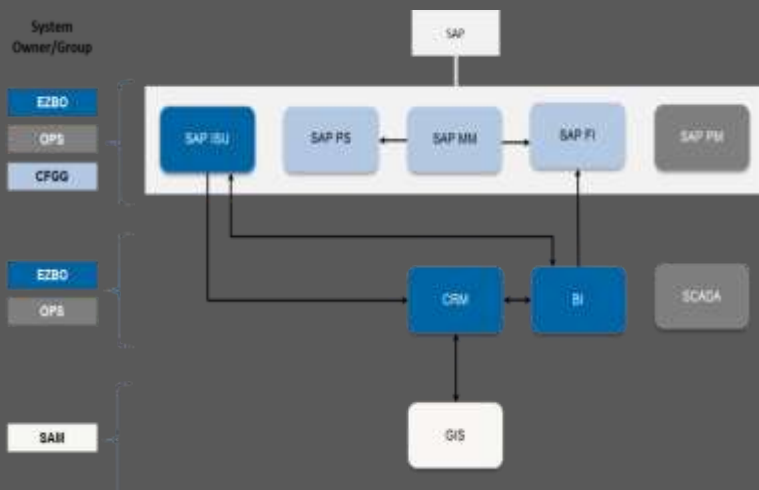# Benefits of EAM System Integrations
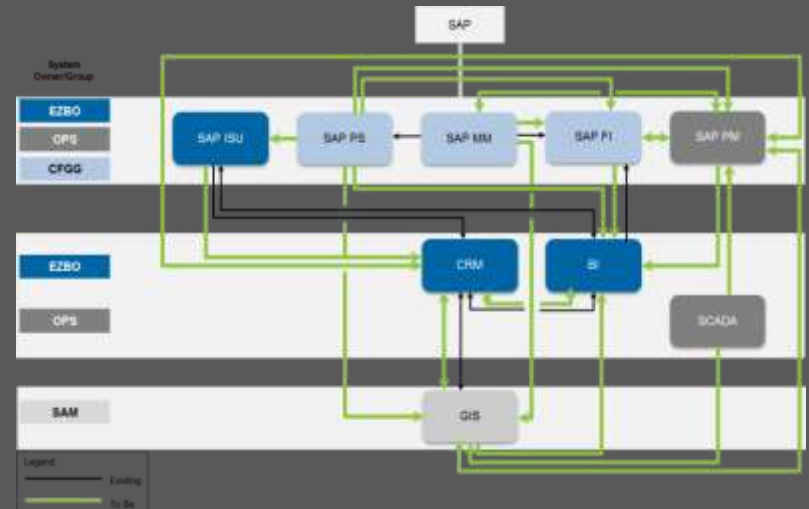
Background and Context

Background and Context

- Global Benchmarking identified key strategic issues - 2012
- The key challenge for MWCI was to increase AM maturity at an enterprise level
- Hence the EAM AMIS Strategy development was commissioned 2013
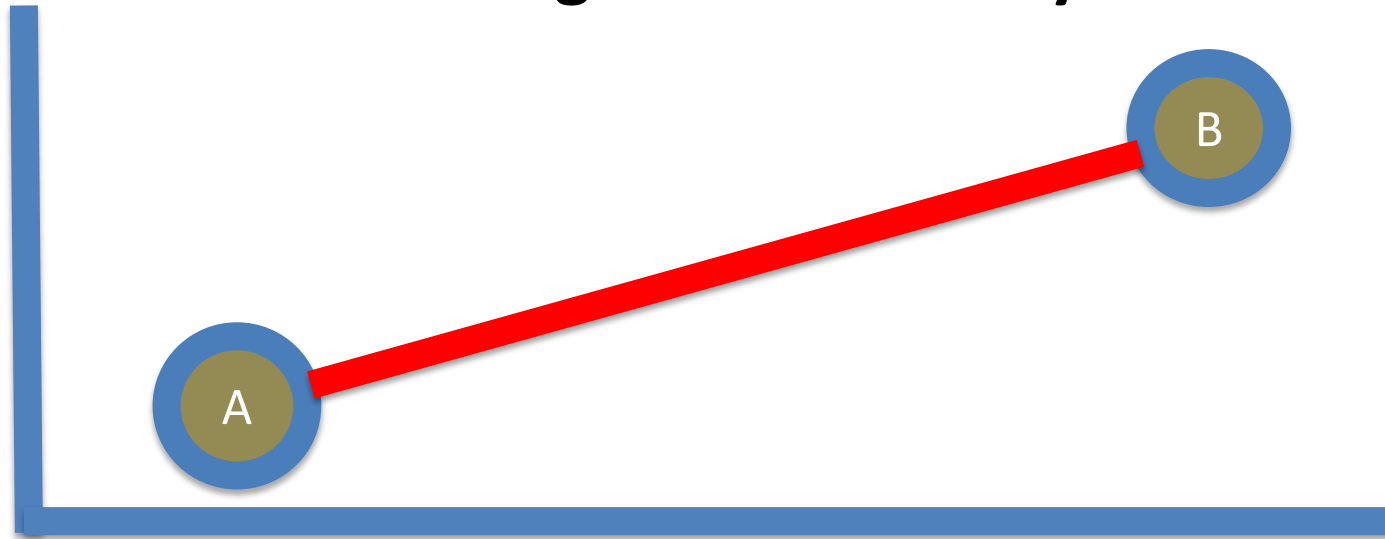- Systems integration project initiated and completed – 2015

Asset Management Maturity Rise

Asset Management Maturity Rise

AM Maturity is direct function of **Improved Decision Making**, supported by:

1. Better quality **data**
2. Better business **processes**
3. The right tools and **business support systems**
4. Engaged and AM-ready **people**

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Business Processes

- Robust (BBPs per SI)
- Repeatable
- Defendable

Data

- Accessibility
- Quality
- Storage
- Analysis
- Availability
- Accuracy
- Reliability

People

- Competent (AM-ready)
- Engaged
- Supportive of Teamwork
- Flexible (willing to alternate)

AM Maturity Rise

Business Support System

- Integrated
- Coherent
- Two way data flow

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Functionality Improvements Lead to:

Culture Change

Operational Efficiencies

Improved Integrity of Assets and Services

Assets
- Better data and leading to better risk management/ renewals/ upgrades

Services
- Better assets provide better services
- Assist Rate Rebasing efforts (RR18)

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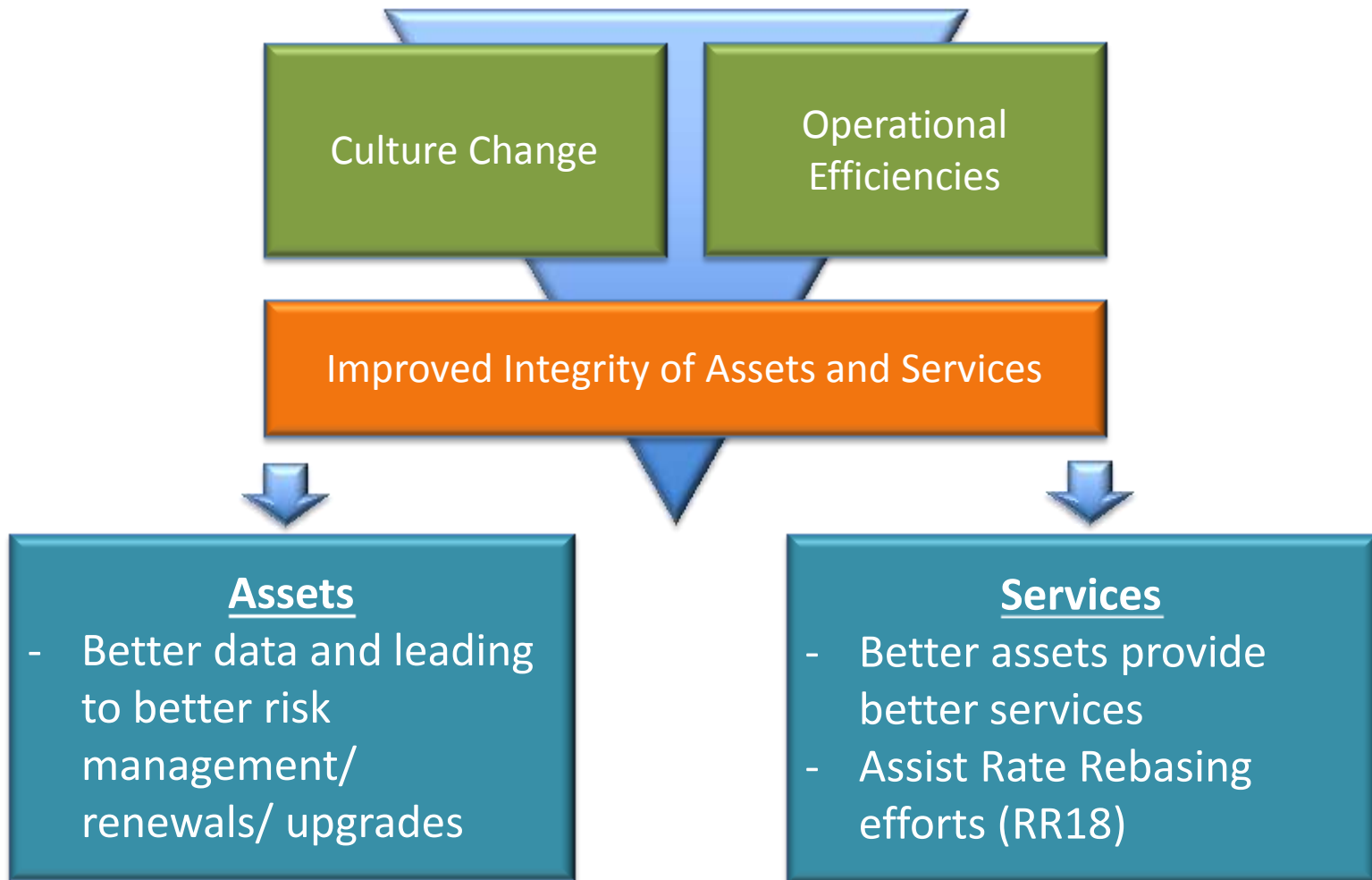
Functional Improvements can be at different levels:

System

1 - Finance

2 - PM

3 - GIS

4 - SCADA

5 - CRM

etc

Process

Financial Reporting

Asset Register

Asset Hierarchy

etc

Sub-Process

Maint Order Creation

Creation of Equipment Upon Creation of Assets

etc

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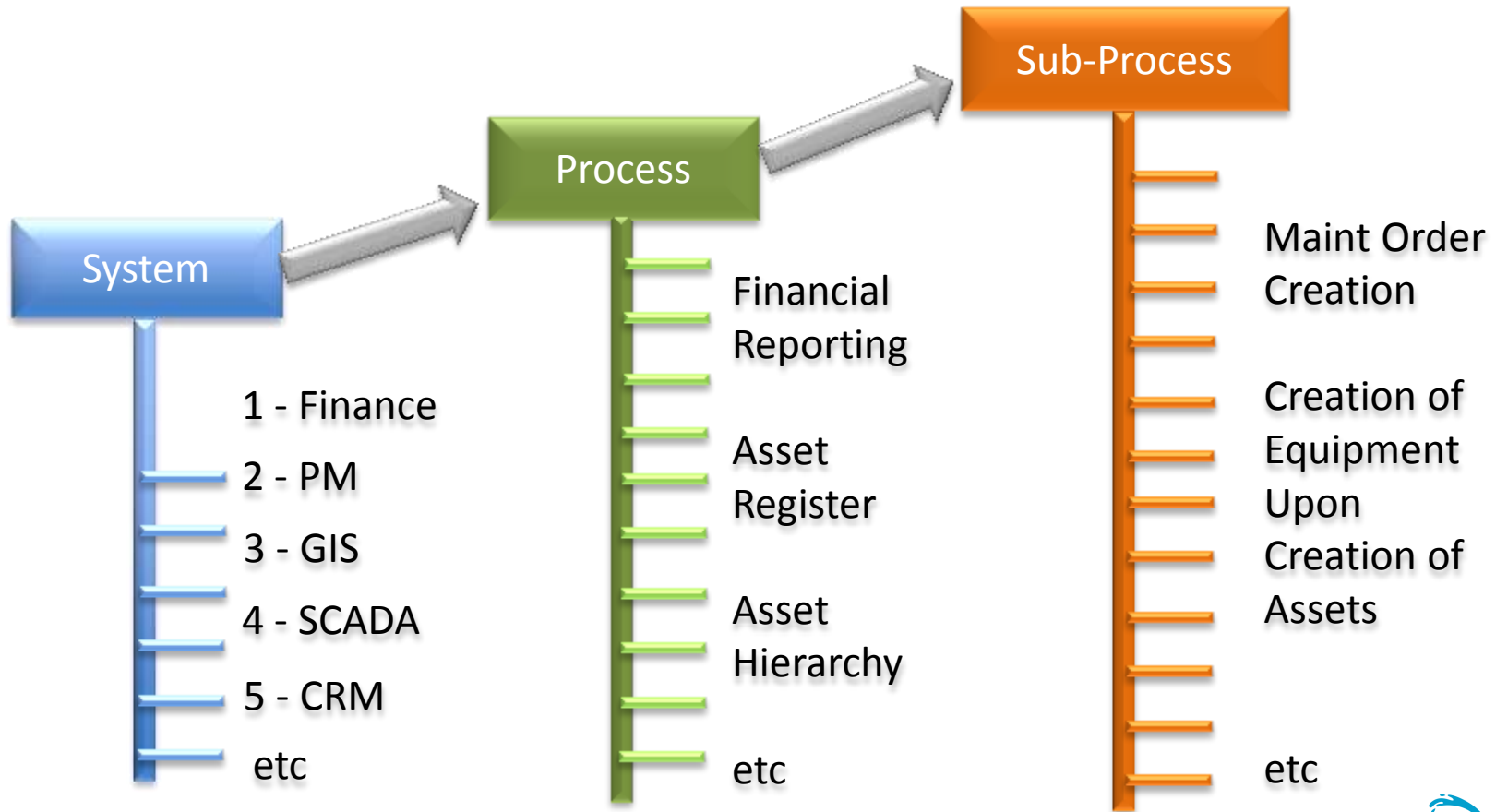
Functional Requirements – Realized Benefits

Functional Requirements – Realized Benefits

FI Asset and PM Equipment Synchronization	⟫	Automatic Creation of equipment upon creation of asset, minimizing inconsistencies between the two.
Maintenance Order Costing	⟫	Traceability of repairs and maintenance costs.
Internal Labor Costing	⟫	Increased utilization of maintenance department's services thru registering of time spent for every maintenance activity.
Materials usage on Maintenance Orders	⟫	Monitoring and accounting of materials used for Maintenance Orders as well as unused materials (are returned to the warehouse).

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Functional Requirements – Realized Benefits

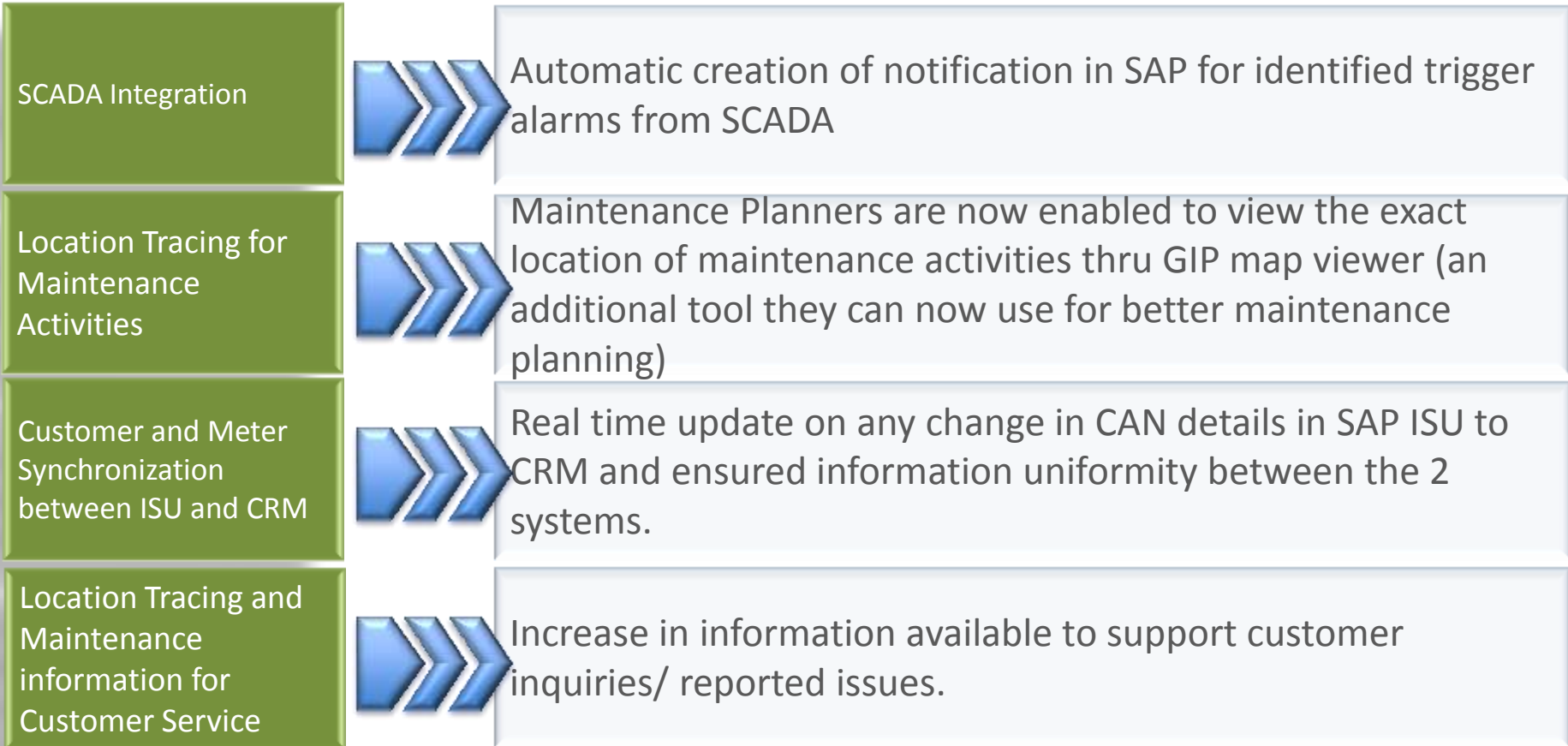|	
Procurement of materials/ external services for Maintenance activities	Streamlining of procurement process where materials/ external services for maintenance activities are initiated automatically by maintenance orders.
Maintenance Order Approval	Increased control over Maintenance Orders in SAP based on MWCI's approval matrix for maintenance activities.
Cost and Budget Information Reporting	Real time information on costs and budgets (online) are now extended to MSD to supplement their maintenance planning.
Capture and update of Failure Records	Keeping of equipment failure history now possible to maintenance planners which can be used for future analysis and regulatory reporting requirements.
CAPEX Projects and integration with Asset Registers	Uniformity of asset information across all systems as well as traceability of projects associated with these assets.

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Functional Requirements – Realized Benefits

SCADA Integration	⟫	Automatic creation of notification in SAP for identified trigger alarms from SCADA
Location Tracing for Maintenance Activities	⟫	Maintenance Planners are now enabled to view the exact location of maintenance activities thru GIP map viewer (an additional tool they can now use for better maintenance planning)
Customer and Meter Synchronization between ISU and CRM	⟫	Real time update on any change in CAN details in SAP ISU to CRM and ensured information uniformity between the 2 systems.
Location Tracing and Maintenance information for Customer Service	⟫	Increase in information available to support customer inquiries/ reported issues.

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Benefits and Measures Framework

Benefits and Measures Framework

FI Asset and PM Equipment Synchronization

SI in Scope

1.01

Realized Benefits	
Automatic Creation of equipment upon creation of asset, minimizing inconsistencies between the two.	
Measure	**Timing**
No of equipment able to be Created with mapped asset	Measure over 12 month period on a monthly basis

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Benefits and Measures Framework

Maintenance Order Costing

Realized Benefits

Traceability of repairs and maintenance costs per maintenance order. Maintenance costs are now broken down per maintenance order.

Removal of manual cost reconciliation against maintenance order.

SI in Scope
1.02
3.02

Measure	Timing
Percentage of total Repairs and Maint (RNM) Costs with maintenance order (MO) numbers	Measure over 12 month period on a monthly basis

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Benefits and Measures Framework

Internal Labor Costing

Realized Benefits

Increased utilization of maintenance department's services thru registering of time spent for every maintenance activity.

Measure	Timing
Utilized man hours (timesheets) measured against time spent on maint activities	Measure over 12 month period on a monthly basis

SI in Scope

1.03

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Benefits and Measures Framework

Materials usage on Maintenance Orders

SIs in Scope
1.05
1.09

Realized Benefits

Monitoring and accounting of materials used for Maintenance Orders as well as unused materials (are returned to the warehouse).

Measure	Timing
100% of the warehouse stock to be issued against a maintenance order	Monitor over few months

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Benefits and Measures Framework

Rotable Asset Management

SIs in Scope
1.04
2.02

Realized Benefits

Improved handling of rotable assets thru visibility and accountability of the said assets.

Measure	Timing
No of rotable assets owned by utility and its whereabouts at any given time	Measure over 12 month period on a quarterly basis
No of rotable assets restored / maintained to good working condition	

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Benefits and Measures Framework

Procurement of materials/ external services for Maintenance activities

Realized Benefits

Streamlining of procurement process where materials/ external services for maintenance activities are initiated automatically by maintenance orders.

SIs in Scope
2.01
2.03
2.04

Measure	Timing
Estimate turn around time for Materials and Service Request (MSR) Form pre EAM, and compare to turn around time for creation of PR, post EAM	Measure over 12 month period on a quarterly basis

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Benefits and Measures Framework

Maintenance Order Approval

SI in Scope

3.01

Realized Benefits

Increased control over Maintenance Orders in SAP based on MWCI's approval matrix for maintenance activities.

Measure	Timing
Estimate turn around time for manual approval process, and compare with online approval	Measure over 12 month period on a quarterly basis

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Benefits and Measures Framework

Cost and Budget Information Reporting

Realized Benefits

Real time information on costs and budgets (online) are now available to Maintenance Services Department (MSD) to supplement their maintenance planning.

Measure	Timing
Estimate turn around time for generating maint reports pre and post EAM	Measure over 12 month period on a quarterly basis

SIs in Scope
3.03
3.04

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Benefits and Measures Framework

Capture and update of Failure Records

SIs in Scope
1.06
1.07

Realized Benefits

Retention of equipment failure history now possible to maintenance planners, which can be used for future analysis and regulatory reporting requirements

Measure	Timing
Run a report on number of failure events / history available to a maintenance planer	Measure over 12 month period on a quarterly basis

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Benefits and Measures Framework

CAPEX Projects and integration with Asset Registers

Realized Benefits

Uniformity of asset information across all systems as well as traceability of projects associated with these assets

SIs in Scope
4.01
4.02
4.04

Measure	Timing
Run gap reports on SAP FI and SAP PM to establish gaps of data registered through the two systems (as they should be the same)	Measure over 12 month period on a monthly basis

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Benefits and Measures Framework

SCADA Integration

SI in Scope
6.01

Realized Benefits

Automatic creation of notification in SAP for identified trigger alarms from SCADA

Measure	Timing
Estimate turn around time for creation of notification in SAP, vs automated system post EAM	Measure over 12 month period on a monthly basis

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Benefits and Measures Framework

Location Tracing for Maintenance Activities

Realized Benefits

Maintenance Planners are now enabled to view the exact location of maintenance activities thru GIP map viewer (an additional tool they can now use for better maintenance planning)

SIs in Scope
7.02
7.03
7.04
7.05

Measure	Timing
New functionality	

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Benefits and Measures Framework

Customer and Meter Synchronization between ISU and CRM

SI in Scope
5.01

Realized Benefits
Real time update on any change in CAN details in SAP ISU to CRM and ensured information uniformity between the 2 systems.

Measure	Timing
New functionality	

Benefits and Measures Framework

Location Tracing and Maintenance information for Customer Service

Realized Benefits

Increase in information available to support customer inquiries/ reported issues.

SIs in Scope
1.10
7.01
9.01
9.03

Measure	Timing
New functionality	

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