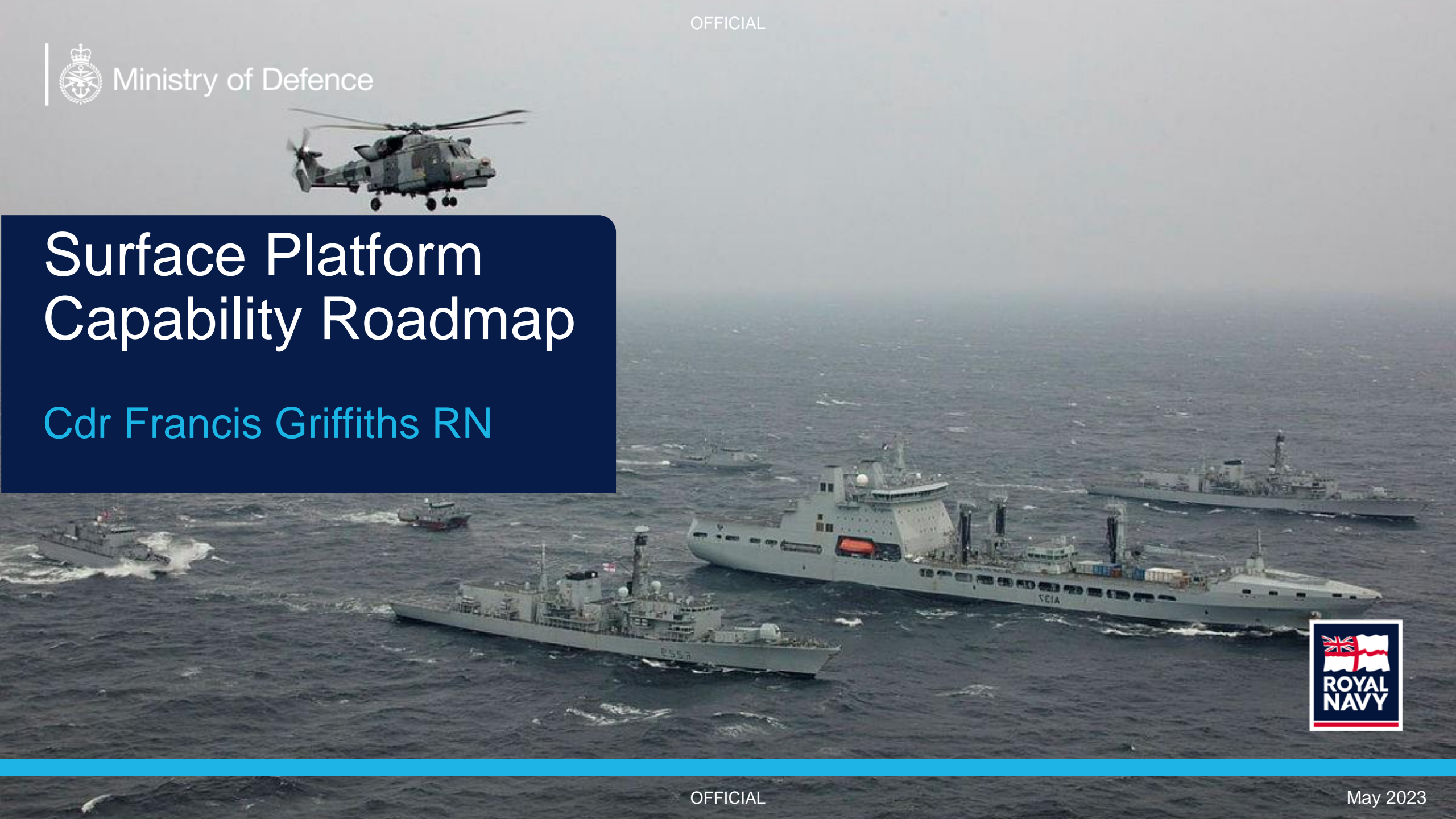




Surface Platform Capability Roadmap

Cdr Francis Griffiths RN



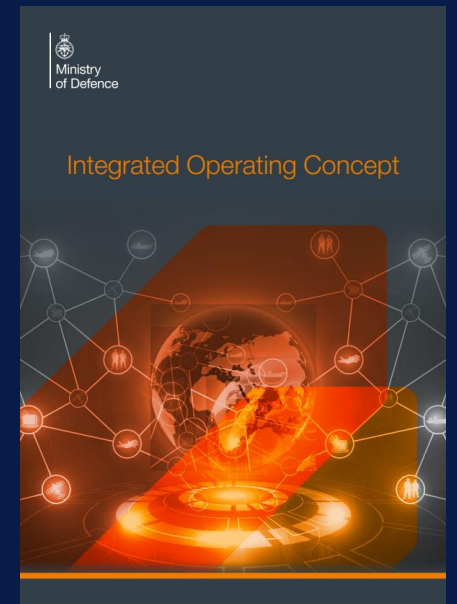
Scope

- Context
- System of Systems Approach
- Capability Requirements
- Capability Vision
- Problem Set
- Initial Roadmap
- Roadmap Development



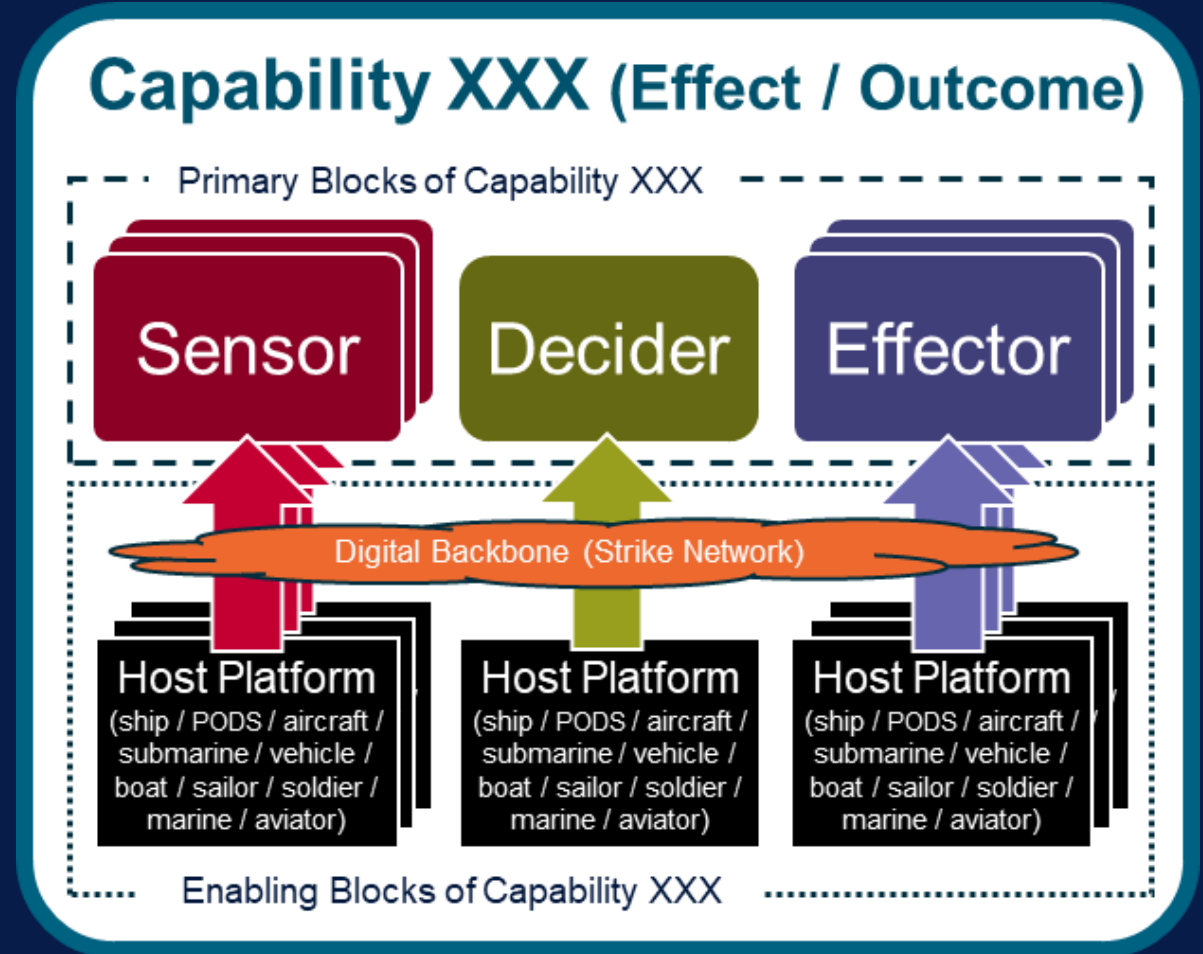
Context

- Defining features of the future security environment:
 - Global competition
 - Climate change
 - Technology proliferation
 - Affordability
 - Demographic shifts
- MarOpC Themes:
 - Becoming a Distributed Protean Force
 - Executing the Wise Pivot
 - Adopting a System of Systems approach



System Of Systems Approach (SOSA)

- Surface Platform Capability
 - Float
 - Move
 - Host
 - Survive



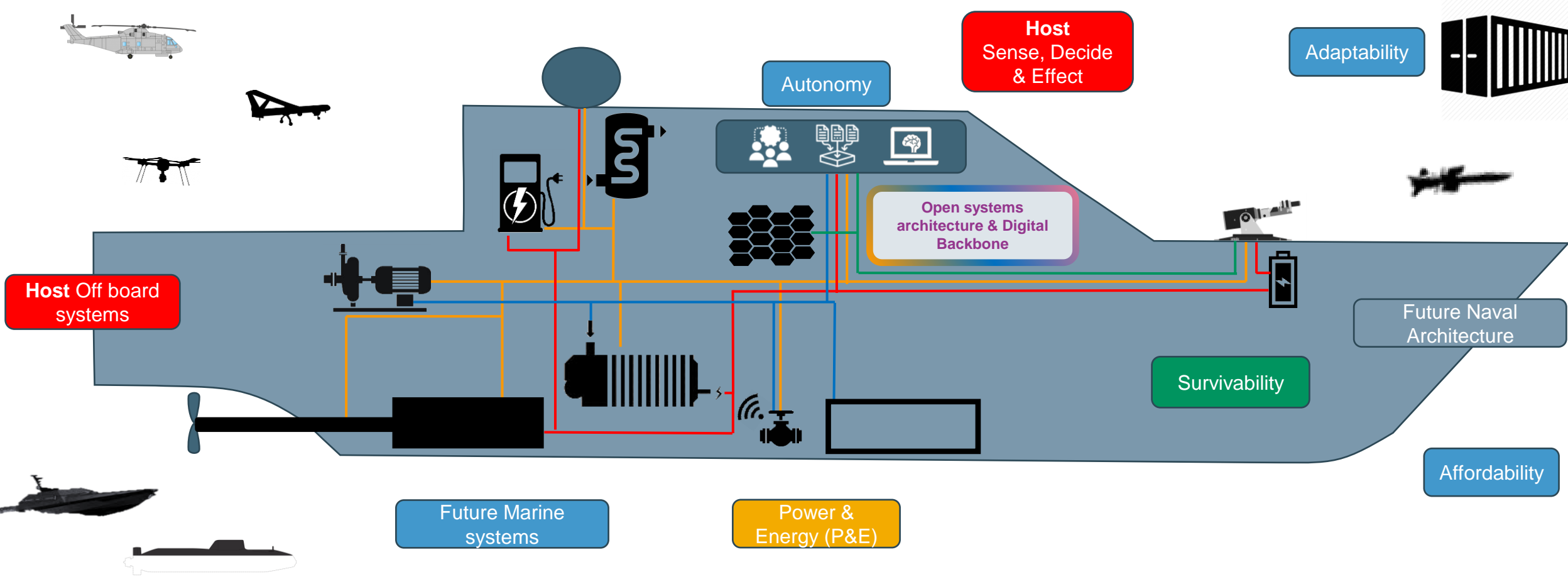
Surface Platform Capability Requirements

Based on IOpC, MarOpC, RN CMS, Above Water Battlespace Vision

- System of Systems Approach
- Host:
 - Sense, Decide, Effect
 - Off board platforms
- Power & Energy
- Survivability
- Adaptability
- Autonomy
- Availability
- Affordability

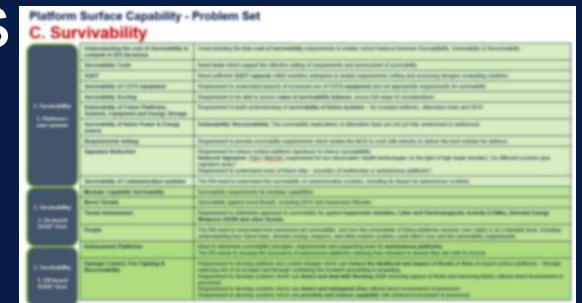
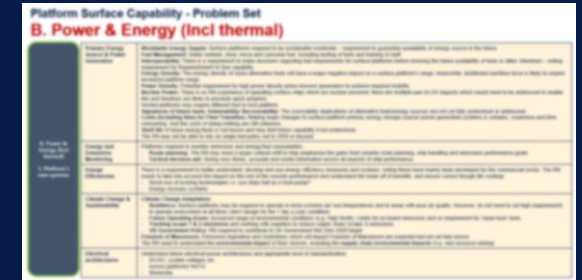
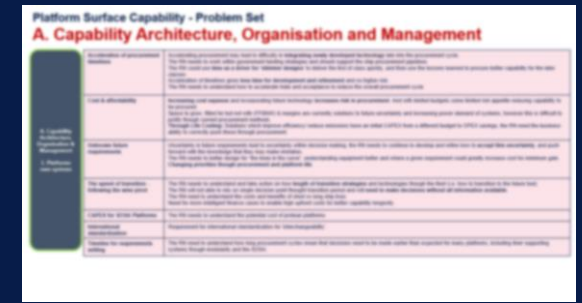
Surface Platform Capability Vision

Based on IOpC, MarOpC, RN CMS, Above Water Battlespace Vision



Problem Set

- Capability Architecture, Organisation & Management
- Power & Energy
- Survivability
- Naval Architecture – Future Hull, Structure & Materials
- Autonomy Enablers and Future Marine Systems
- Across:
 - Platform's own systems
 - On board SOSA host (Sense/ Decide/ Effect – incl modular/ people)
 - Off board SOSA host (host another platform)



Initial Roadmap

- Platform Timeline
- Context
- Decision Points
- Research, Development & Experimentation
- Concept Cards
- Opportunities



Roadmap Development

- Capability Planning Working Group
- Industry
- International

Surface Platform Capability Requirements
 *Based on JOpC, MarOpC, RN CMS and Above Water Battlespace 2040 Vision

Surface Platform Capability Vision

Platform Surface Capability - Problem Set
A. Capability Architecture, Organisation and Management

PLATFORM CAPABILITY ROADMAP: FLOAT - MOVE - HOST

The collage contains several key elements:

- Surface Platform Capability Requirements:** A slide detailing requirements for 'Protean' multi-role platforms, including 'Smart crewing and hosting of personnel', 'Host Sense, Decide & Effect', and 'Operate with future air systems'. It also mentions 'System of Systems Approach (SOSA)' and 'Common Digital Architecture'.
- Surface Platform Capability Vision:** A diagram showing various capabilities like 'Host Off board systems', 'Power and cooling systems for future sensors', 'Effective mission monitoring', 'Smart crewing & future hosting', and 'Host Sense, Decide & Effect'. It also includes 'Affordability' and 'Principles'.
- Platform Surface Capability - Problem Set:** A slide titled 'A. Capability Architecture, Organisation and Management'.
- Platform Capability Roadmap:** A chart showing the evolution of capabilities from 'Float' to 'Move' to 'Host' over time, with a 'Future Surface Fleet' on the right.



Ministry of Defence



Surface Platform Capability Roadmap

Cdr Francis Griffiths RN

RN - Surface Platform Power and Energy Roadmap Development Seminar

