Future Maintenance Management System (FMMS) – for Maritime / Ships

- FMMS _ Maritime summary slide pack contains the following info. –

  - Indicative Architecture for FMMS
  - Indicative Interface Requirements for FMMS
  - Indicative Workflow Requirements for FMMS
  - Indicative Dashboard Requirements for FMMS
  - Summary Requirements for FMMS covering URD & SRD.

Ministry of Defence

de&s

SHIPS MAINTENANCE MANAGEMENT (SMM)

Release of this information is provided in good faith and in confidence and must not be distributed further without the express written permission of SMM-Team Leader, contact as below:

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FMMS - Architecture

BYOD – Hardware Agnostic

Platform Configuration Baseline

Asset Tree ✳

Platform., system & Equipment Asset Tree

- Critical Asset ID
- Asset Details
- Asset History
- Find your asset

Maintenance Planning & Delivery ✳

Maintenance Planning Work Flow

- Work packages – JIC/MTI
- Defect Management
- BoM
- Scheduled SQEP (Work Orders)
  - Peer 2 Peer sharing
  - Training Mate
- Work done report
  - Document Uploader (photos/Calib reports)
  - Word Order Signoff

Water side Providers

Procurement System

Procurement

- Status of Delivery
- Order Tracking
- Order Distribution
- Order Tracking

Inventory Management ✳

Inventory Control

- Initiate Requisition
- Location
- Consume
- Receive
- Lifecycle Management

Dashboard & Reporting ✳

(Monitoring through predicative, operational, Analysis,

- User Defined Dashboard
- BI Analytics Capability
- Platform Health
- Asset Health
- Asset maintenance history
- Audit Trail
- Fleet Health

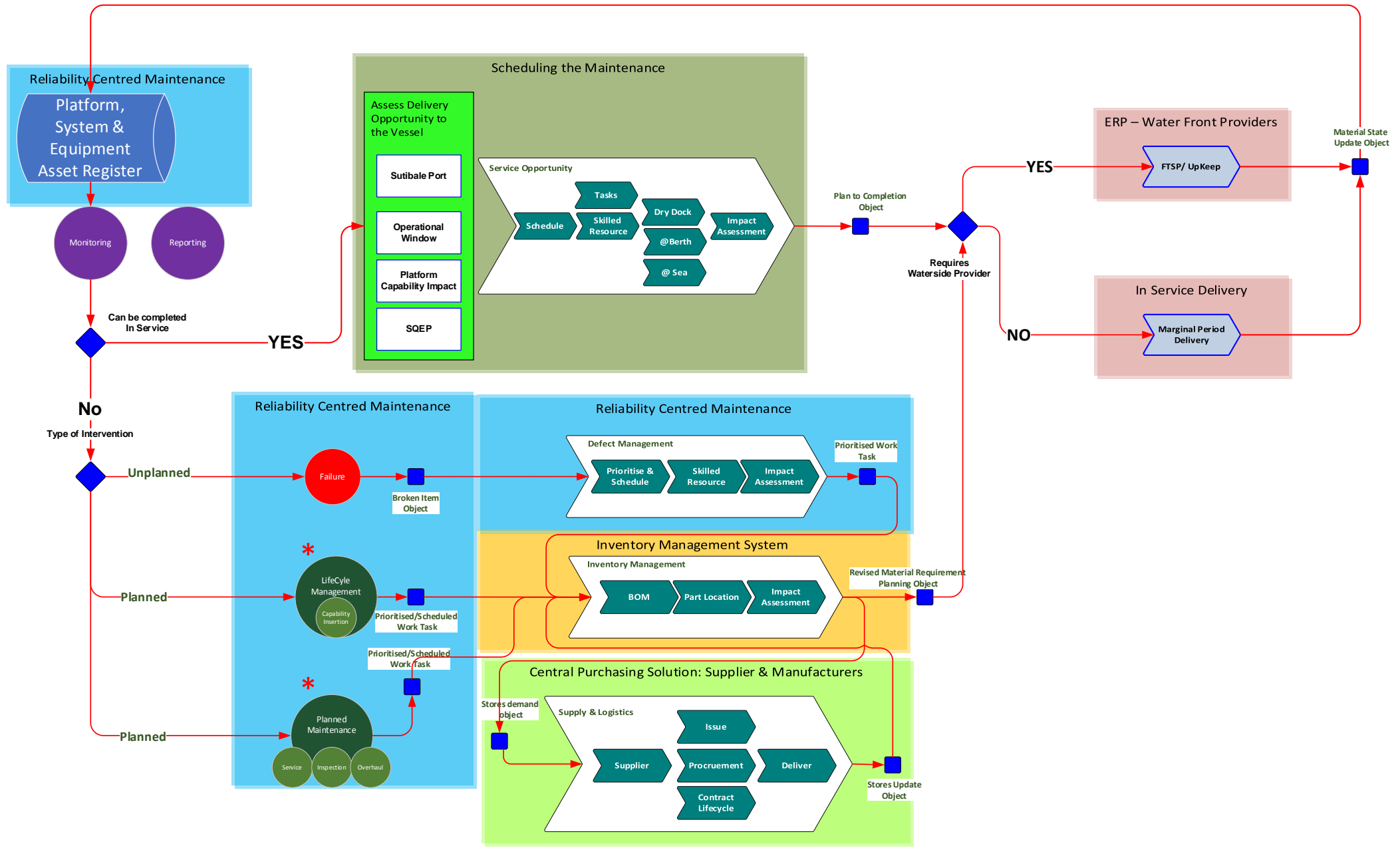**External Inventory Management**

Data Integration

Data Object

Software Solution ✳

Future Maintenance Management System

Future Maintenance Management System
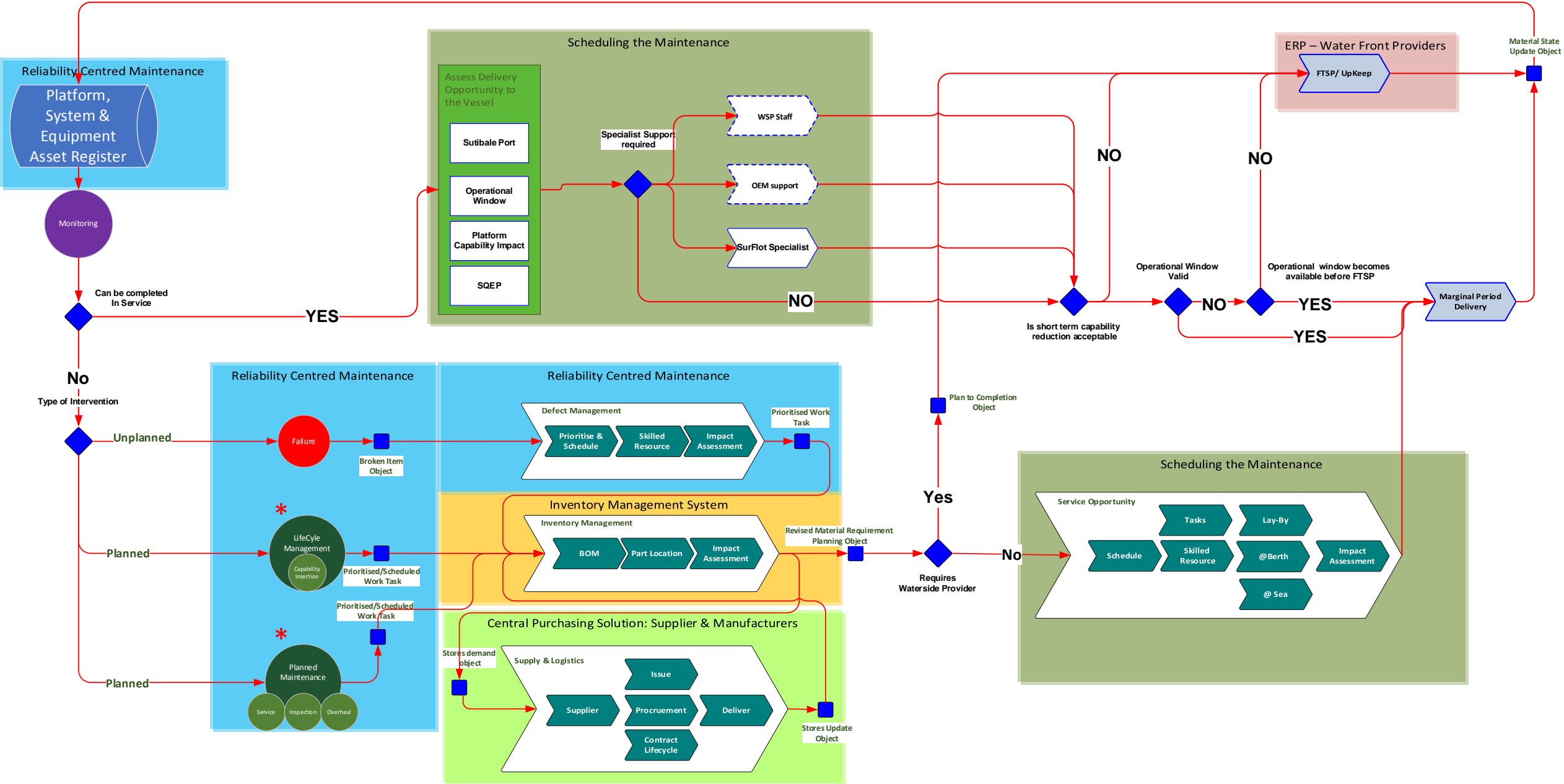
FMMS Dashboard

(Configurable Dashboard)

HMS Gold-1

At Sea → Portsmouth | ETA 24/01/2022

Availability **82%**

Weapons	Propulsion	Hull Integrity	Auxiliaries	Critical Assets
Inventory	Defects	Crew	Maintenance (MMBL)	Overdue WOs

Reliability **77%**

HMS Gold-2

In Port: Portsmouth | ETD 24/01/2022

Availability **53%**

Weapons	Propulsion	Hull Integrity	Auxiliaries	Critical Assets
Low Stock Items	Defects	Crew	Maintenance (MMBL)	High Priority WOs

Reliability **55%**

Future Maintenance Management System

Asset Register for platform, system & equipment

FTSP & UpKeep **Material State**

Maintenance Process Planned, Corrective and Operational Maintenance. Work Packages created and schedules built for SQEP.

Onboard Inventory Management and capable to exchange data with outside Inventory system, auto track demand

Material Requirements Planning

BoM

JIC

Schedule

Existing Maintenance Management System

A

Asset Register

RCM

Maintenance

CPS

BYOD

KPIs

B

Defect Management - *Capability to report Defect through the relevant Asset tree, manage unplanned repair and track it until closed.*

Reliability Centred Maintenance used to implement MOD Maintenance Strategy and prepare data ready to programme recommended Maintenance for all Assets in FMMS, establish Maintenance Base Line (MMBL).

B2B Maintenance Contracting - *Waterfront Organisations / Industry Partners Own the plan to completion, Report back to system.*

Central Purchasing System. The MRP for the work packages consume by the CPS and triggers the procurement process

Big Data Analytics Capable to collect real time / near real time Equipment performance data, Events data and feeds it into a shoreside Digital Twin model to develop predictive failure model, predictive maintenance.