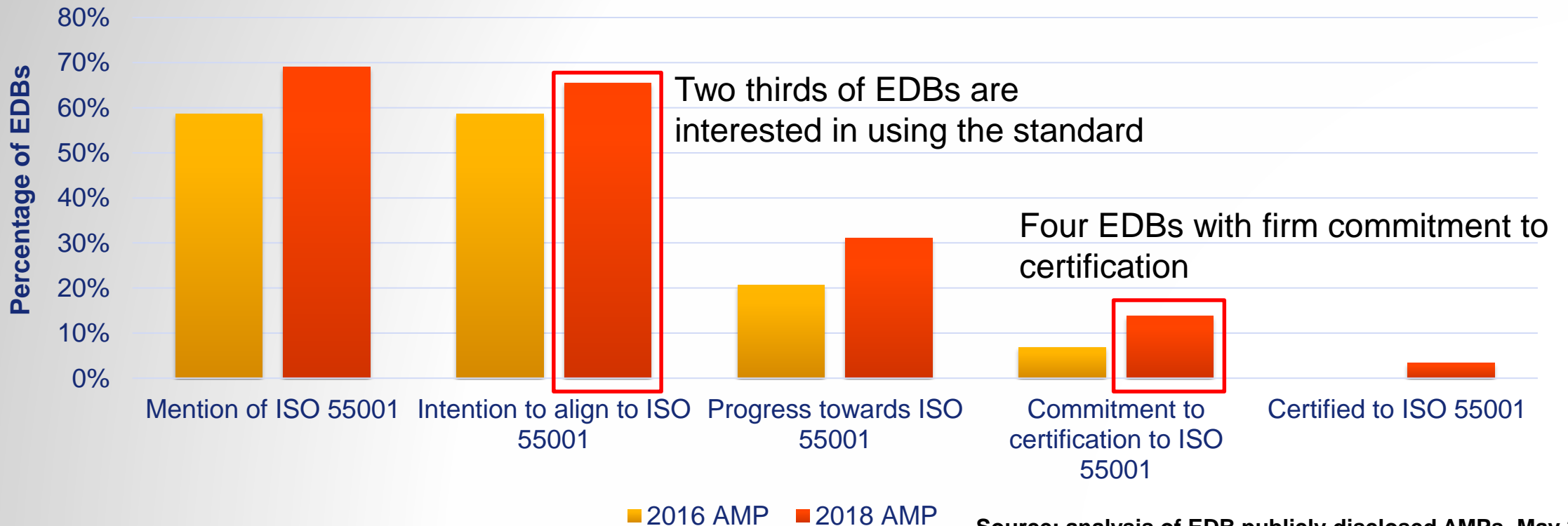


n=168, May 2018 Source: [TC251 Known Certified Organisations](#)

Growing New Zealand Interest



ISO 55001 in New Zealand EDBs AMPs

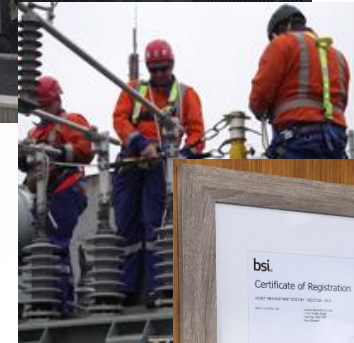


Source: analysis of EDB publicly disclosed AMPs, May 2018

Certification Process

- Selected auditor – March 2017
- Precertification audit – August 2017 (1.5 days)
- Stage 1 Audit – November 2017 (1.5 days)
- Stage 2 Audit – March 2018 (4.5 days on-site + 1.5 days off-site)
- Certification confirmed late March
- Annual surveillance audits, recertification 2020

bsi.

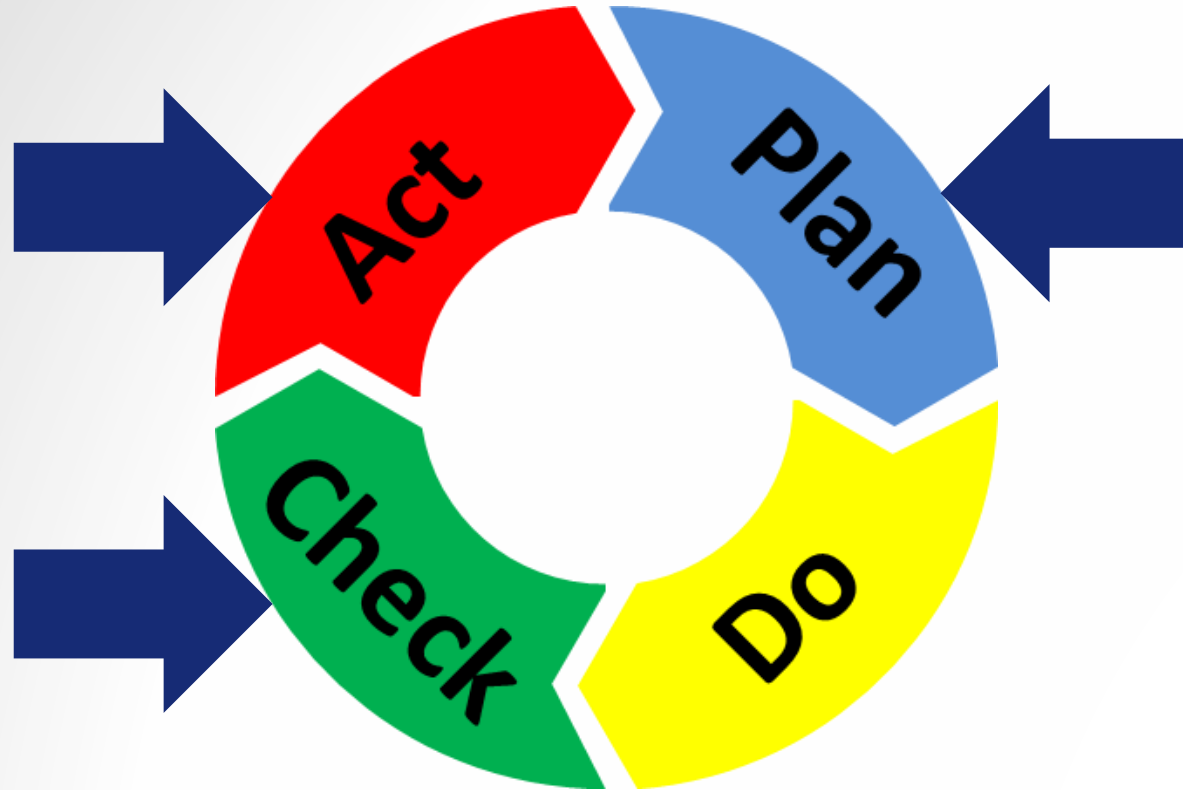


AMS 671320

Key Improvements

3. Continual Improvement Strategy

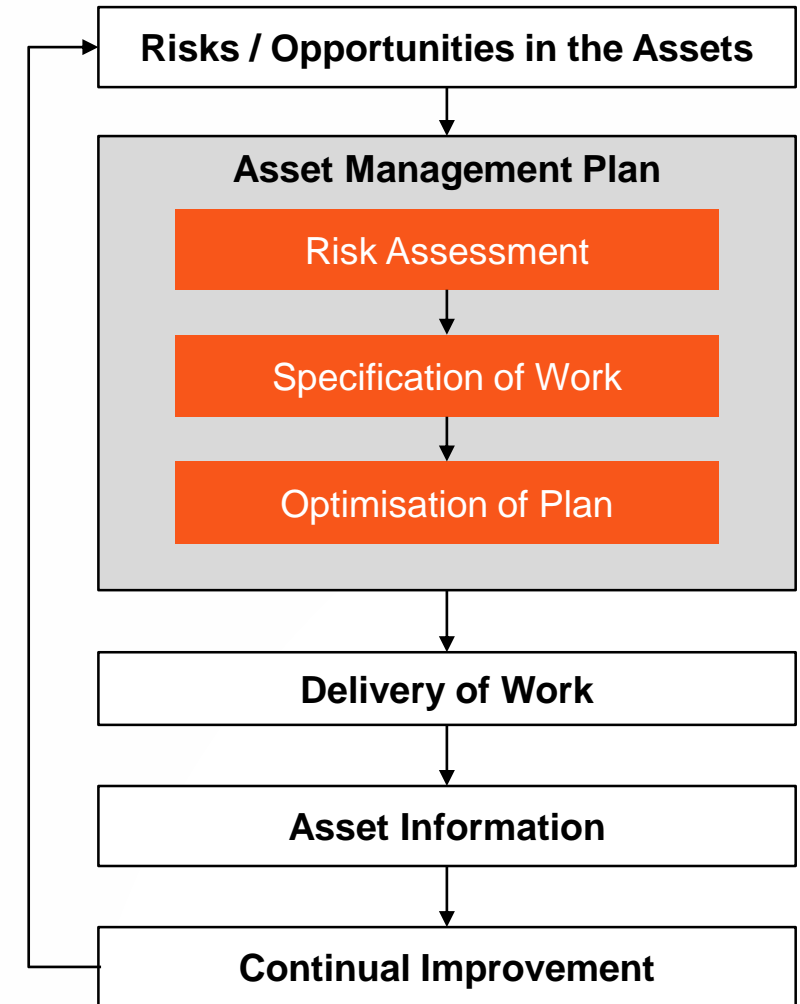
2. Performance Evaluation Framework



1. Asset Management Plan

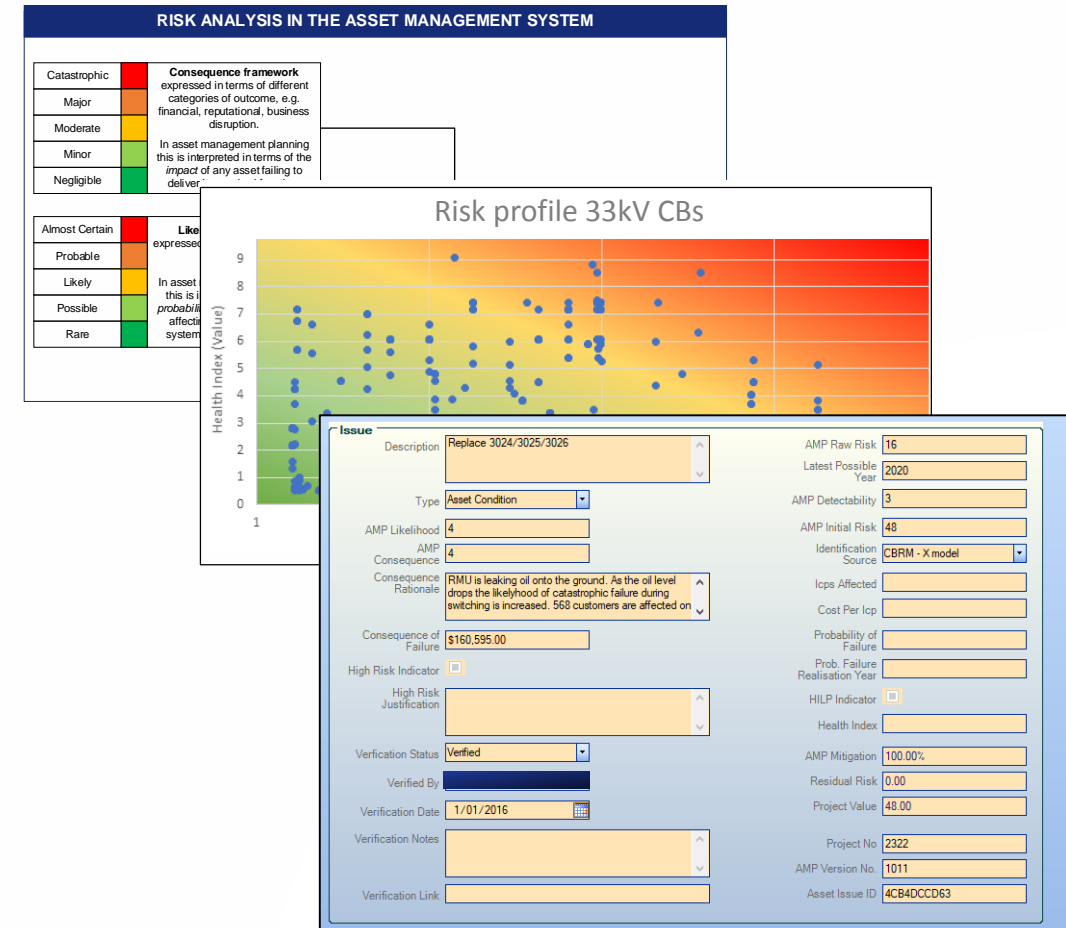
Asset Management Plan

- Forward view of:
 - Risks in the assets
 - Work required to balance cost, risk and performance
- Key challenges:
 1. Objective and consistent assessment of risk
 2. Effective specification of work
 3. Optimisation of the plan



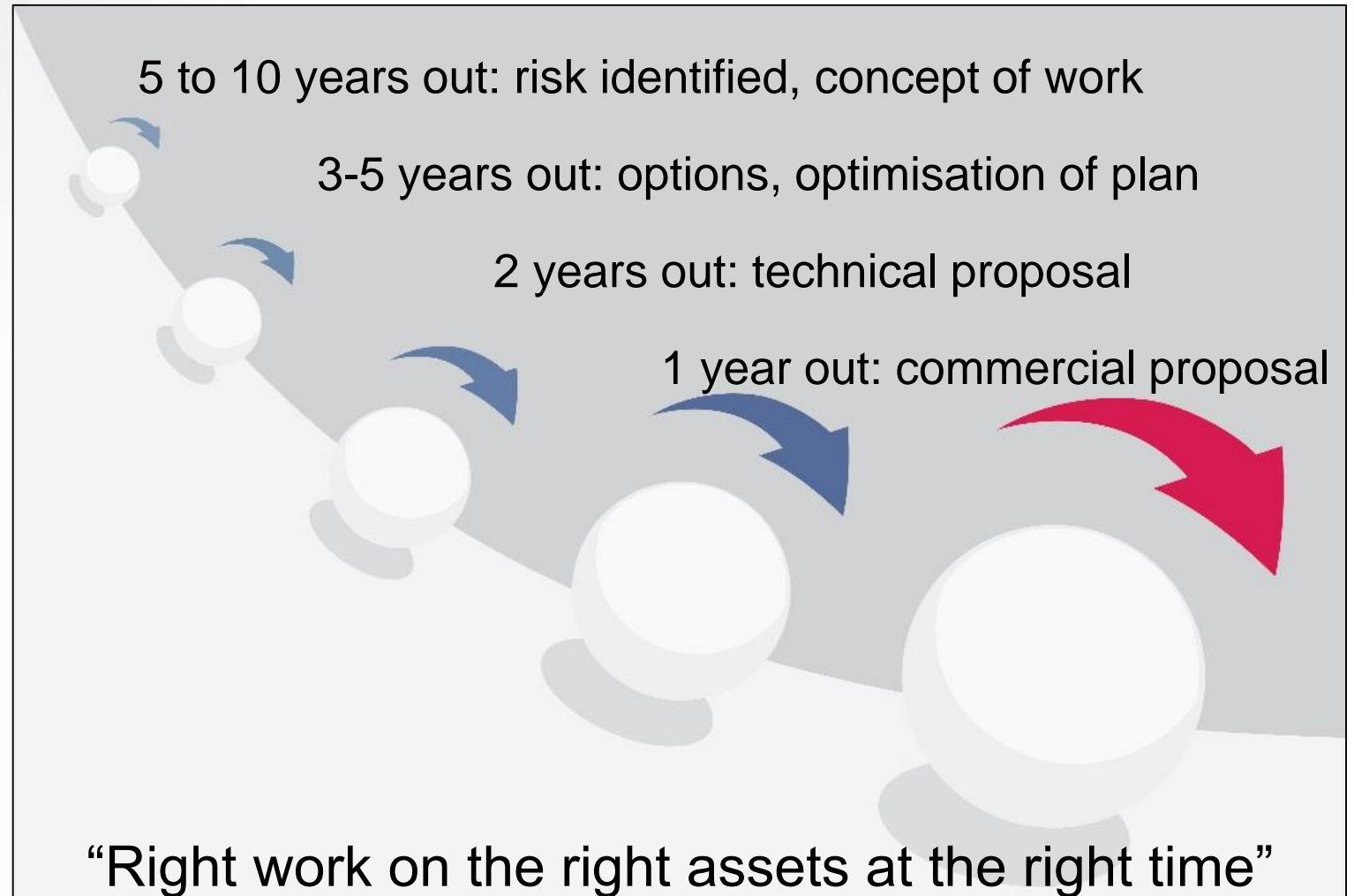
Risk Assessment - Principles

1. All issues driving work in the AMP must be consistently risk assessed
2. Must be aligned to corporate frameworks
3. Should be objective, but flexible
 - Prefer quantitative assessments
 - Allow qualitative assessments
4. Make it easy for people to do the right thing and do it right
 - Integration of AMP with work management system / asset register
5. 80% solutions are good enough – continual improvement

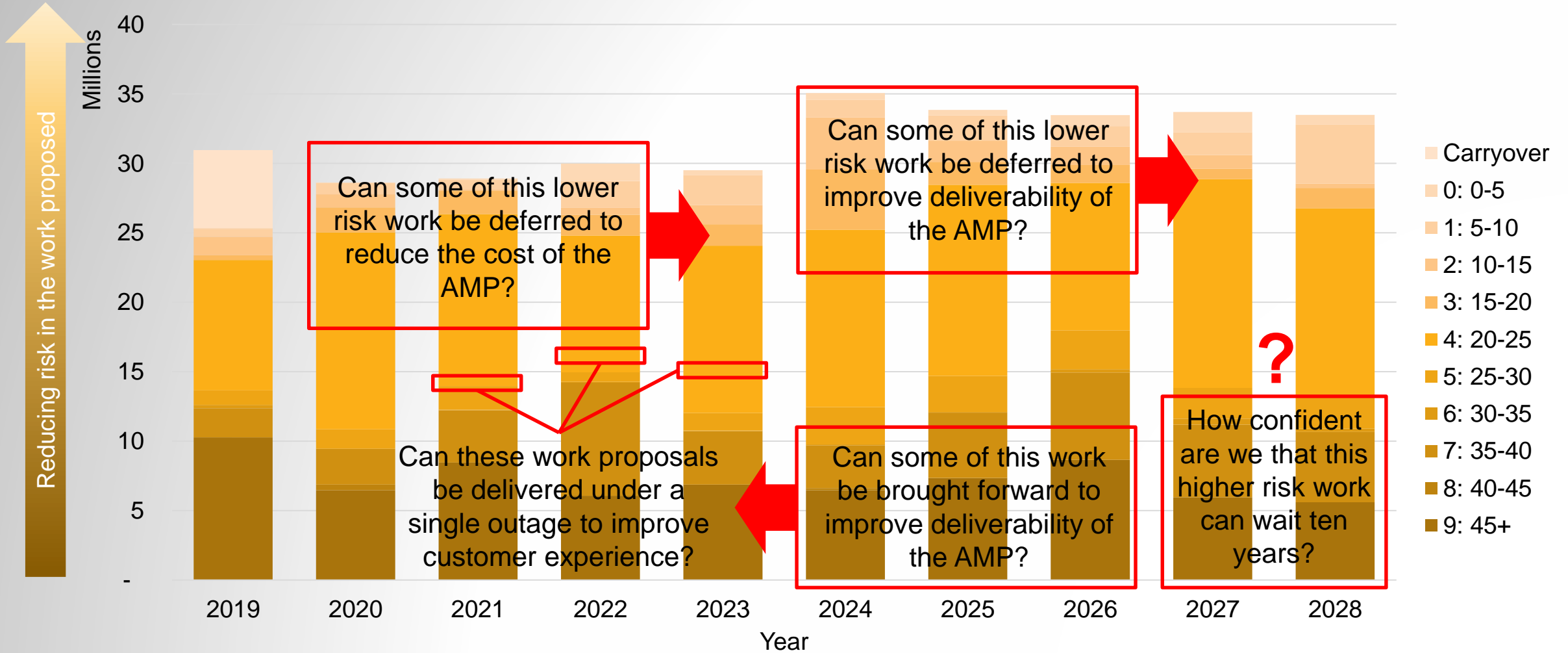


Specification of Work

- Work proposed to the AMP accumulates information as it comes closer to date of delivery
- Assets to be worked on
- Cost estimates
- Procurement
- Network access
- Safety and risk management



Optimisation of the AMP

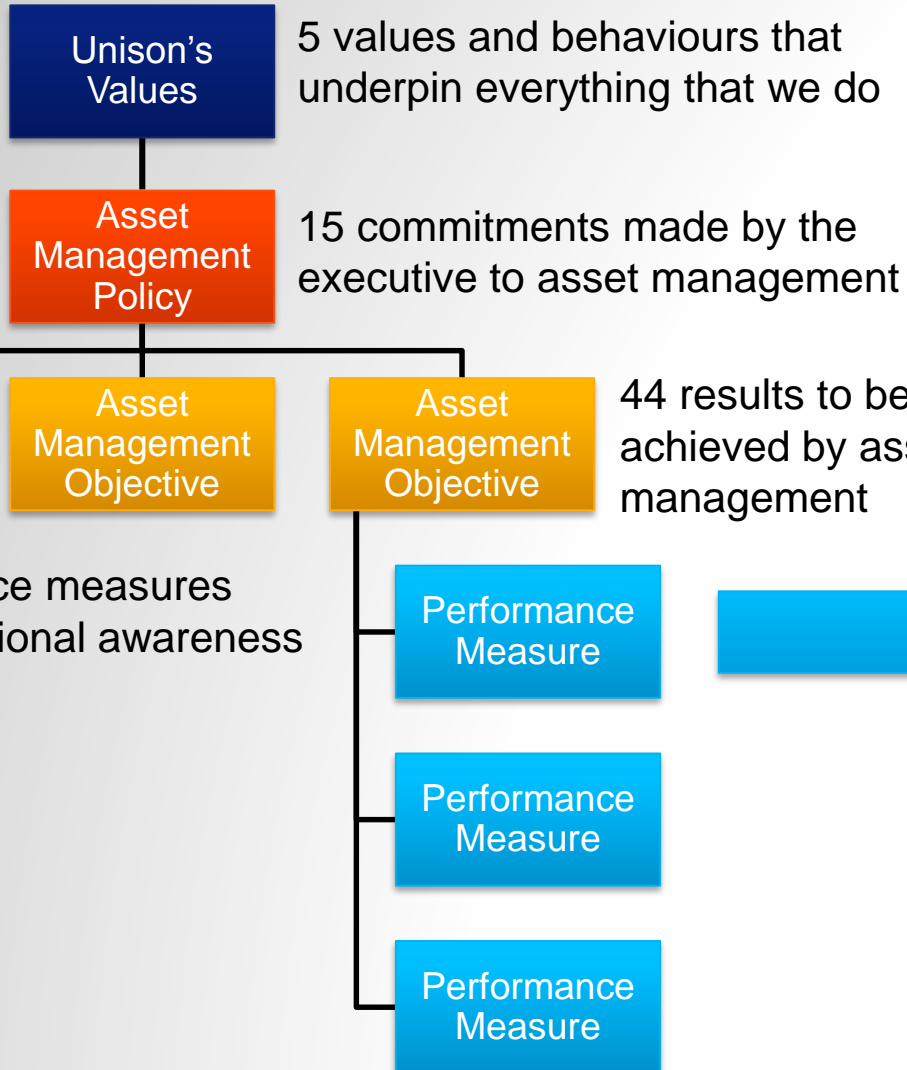


Performance Evaluation

- Situational awareness of performance for management and asset management teams
- Health of the assets, asset management and the AMS
- Feedback on performance shortfall to target improvement



Line of Sight



60+ performance measures providing situational awareness

Performance Evaluation Procedure

Appendix A – Measure Definitions, Continued

<u>Measure</u>		<u>22</u>
Key Result Area	Network Reliability	
Objective Category	Unison sustainably meets network performance targets.	
Asset Management Objective		
Meet or exceed the lower of the SAIDI and SAIFI targets from:		
<ul style="list-style-type: none"> Commerce Commission (Default Price-quality Path), and Hawke's Bay Power Consumer Trust (SCI). 		
Measurement Approach		
Target versus actual SAIDI	Responsible for data collection	
Start Date	1/07/2017	Data Collector Network Performance Engineer
Target	≤ 99.1	Target Type Numeric
System used	Fault Reliability for export - from Insight	
Business Rules		
Target:		
<ul style="list-style-type: none"> Use ComCom target (as opposed to collar or limit). SCI target (105.4) reflects changes to H&S legislation. ComCom target (99.1) does not and is therefore the lower of the two, and Target varies by month based on historic averages. 		
Actual rules:		
<ul style="list-style-type: none"> Follows ComCom defined rules: Electricity Distribution Services Default Price-Quality Path Determination 2015. 		
Date used is the based on when the outage started.		

Precise rules enabling trend analysis

Performance Evaluation System

Web app supporting:

- Scalability / ease of administration
- Performance data capture
- Tailored reporting to stakeholders

Ongoing work to fully implement performance measures

Monthly top level health check on the AMS

Data Collector: Andrew Gatland

▲ Number of post-project reviews of capability projects undertaken.

Month Actual	0	Commentary about this measurement	Month Target (Greater than or equal to)	0	Month target met
Year to date Actual	0		Year to date Target (Greater than or equal to)	0	Year To Date target met

▲ Number of internal audits completed according to Unison's Internal Audit Framework.

Month Actual	0	Strategic asset management audit not yet commenced. This is the result of constrained	Month Target (Greater than or equal to)	1	Month target unmet
Year to date Actual	1		Year to date Target (Greater than or equal to)	2	Year To Date target unmet

▲ External audit: certification by appropriately accredited and competent assessor.

Month Actual	Certified	Commentary about this measurement	Month Target (Equal to)	Certified	Month target met
Year to date Actual	Certified		Year to date Target (Equal to)	Certified	Year To Date target met

▼ Internal audit: Assessment of deliverables and outcomes of Capability Projects against original business motivations.

Commentary required where target not met

AMS Performance Evaluation Report April 2018

AMOs measured this month: 74 % Measures met this month: 75 % Measures met this year to date: 75 %

AMOs measured last month: 61 % Measures met last month: 71 % Measures met year to date last month: 69 %

Key Result Area > Objective Category > Asset Management Objective > Measurement	Period	Target	Actual	Result
Assurance				
Unison is a resilient asset manager.				
Unison carries essential spares, materials and equipment to recover from the failure of a significant asset or asset system				
Percentage of reactive jobs where all materials are delivered on time in full (DIFOT)	Month:	100%	100%	Met✓
	YTD:	100%	100%	Met✓
Unison has effective recovery plans in place which can be rapidly implemented to comprehensively return full services after a significant external event				
A test of contingency plans for a significant external event has occurred in the last 18 months, either through a simulation or a real event.	Month:	Met	Met	Met✓
	YTD:	Met	Met	Met✓
Number of high or medium priority findings from the last test of contingency plans for a significant external event which are outstanding and have not been addressed in the agreed timeframe	Month:	0	0	Met✓
	YTD:	0	0	Met✓
A periodic review of fitness-for-purpose of contingency plans has occurred in the last 24 months	Month:	Met	Met	Met✓
	YTD:	Met	Met	Met✓
Unison is effective in managing its legislative obligations.				
Ensure that no formal complaint reaches the stage of legal challenge or government investigation in relation to asset management.				
Number of instances of unanticipated legal challenge or government investigation occurring.	Month:	0	0	Met✓
	YTD:	0	0	Met✓
Unison is, and is perceived to be an ethical organisation.				
The organisation is managed sustainably to preserve Unison's reputation as an ethical business.				
Number of instances of adverse media about Unison	Month:	2	5	Not Met✗
	YTD:	2	5	Not Met✗
Comment: During the month of April there were approximately 12 media mentions, most of which were neutral. Five were negative however.				

Opportunity for improvement

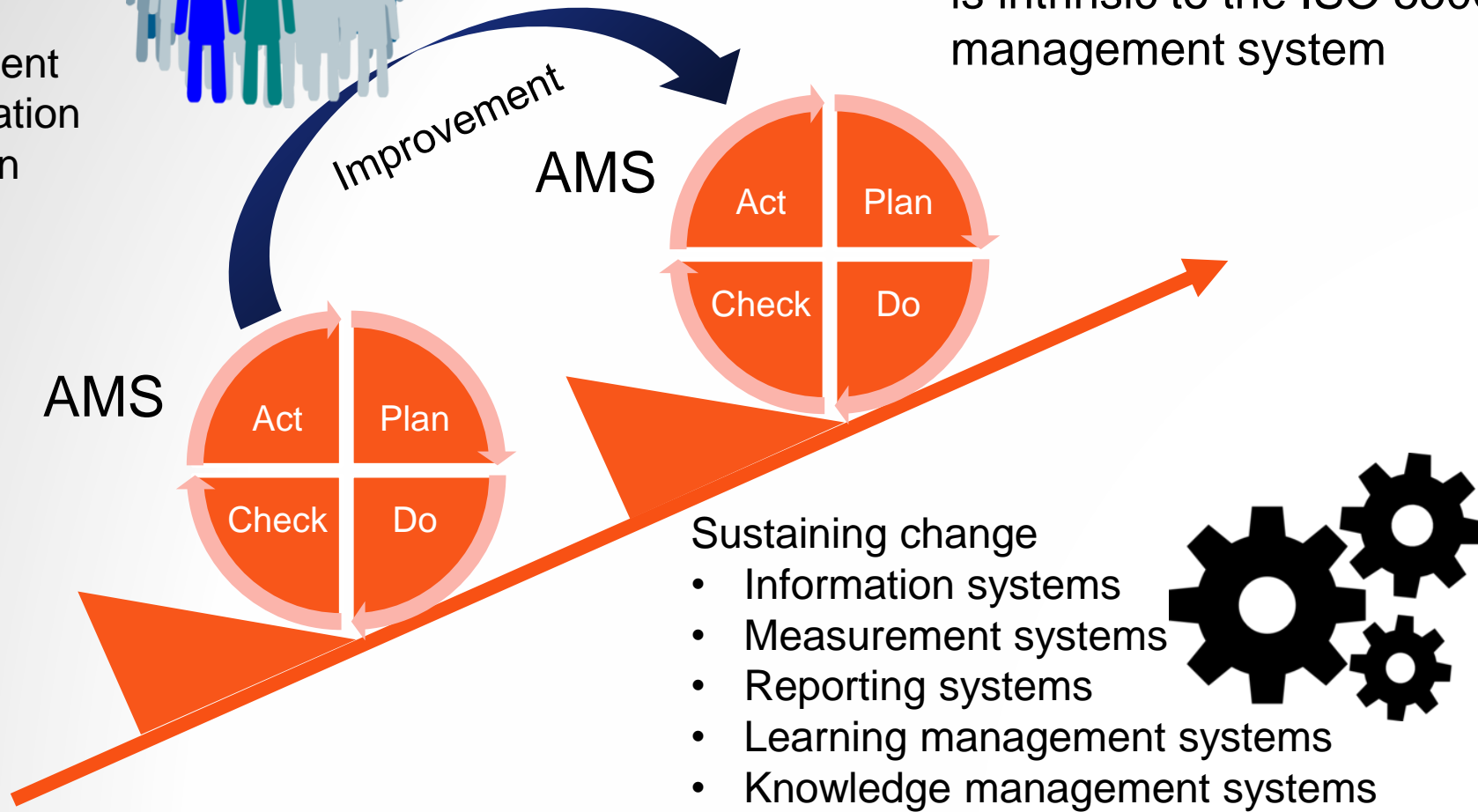
Continual Improvement

Managing change

- Leadership
- Capability
- Empowerment
- Communication
- Participation



A structured improvement process is intrinsic to the ISO 55001 asset management system

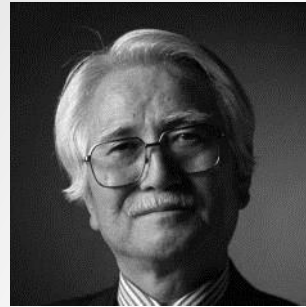


Sustaining change

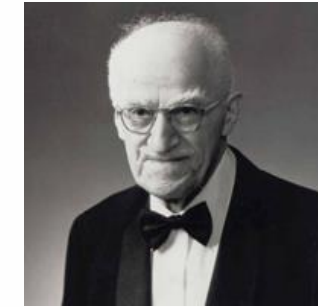
- Information systems
- Measurement systems
- Reporting systems
- Learning management systems
- Knowledge management systems

Continual Improvement Strategy

Both approaches must consider management of change and sustainment of change



“not a day should go by without some kind of improvement being made somewhere in the company.” – Masaaki Imai



“All improvement happens project by project and in no other way.” – Joseph Juran

	Continual Improvement Register	Capability Project
Role in AMS	Incremental improvement of existing capabilities	Establishment / transformation of capabilities
Identification	Feedback from AMS processes and people	AMS strategic review
Volume PA	~90	<5
Average duration	1 month	12 months
System	SharePoint database and workflow	Lightweight project framework
QA	Verification by AMS Specialist	Quarterly project audit by Strategy Manager

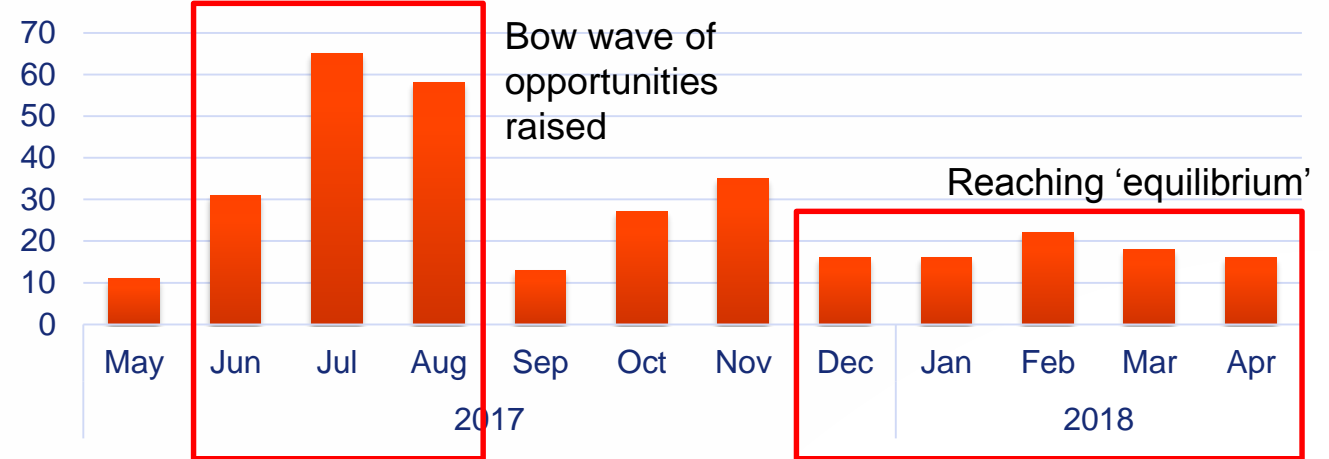
Maturing CI Plan

Pipeline of CI – match volumes coming in with volumes being closed out

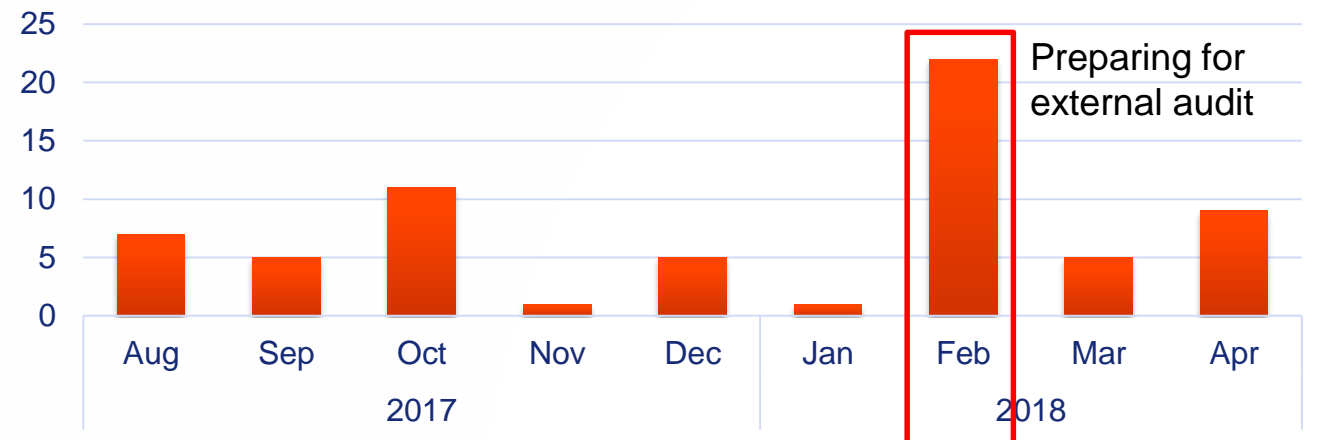
Types of opportunities being closed out:

- H&S improvement
- Internal audit non-conformances
- Asset failure investigations
- Process improvements
- Information systems improvements
- Asset information improvements
- New technology trials
- Etc

CI Opportunities Raised per Month



CI Opportunities Completed per Month



Concluding remarks

- Asset management capability must be continually improved to keep pace with a changing world
- ISO 55001 does provide an applicable and value-adding framework for NZ EDBs
- Successful implementation depends upon leadership
 - Create awareness and desire of need for change
 - Develop peoples' capabilities in asset management
 - Empower teams to improve the business
- Make the most of what you have
- There is no “best practice”, but learn from others

Thank you