

AM in Defence Infographics

- Background
 - Due to the nature of AM in defence there are a number of different ways to apply well documented good practice approaches
 - Defence has a substantial number of existing processes, language, solutions that need to be respected in the implementation of AM
 - Often AM can sound like common sense, and is further confused by terms like “asset” that can be easily confused
- So what?
 - Collectively it is perceived that AM can increase defence outputs and optimise whole life cost, however it is hampered by silo’s within defence. And the “not made here” barrier
- Solution?
 - By sharing key concepts that can be linked to wider good practice, and gain a common approach pan defence we have the ability to create common approaches that can bridge language barriers
 - Infographics can provide bitesized concepts, and start conversations that can be used to inform / translate policy into meaningful change
- Hosted on TDI site

List of potential infographic

- The Asset Management advantage

ASSET MANAGEMENT & INTEGRATED PRODUCT SUPPORT

Asset Management

AM is a management system that involves the balancing of costs, opportunities and risks against the desired performance of assets to achieve an organisation's objectives.

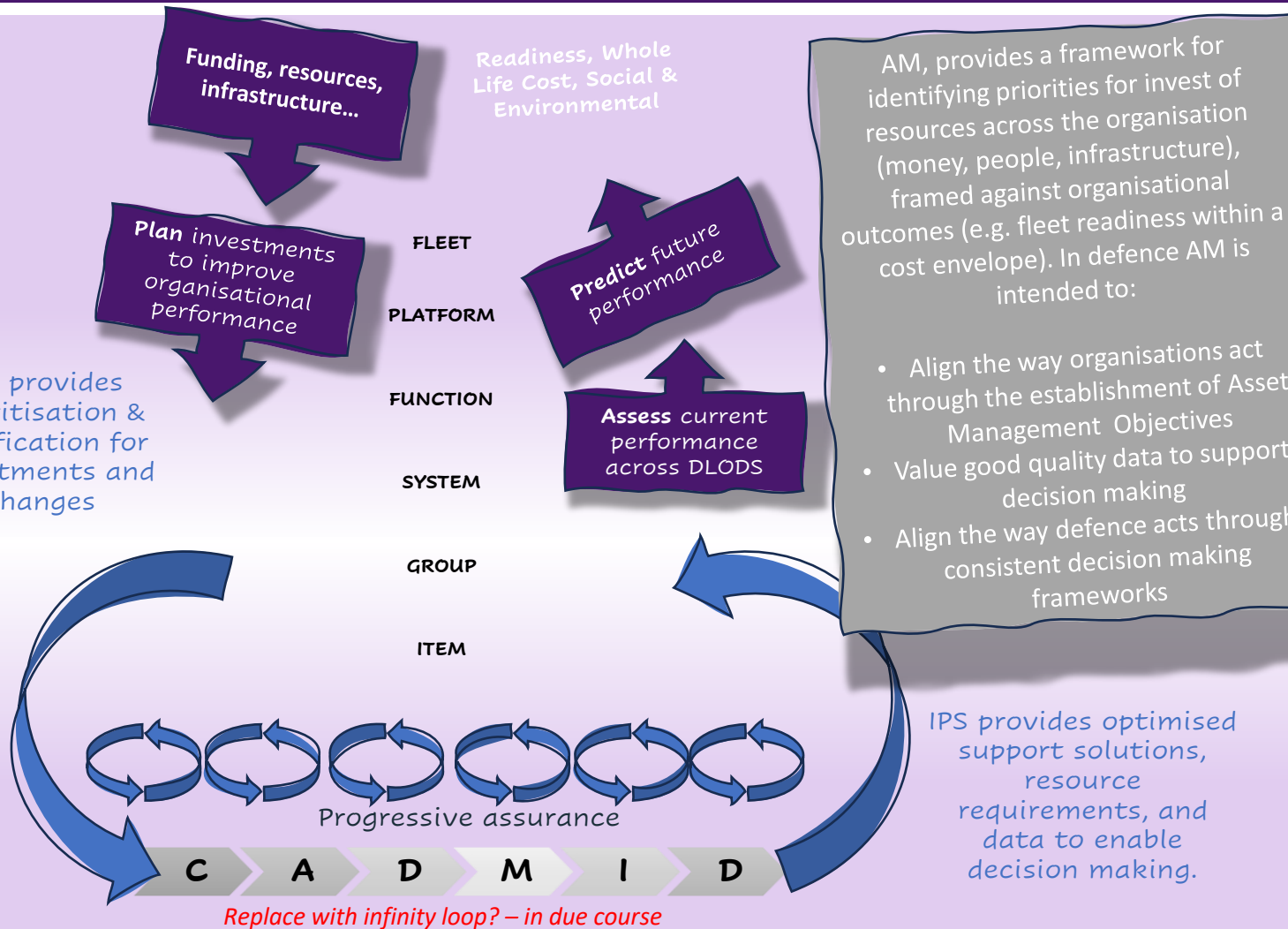
AM is typically applied at organisational level, whilst the principles align with those of IPS below.



AM provides prioritisation & justification for investments and changes

ILS & IPS represent processes that influences the design to improve whole-life outcomes. It also builds and optimises the support solution to unlock readiness and optimise whole life cost. *That are consistent through a single maintenance plan...*

ILS/IPS is typically applied at a **product** level, whilst the principles align with those of AM above.



Start

- Awareness of the value that each discipline brings across the organisation and asset lifecycle
- Common language & understanding to enable information & insight to flow

Progress

- Clarity of the processes and outcomes that enable difference between the way AM is applied at an organisational level, with clear boundaries & objectives
- Digitally enabled decision support tools

Excel

- One team working with information to influence investment decisions within the organisation and enable visibility of current and future equipment performance
- Whole life aggregated articulation of outcomes

AM, provides a framework for identifying priorities for invest of resources across the organisation (money, people, infrastructure), framed against organisational outcomes (e.g. fleet readiness within a cost envelope). In defence AM is intended to:

- Align the way organisations act through the establishment of Asset Management Objectives
- Value good quality data to support decision making
- Align the way defence acts through consistent decision making frameworks

IPS provides optimised support solutions, resource requirements, and data to enable decision making.

OTHER GOOD PRACTICE



ASSET MANAGEMENT IN DEFENCE – INFORMATION SYSTEMS

Is data is just 1's and 0's until it is used to support a decision... to maintain... to replace ... to modify...?



Did you know there are different types of information system to support decision making, each with different levels of governance and scope?

Systems used to monitor, analyse data to provide insight and support decision making



Driven by aggregation & analytics

"Information is the oil of the 21st century and analytics is the combustion engine"

Start

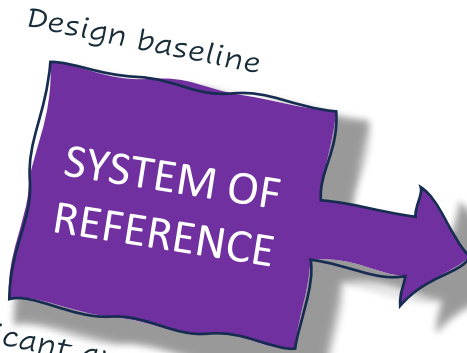
- Established Physical & Functional Hierarchies
- Data quality baseline understood
- Systems of Record / Insight / Reference / Engagement identified

Progress

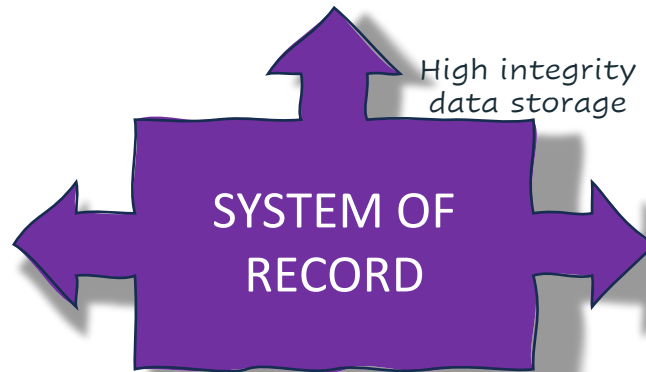
- Systems established as single source of truth, supported by governance
- Good quality data defined, and established "as the norm"
- Data models established for decision making

Excel

- ...

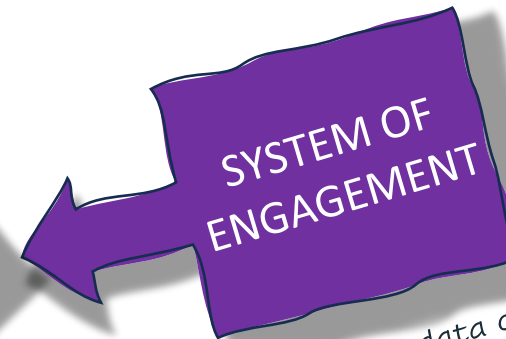


Design baseline



High integrity data storage

Planning, Execution, history data. Used to inform the data to day management of assets, and is constantly evolving



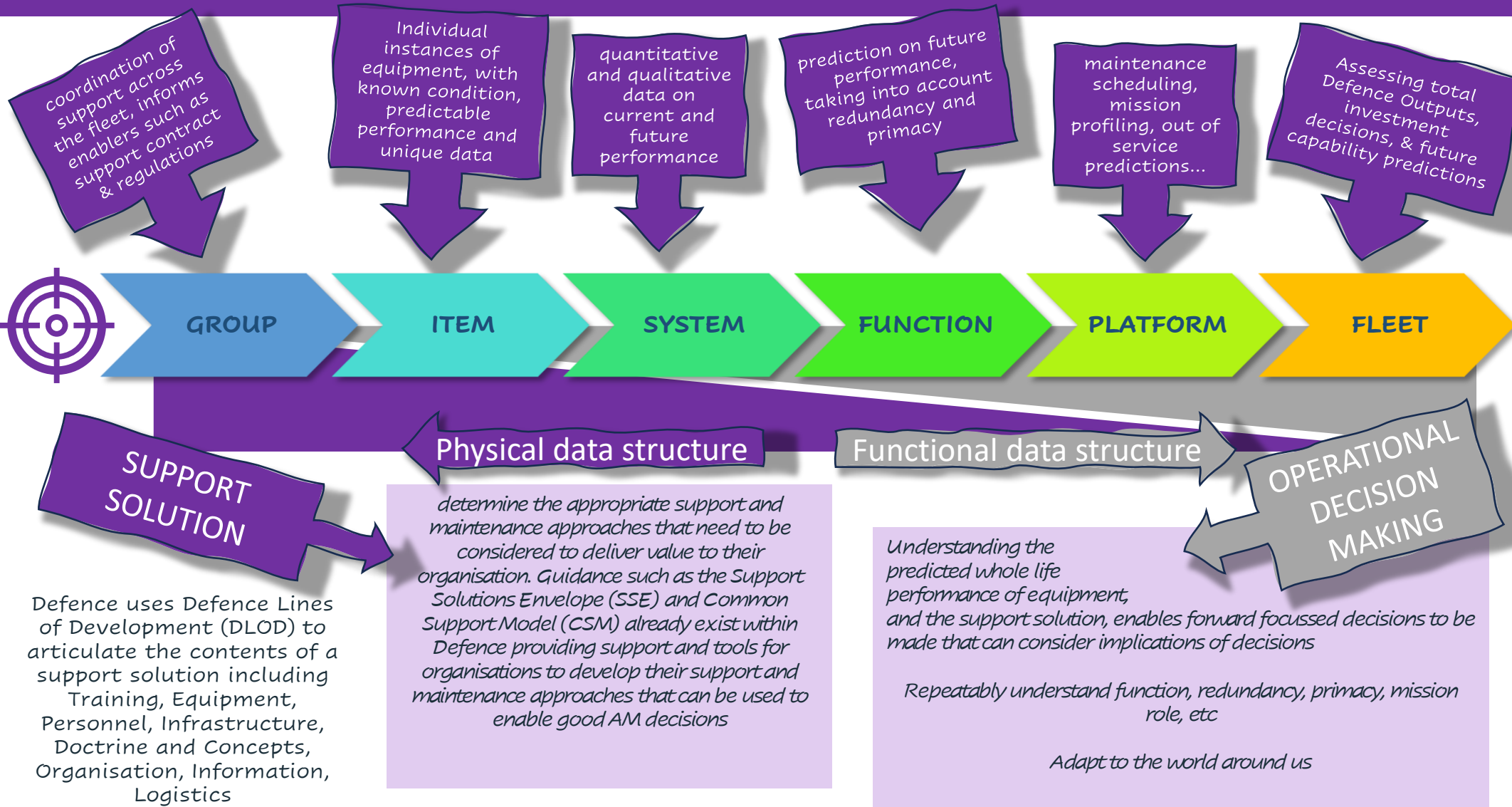
End user focussed system

User interface, data capture, sensors, used to capture information and load into the system of record

Significant amounts of data (e.g. training, instructions, NSN) created in the Acquisition phase to birth the assets in the Systems of Record, updated and evolved inservice.

OTHER GOOD PRACTICE

ASSET MANAGEMENT IN DEFENCE – DECISION LAYERS



- Start**
 - Articulate decisions, and objectives (e.g. in AM Strategy)
 - Establish objectives to support development of the frameworks
 - Establish common language & taxonomy
- Progress**
 - Establish common reporting frameworks
 - Establish key reporting metrics
 - Digitally enabled decision support tools
- Excel**
 - Dynamically test interventions to determine if they will move the bottom line
 - Whole life aggregated articulation of risk & opportunity

Defence uses Defence Lines of Development (DLOD) to articulate the contents of a support solution including Training, Equipment, Personnel, Infrastructure, Doctrine and Concepts, Organisation, Information, Logistics

determine the appropriate support and maintenance approaches that need to be considered to deliver value to their organisation. Guidance such as the Support Solutions Envelope (SSE) and Common Support Model (CSM) already exist within Defence providing support and tools for organisations to develop their support and maintenance approaches that can be used to enable good AM decisions

Understanding the predicted whole life performance of equipment, and the support solution, enables forward focussed decisions to be made that can consider implications of decisions

Repeatably understand function, redundancy, primacy, mission role, etc

Adapt to the world around us

OTHER GOOD PRACTICE

ASSET MANAGEMENT IN DEFENCE – WHAT IS IT?

There are countless ways of implementing AM, for defence to leverage value its important that the crown, civil servants, military personnel, supply chain, tax payers etc, can find a common language and vocabulary to reduce rework and establish common ways of working

Decision making across the whole lifecycle of an asset considering Defence Outputs, Financial, Social & Environmental capitals



Linking AM planning to Defence corporate vision, strategy, policies, plans and objectives



Commitment from senior leaders in the Naval Organisations to embrace Asset Management, and provide consistent direction and delegated authority to enable consistent improvement and long term change



*Defence outputs in terms of: Readiness, i.e. Availability, Capability, Sustainment



By establishing common frameworks changes in the internal and external constraints can be rapidly tested to determine the right action to optimise Defence Outputs.



A whole life focus coupled with the Defence Lines of Development (DLoD) will enable operations and support solutions to be developed that Increase Defence Outputs whilst reducing Whole Life Cost



Assuring data gathered across the Naval Enterprise to enable improved decision making. This will enable aggregated predictions of current and future performance across the enterprise considering cost and performance



Start

- Common framework of outcomes (e.g. 6 capitals)
- Understand maturity against a common framework
- Establish Common endpoint



Progress

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Excel

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OTHER GOOD PRACTICE

ASSET MANAGEMENT IN DEFENCE & TES

ISO 55000

Management system that defines what outcomes the organisation is trying to achieve, what contributing assets are, and how to make investment decisions

Organisational Strategy – What are we trying to achieve?

Objective setting & governance – What do I need from my assets?

Planning – How will I achieve this with my assets?

Assets... Enabling resources, People, process, technology, physical assets, funding, knowledge....
Outsourcing – Who will do it? Could a servitisation model be considered

PAS 280

Guidance that articulates how to enable services that deliver value, rather than commodities, and how to enable consistency across the lifecycle

Strategy – Should I go down a servitisation path?

Explain servitisation approaches and the pro's and con's; e.g. moving from output based approaches to outcomes

Approach – Effectiveness

Optimise whole life cost and performance, improve speed to achieve value...

Day to day actions – Efficiency

 **Start**

- Partnership to share between organisation & service provider when developing service

-Readiness / maturity assessment of the organization to leverage services

 **Progress**

- Agreed consistent approaches across lifecycle developed with org & industry sector

-Establish frameworks and approaches to enable consistency in whole life delivery

 **Excel**

Network Rail enabled a transformation in "Designing for Reliability" by training hundreds of suppliers, and establishing common policies

OTHER GOOD PRACTICE