The background is a complex digital-themed illustration. It features a dark blue and purple color palette. A large, faint globe is visible in the center, overlaid with a network of glowing lines and nodes. Binary code (0s and 1s) is scattered across the top and sides. The overall aesthetic is high-tech and futuristic.

# The UK MAPLE Architecture and its potential application to the RAN

Graeme Bick  
Maritime Solution Architect  
11 May 2022

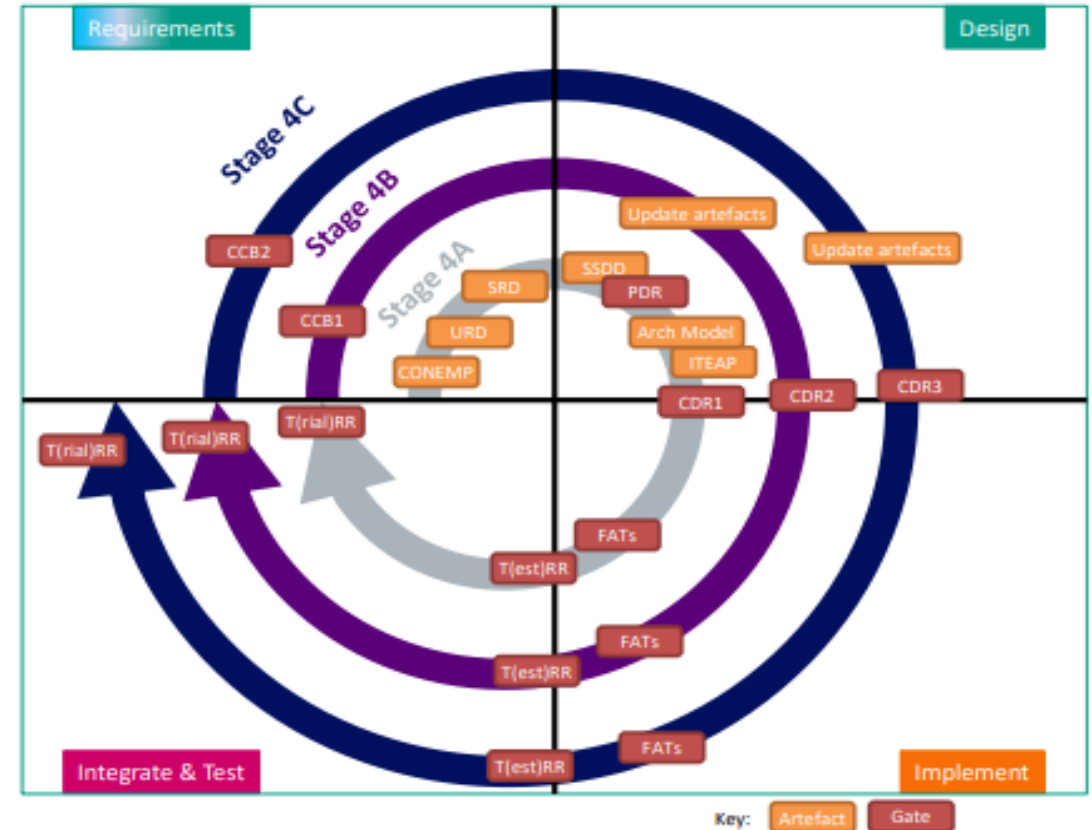
QINETIQ  
Indo Pacific  
2022

# A Collaborative Program

- Collaborative - No single company can deliver the optimal solution
- Agile Development Approach
  - Iterative
  - Flexible



Naval Strike Network (Maritime Autonomous Systems) Contributors



MAPLE Spiral Development Approach



# Context

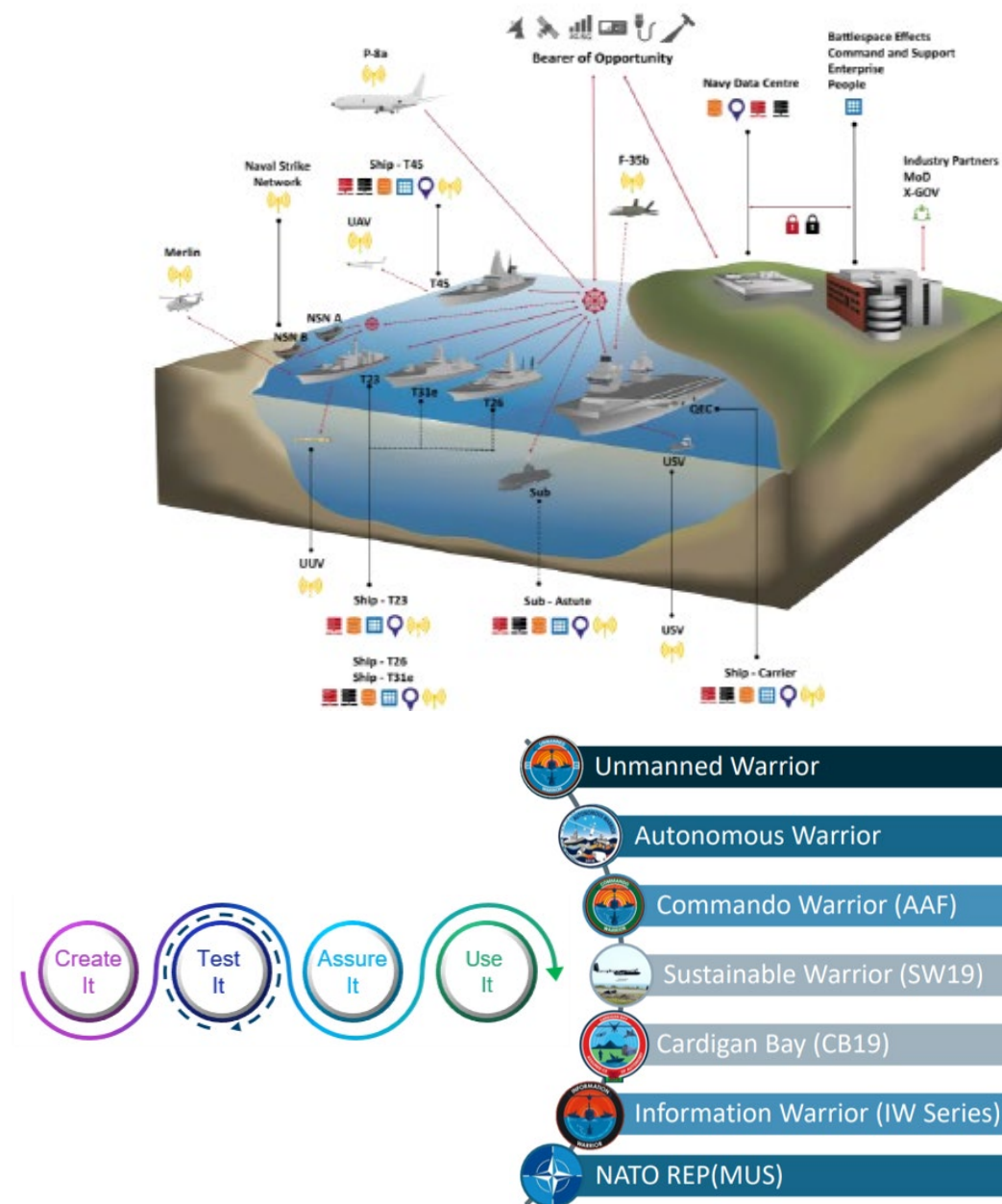


Enabling the military to deliver operational advantage through the use of Robotic Autonomous Systems to expand physical presence, broaden sphere of influence and deliver aggregated military effect.

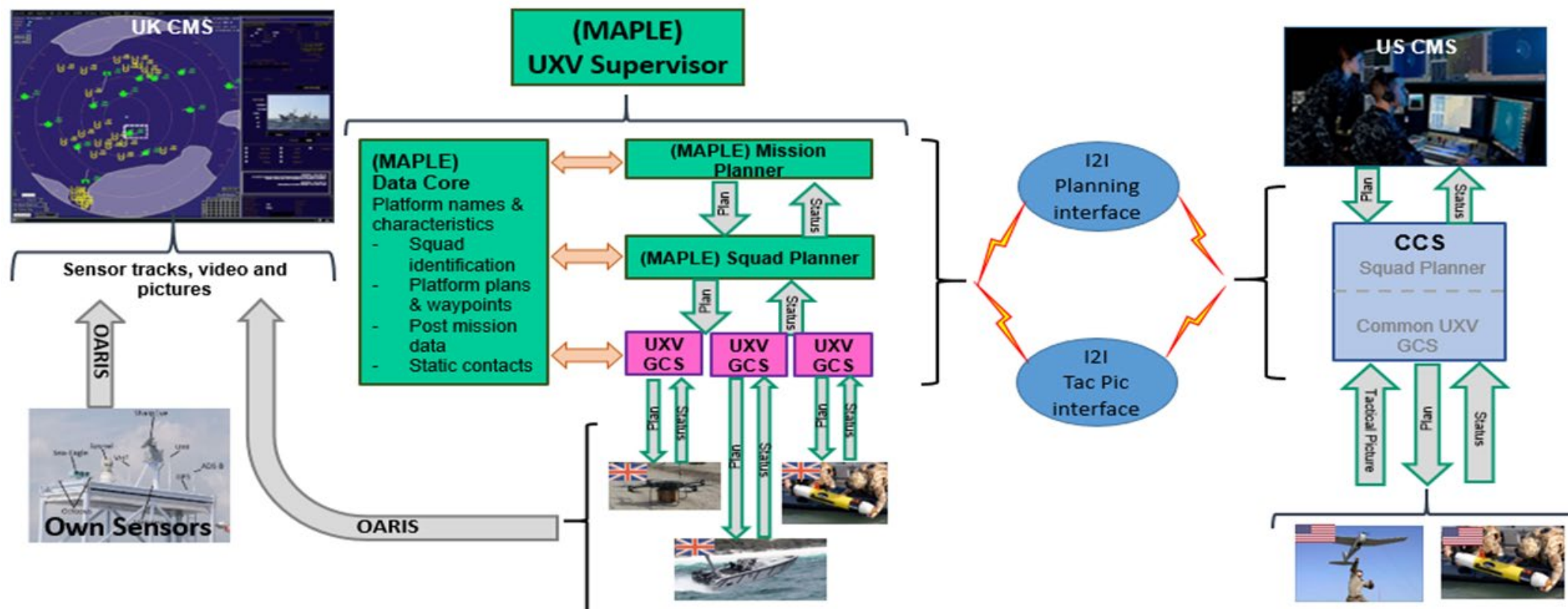
# From MAPLE to Naval Strike Network

## Royal Navy's Naval Strike Network

- 'Naval Strike Network' incorporating a mix of uncrewed vehicles
- Builds on iterative development and trial/exercise outputs
- Interoperability to Interchangeability
- System of Systems underpinned by an 'information backbone' for an increasingly distributed and separated future fleet
- Capability generation through operational experimentation
  - Create / Test / Use



# Interoperability

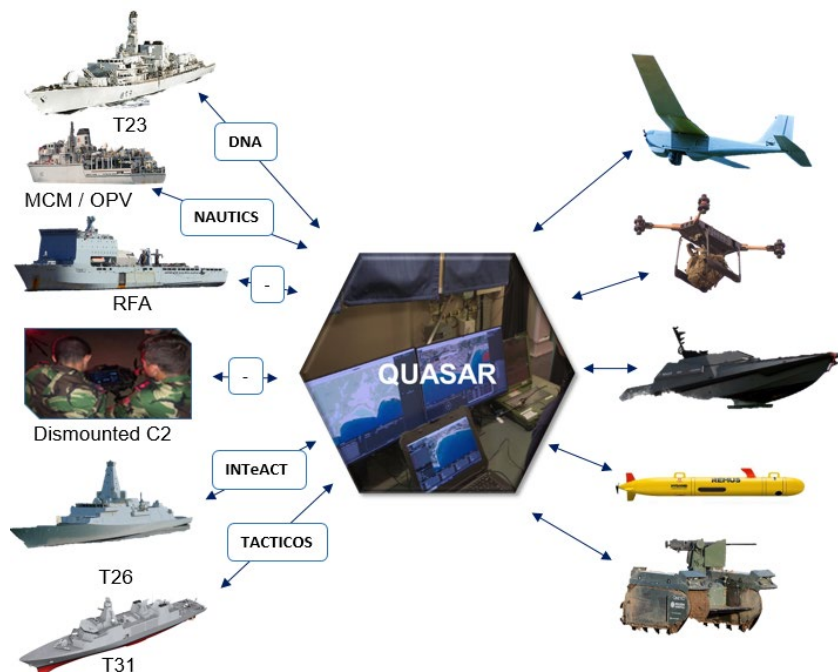


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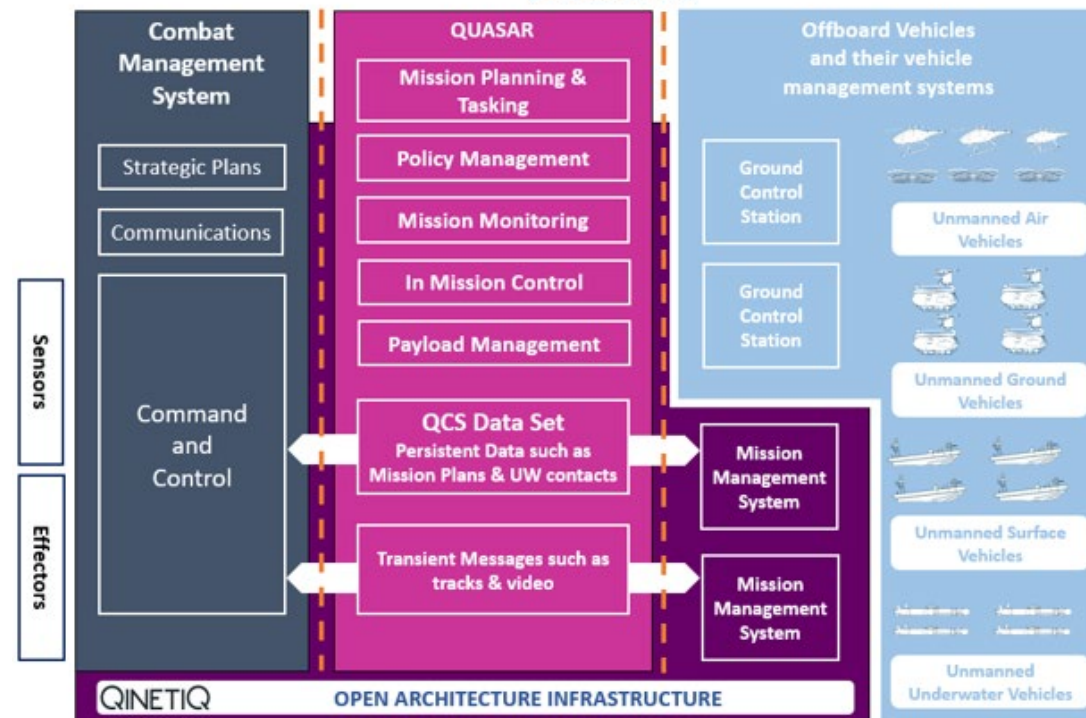


# UXV C2 - Architecture

- Defence owns the core persistent architecture
- Open Architecture
- Multi Domain Agnosticism – Combat Management System, UXVs & Payloads

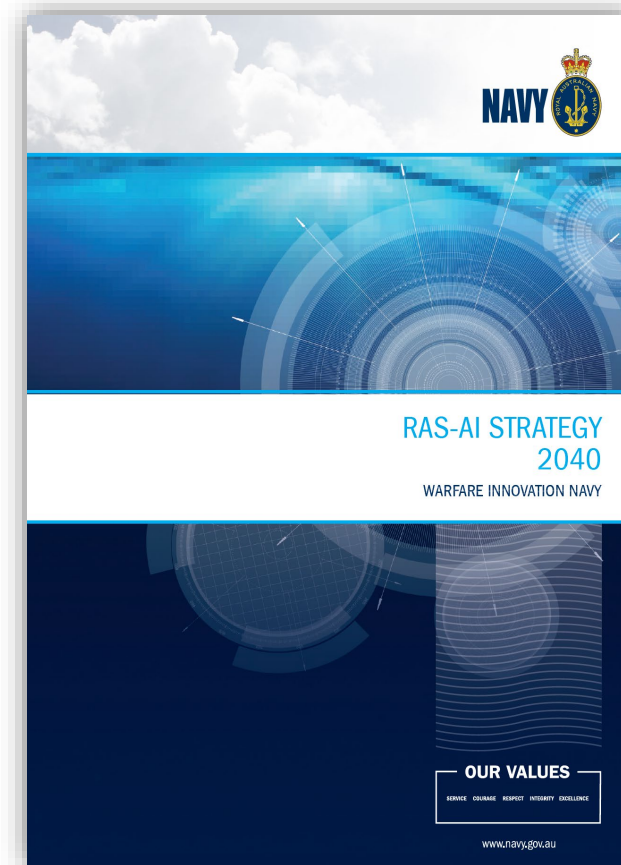


## QinetiQ Unmanned Autonomous Systems Architecture (QUASAR)



# Royal Australian Navy – RAS AI Strategy 2040

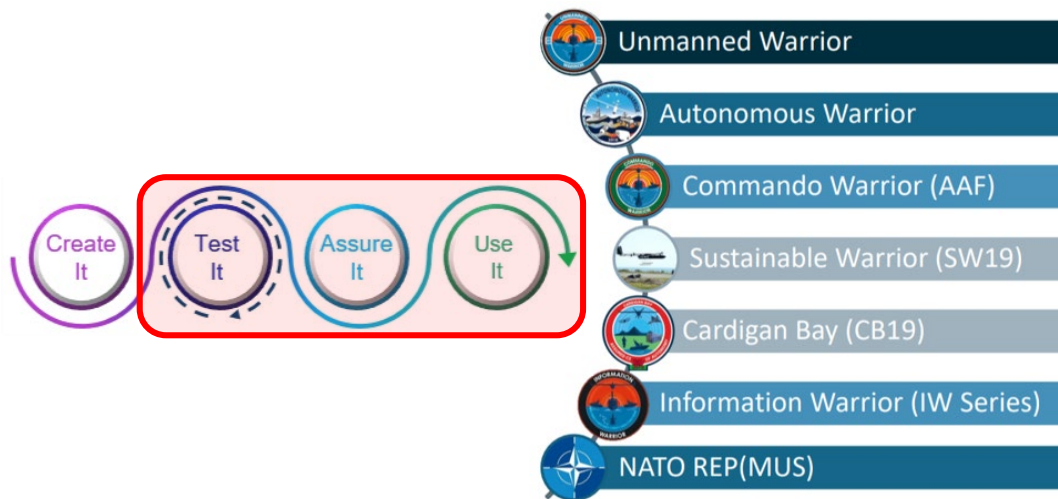
- Enterprise-wide approach to increase RAS AI effects
- Sovereign Common Control System
- Multi-National experimentation
- Autonomous Warrior 2022



To fulfil our potential, we need to engage in constant experimentation, and encourage collaboration and innovation at all levels. This will enable us to leverage RAS-AI to enhance Navy's capability by strengthening our **Force Protection**, increasing our **Force Projection** in the maritime approaches of our near region, improving our **Joint Integration** through **Partnership**, maximising our **Force Potential**, and ensuring **Australian Control**.

*Vice Admiral Michael Noonan, AO, RAN  
Chief of Navy*

# Conclusion







Drinks are on us!

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**4pm, Wednesday 11 May**

**Stand 2S16**

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