

NAVY



# TDL Interoperability Summit

CAPT Matthew Doornbos, RAN  
Program Director Navy Information Warfare Branch

## NAVY VALUES

HONOUR HONESTY COURAGE INTEGRITY LOYALTY



# Interoperability

- Operating Environment
- Agility
- Combat Management System Enterprise
- Evergreen Approach
- Future
- Industry

NAVY VALUES

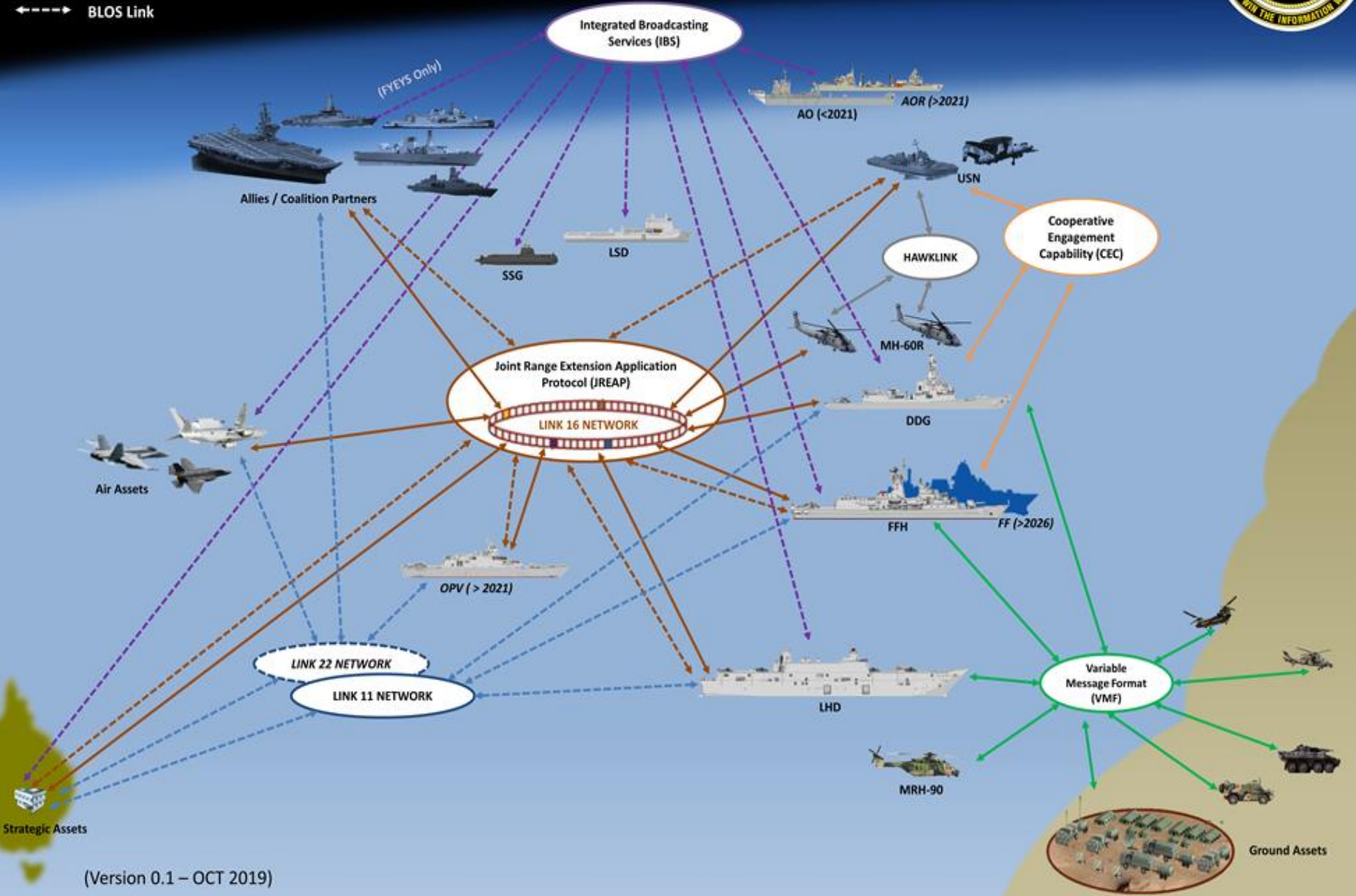
HONOUR HONESTY COURAGE INTEGRITY LOYALTY



# Navy Tactical Data Network (NTDN) Operational View (OV-1)



→ LOS Link  
 - - - - BLOS Link



# Operating Environment

- South West Pacific / South East Asia / Indian Ocean
  - Great power competition
  - Congested and contested
  - Complex maritime environment
  - Maritime Task Group, Joint Task Force, Coalition

## NAVY VALUES

HONOUR HONESTY COURAGE INTEGRITY LOYALTY





# Agility

- Adaptive
  - Changes in threat profile
- Generate multi domain awareness
- Improving speed of command
  - Put decision makers more in sync with shooters
  - Warfighters will be able to create new offensive and defensive capabilities by quickly reconfiguring their systems
- Human on the loop
  - Machine Learning / Augmented Intelligence



## NAVY VALUES

HONOUR HONESTY COURAGE INTEGRITY LOYALTY



# Combat Management Systems Enterprise

- Alignment to Combat Systems refresh cycle
  - Transforms warfare from discreetly escalating steps to a continuous process
  - Keep pace with changing adversary capabilities
- Systems Approach
  - Move away from the platform-centric perspective, and adopt a more comprehensive Systems of Systems (SoS) approach across all IW systems to ensure an integrated and interoperable Information Dominant Force.



# Evergreen Approach

- Defence is struggling with inflexible and expensive legacy systems
- Move towards on-demand infrastructure:
  - Offering Agility
  - Flexibility
  - Cost-effectiveness
  - Always up to date to meet changing threat environment
  - Delivering new capability through sustainment

NAVY VALUES

HONOUR HONESTY COURAGE INTEGRITY LOYALTY



# Future

- Need to enable ‘the Networked Force’, adaptive, reliable and robust
- Adaptive and robust military waveforms including sovereign are needed to meet advanced threats (LPI/LPD/LPG)
- Future capabilities/ technologies that support the Network Force:
  - Joint Tactical Radio System (JTRS)
  - Tactical Targeting Network Technology
  - Wide-band Network Waveforms
  - Common Data Links
    - Tactical Common Data Link
  - AI / machine learning / 5G technology ecosystem
- Support introduction of Electromagnetic Manoeuvre Warfare



NAVY VALUES

HONOUR HONESTY COURAGE INTEGRITY LOYALTY





# Industry

- Navy Industry Engagement Strategy
  - Greater Collaboration
- Adaptive acquisition and sustainment strategies
- Enhanced education and awareness
- Navy an informed customer



## NAVY VALUES

HONOUR HONESTY COURAGE INTEGRITY LOYALTY



# Questions



## NAVY VALUES

HONOUR HONESTY COURAGE INTEGRITY LOYALTY



# Maritime C4ISREW&Cyber Operational View (OV-1)

