



Australian Government
Department of Defence



ADIESA

Australian Defence Information and Electronic Systems Association

Joint C2 Industry Focus Group

Second Meeting

23 July 2018

Adams Auditorium - ADFA

0900-1400



Agenda



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- 0900 Introductory brief
- 0930 JP9111, JP2221 & JP9347 Update
- 1000 C4ISR Design Update
- 1030 **Morning Tea**
- 1100 Industry update
- 1130 Breakouts on Focus Questions
- 1230 **Lunch**
- 1300 AS CS Branch – CASG
- 1315 AS SISD – CIOG
- 1330 Back brief on Industry answers to focus questions



Admin Brief



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- All discussions UNCLASSIFIED
- Breakout sessions
- Probity and impartiality
- Toilets in foyer
- Evacuation
- Name tags
- Food served in the North foyer (main entrance)
 - Morning tea 1030-1100
 - Light lunch 1230-1300



Focus Questions



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1. What conditions will allow your business to contribute to this capability?
2. Will a hybrid alliance strategy effectively deliver the intended capability outcomes?
3. How can we utilise current and near future visualisation technology to best deliver the intended capability outcomes?
4. How can commercial models enable fast and reactive development whilst maintaining integrity of systems that require high assurance?



Impartiality



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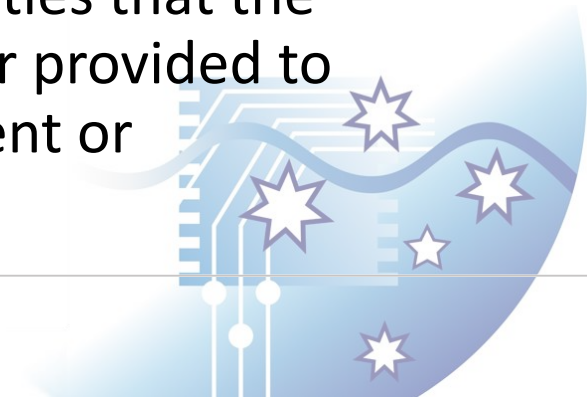


Impartiality and fairness are essential for ensuring that future procurement processes are defensible.

All parties are treated equally and provided the same information.

We will not be providing confidential information and do not want to attendees to provide confidential information today.

Disclaimer: the Commonwealth makes no representations or warranties that the information in this presentation or any information communicated or provided to attendees during focus group discussion is, or will be, accurate, current or complete.



There are 5 core probity principles:

Obtaining best Value for Money

Impartiality and fairness

Dealing effectively with Conflicts of Interest (COI)

Accountability/transparency

Confidentiality

The Commonwealth may circulate attendee questions and the Commonwealth's answers to all attendees without disclosing the source of the questions or revealing Commercial-In-Confidence information.



Rules of Engagement



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- Respect Intellectual Property
- Openness and sharing
- Chatham House – use common sense



Purpose



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Develop and promote an overall industry engagement strategy with elements of Defence developing, delivering and supporting Joint C2 capability:

- a. information exchange on emergent technologies, concepts and systems
- b. identify mechanisms to overcome impediments to C2
- c. interaction between companies involved in Joint C2 and other elements of Defence involved in capability development and sustainment
- d. visibility of extant industry involvement with C2 elements, and coordinate collective involvement
- e. provide industry with insight into the capability challenges and Defence planning to meet those challenges.





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Joint C2 Program Update



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- JP9111 Update
 - Current focus: Studies, Risk Reduction
 - Government approval Q4 2018
 - Focus on COP, Targeting, C2 Chat
 - Delivery FY20/21
- JP2221 Update
 - Tranche 2 Government Approval Q2 2019
 - Mission Systems
 - Legacy, FVEY/N-EYE (S), N-EYE (U/P), OGA
- JP9347 Update
 - MTN Management, L22, L16 mod, IBS, JNIC
 - Future JDN Capability
 - Government Approval Q1 2019



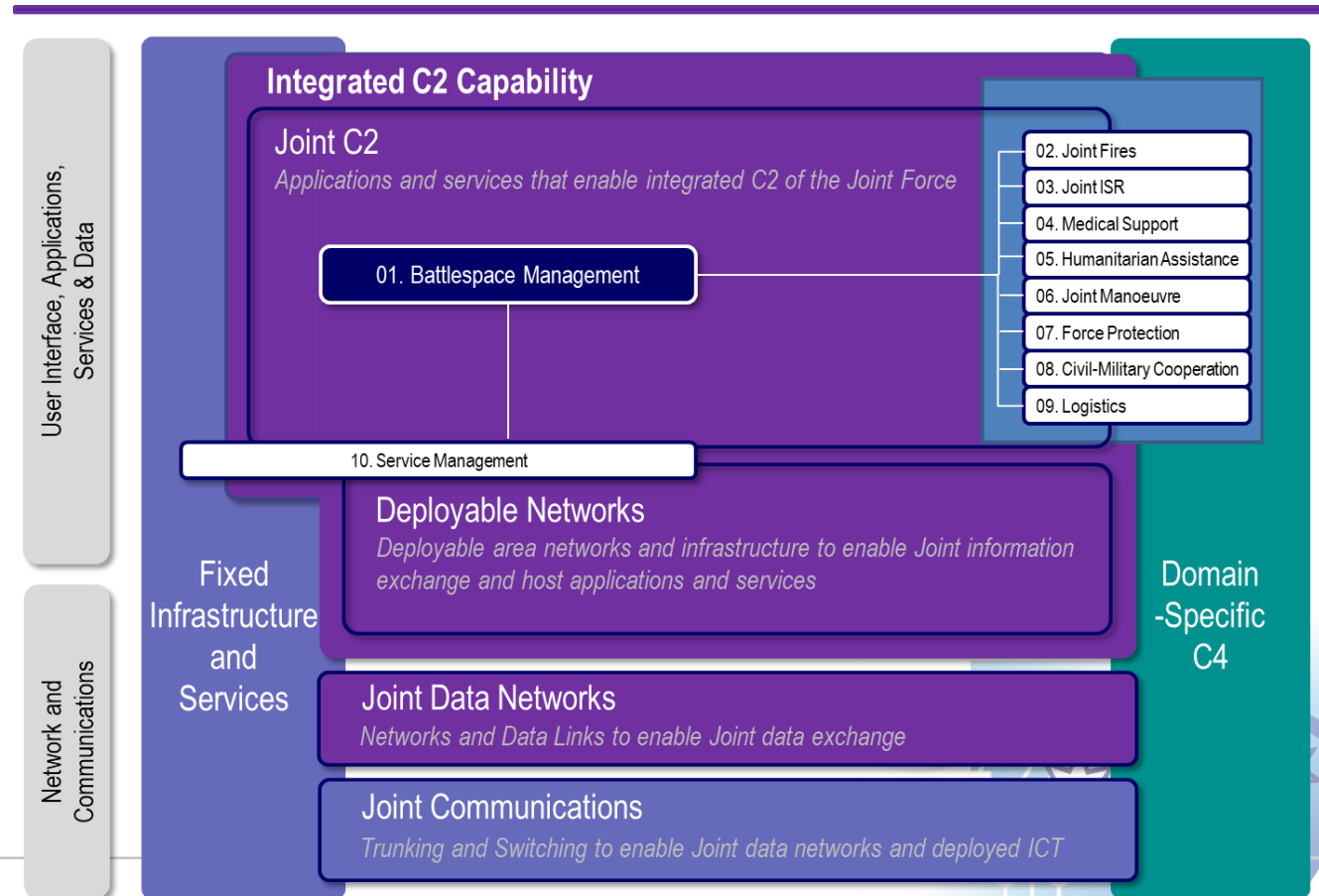
JP9111 Update



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- Program Approach
 - Centralised governance, Tranched delivery every two years
 - Analysis and studies
 - COP/CTP, Targeting, C2 Chat
 - Network Integration
- Government approval for T1
 - Q4 2018
- Industry Involvement
 - Agile, evolutionary acquisition and sustainment
 - Prototyping, integration testing



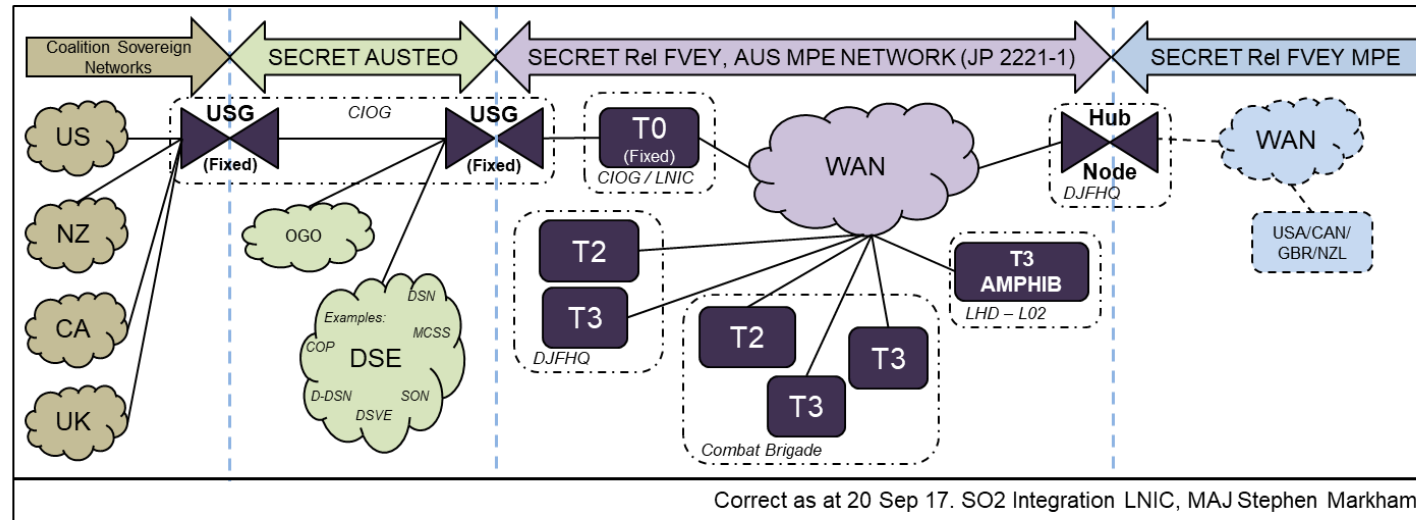
JP2221 Update



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- Tranche 1
 - Transitioned MSN to FVEY MPE
 - N-EYE (S) system delivered?
- Tranche 2
 - Government Approval – Q2 2019
 - Mission systems – Legacy, FVEY/NEYE (S), N-EYE (U/P), OGA
 - Planning for transition from Tranche 1
- Industry Involvement
 - Multi National Information Sharing capability Support System will be substantively contractor based (inclusive of facilities) FYs 21/22 to 25/26
 - Current concept for a unitary (5-year) M&S contract



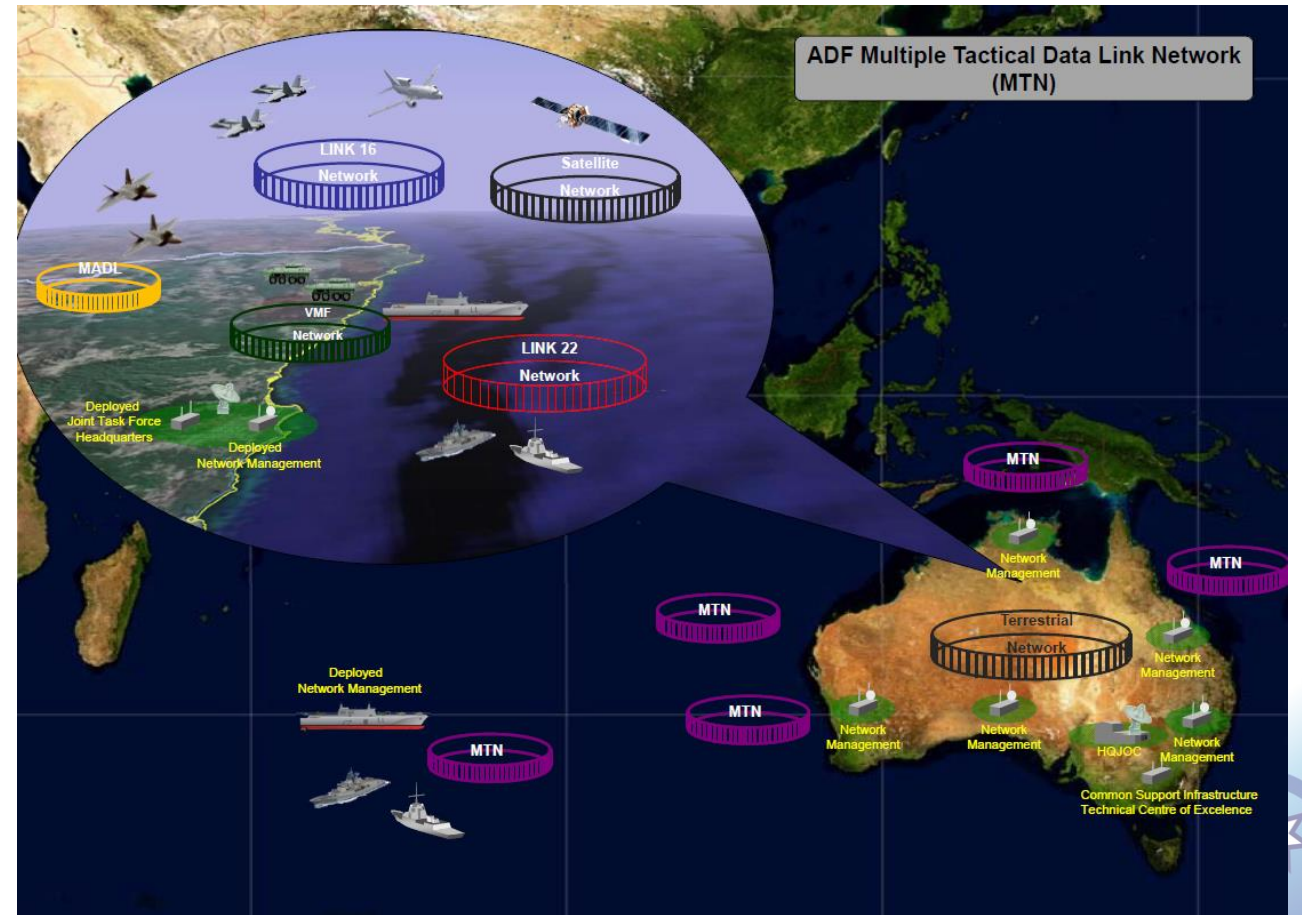
JP9347 Update



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- Government approval Q1 2019
- Capability
 - MTN network management system
 - Link 22 introduction, Link 16 mod
 - IBS enhancement
 - JNIC and Future JDN Capability
- Industry Involvement
 - In-country OEM and OEM Support
 - Test and integration (JNIC)
 - Capability Support (Workforce)



Joint C2 Contacts



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Director Joint C2
Joint C4 Capability Branch
Joint Capabilities Group

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LCDR Bradley Ryan
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C4ISR Design



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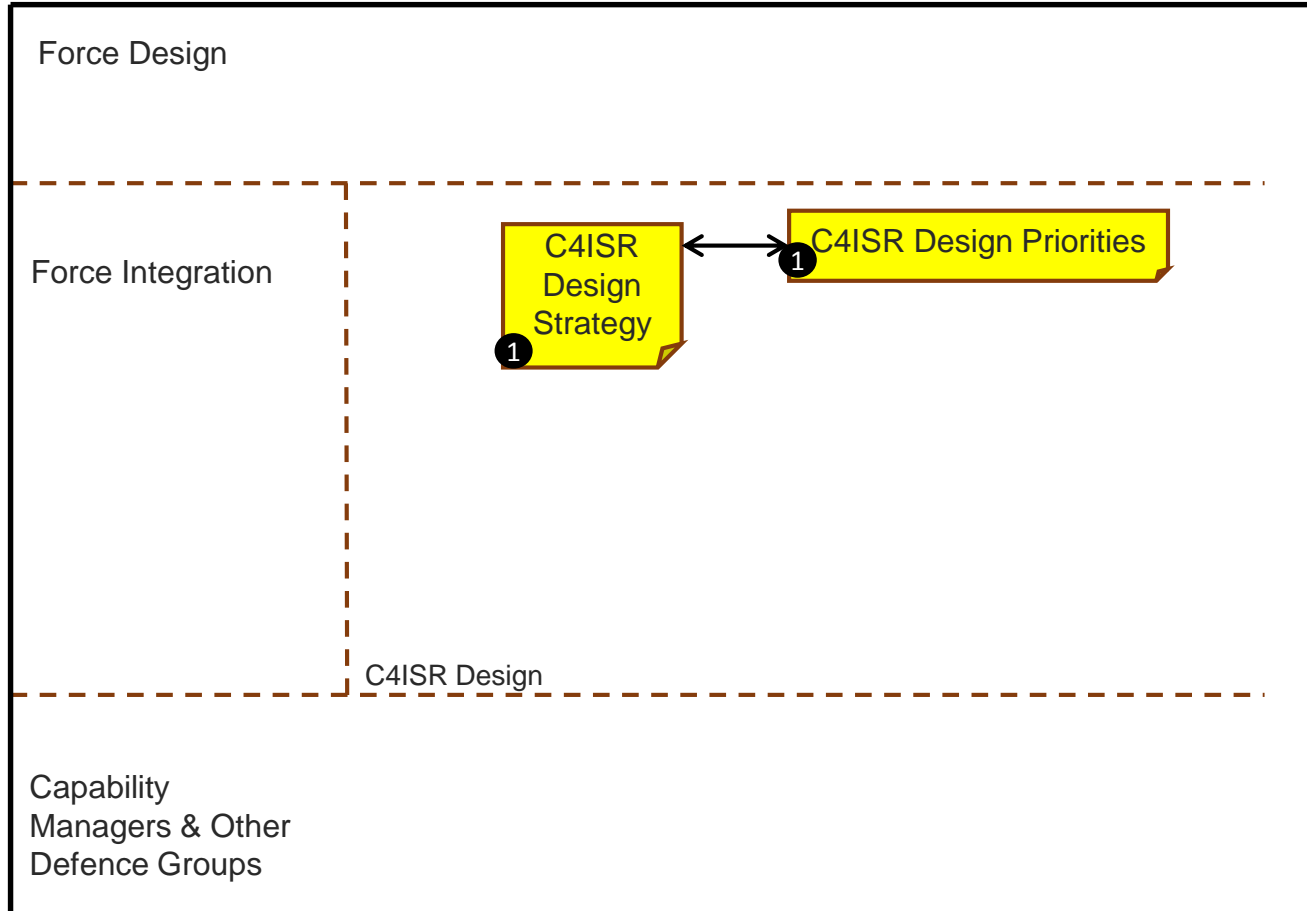
- C4ISR
- C4ISR Design
- C4ISR Design Goals
- C4ISR Design Collaboration







C4ISR Design – Process (1)



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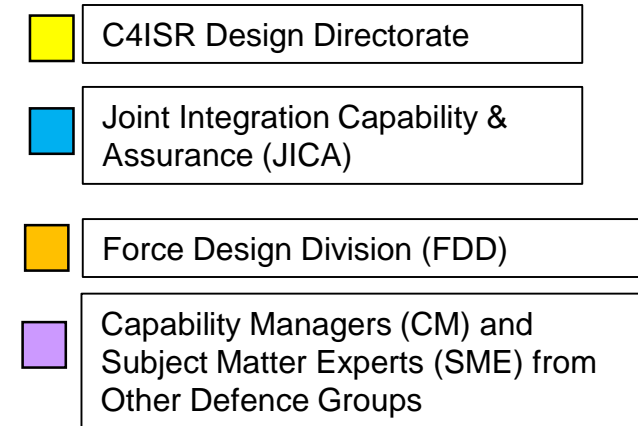
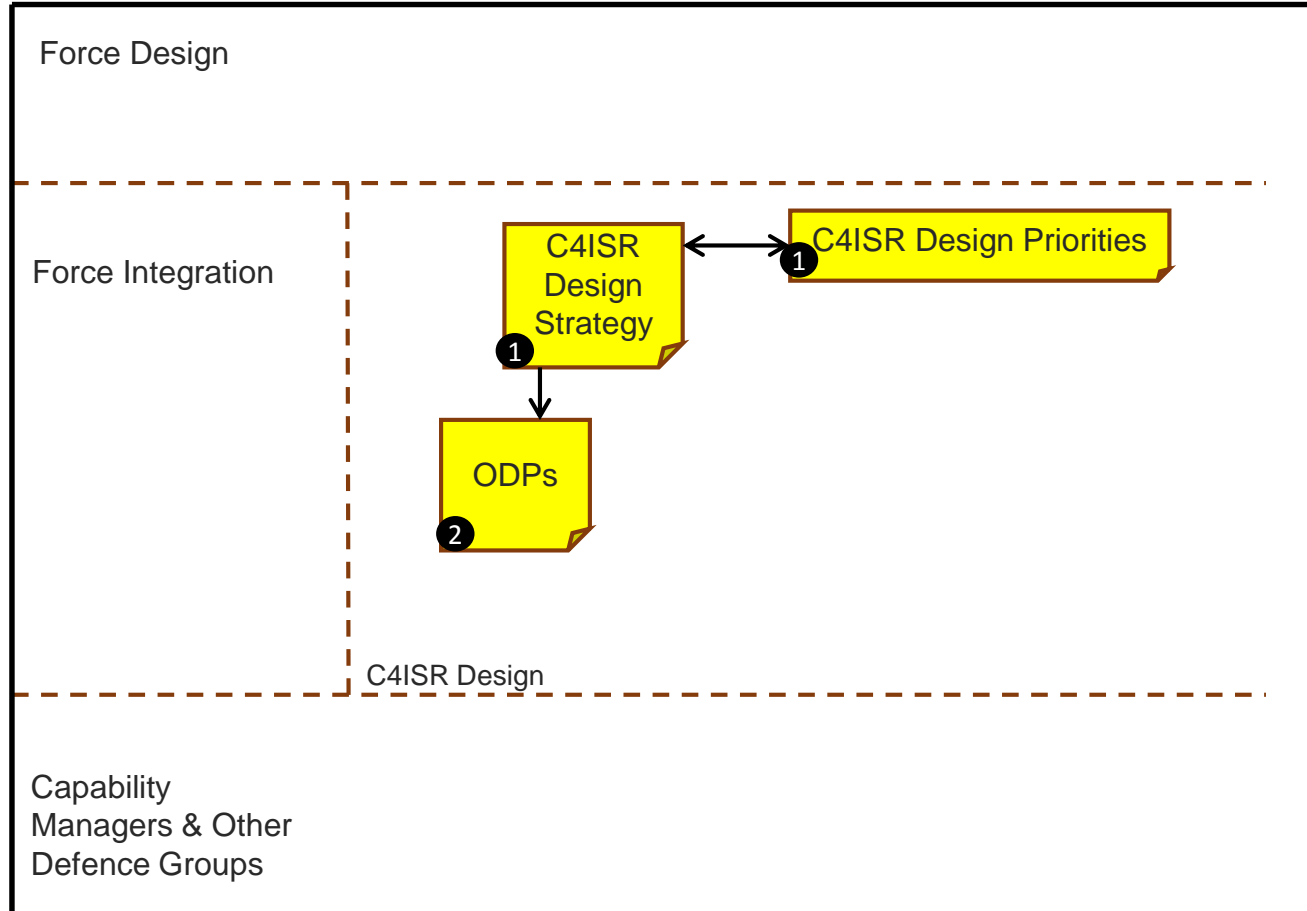


-  C4ISR Design Directorate
-  Joint Integration Capability & Assurance (JICA)
-  Force Design Division (FDD)
-  Capability Managers (CM) and Subject Matter Experts (SME) from Other Defence Groups

C4ISR Design – Process (2)



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C4ISR Design - ODPs

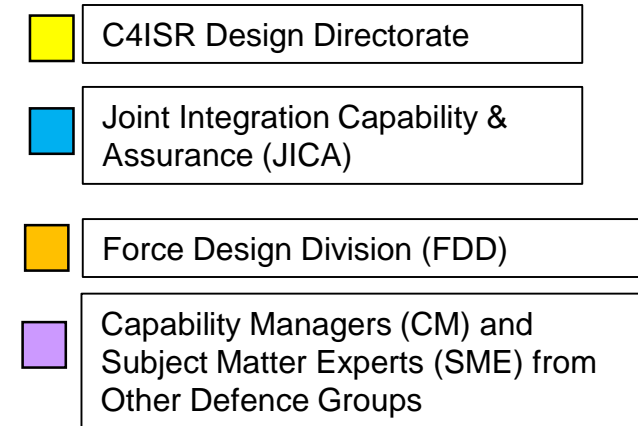
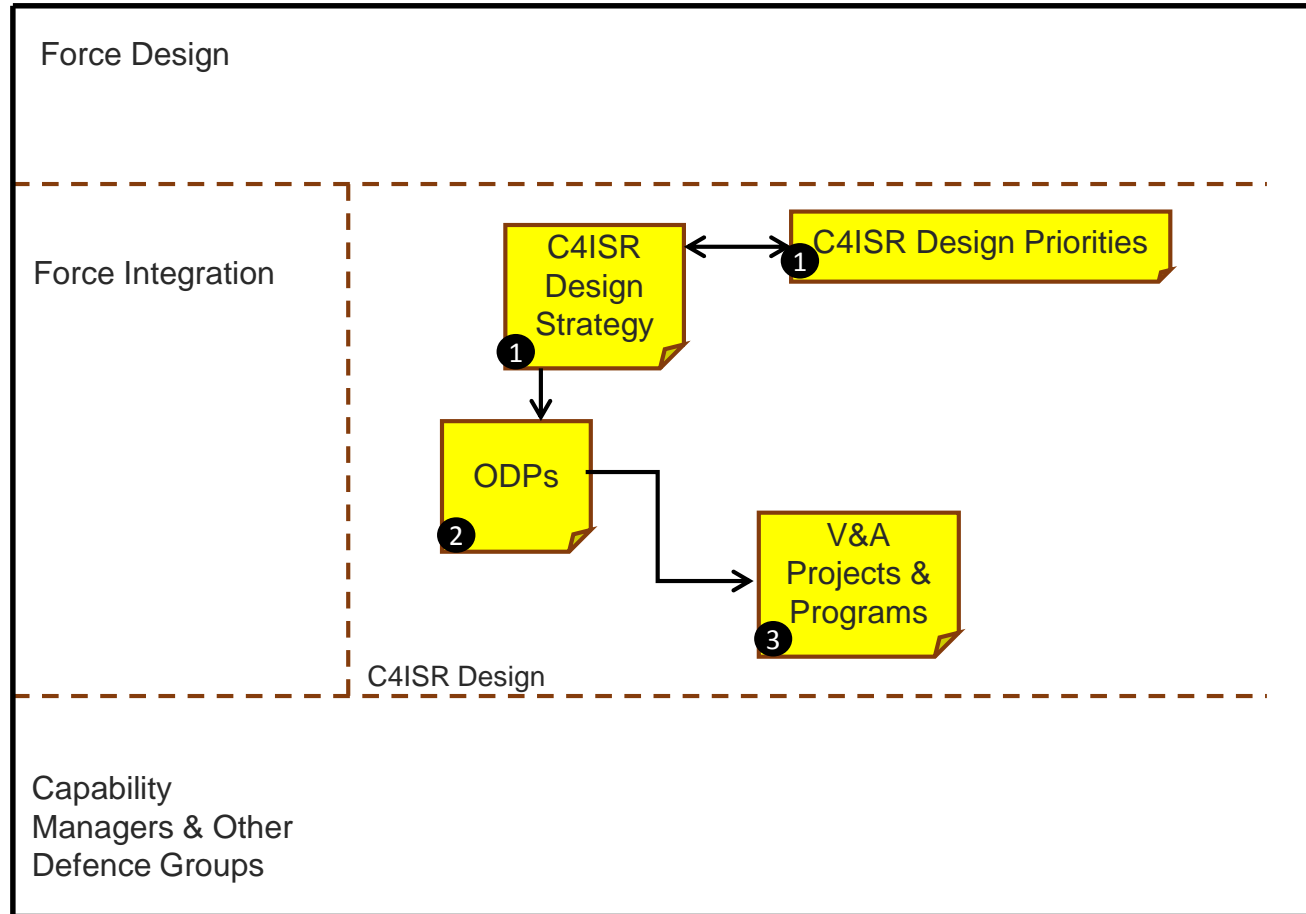
- Completed
 - Theatre Anti-Submarine Warfare (TASW)
 - Collaborative Precision Geolocation (CPG)
- Under Development
 - Position Navigation and Timing (PNT)
 - C2 Remotely Operated Systems (C2 ROS)
 - Joint C2
 - Mission Data Processing (MDP)
 - Joint Integrated Air & Missile Defence (JIAMD)



C4ISR Design – Process (3)



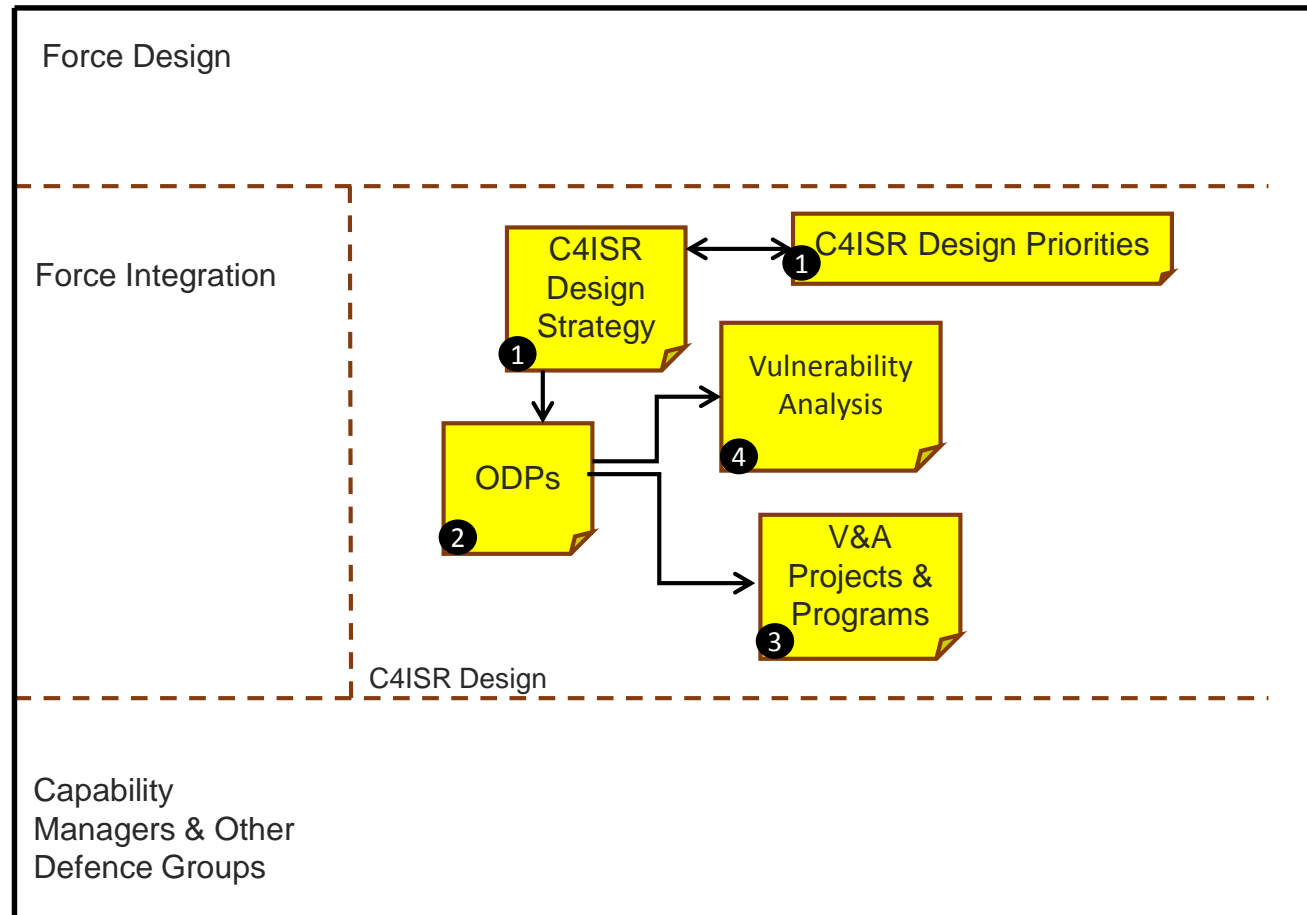
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C4ISR Design – Process (4)



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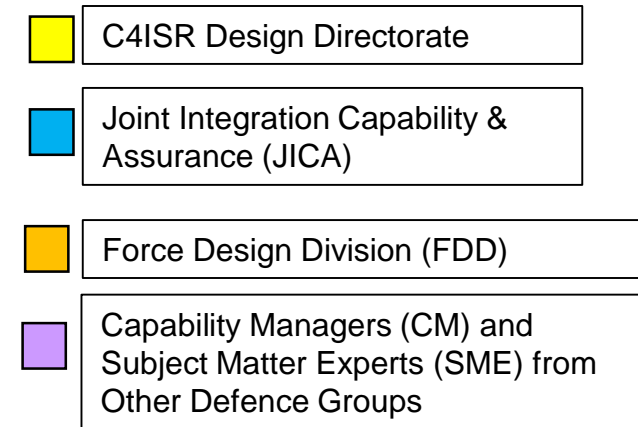
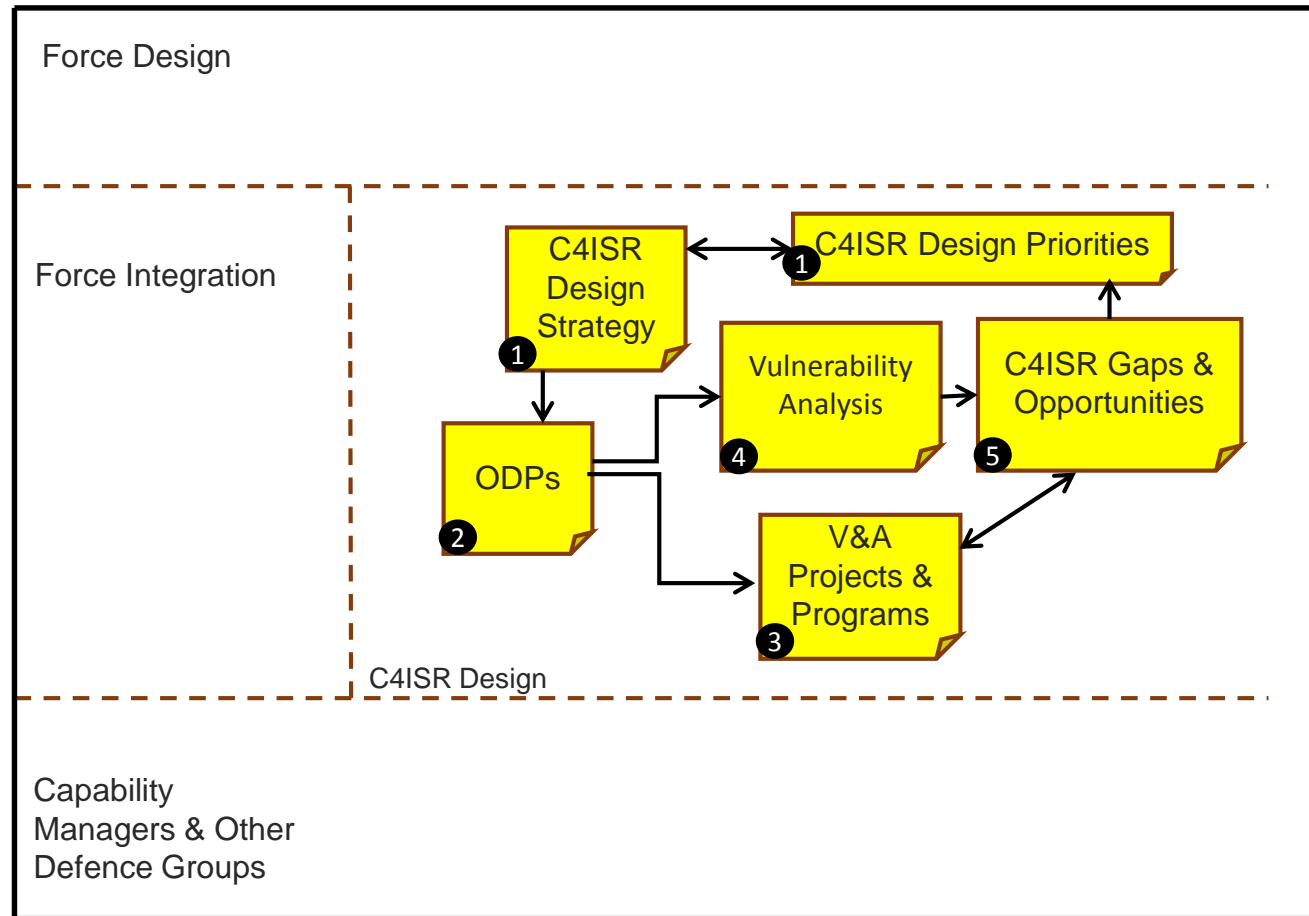


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C4ISR Design – Process (5)



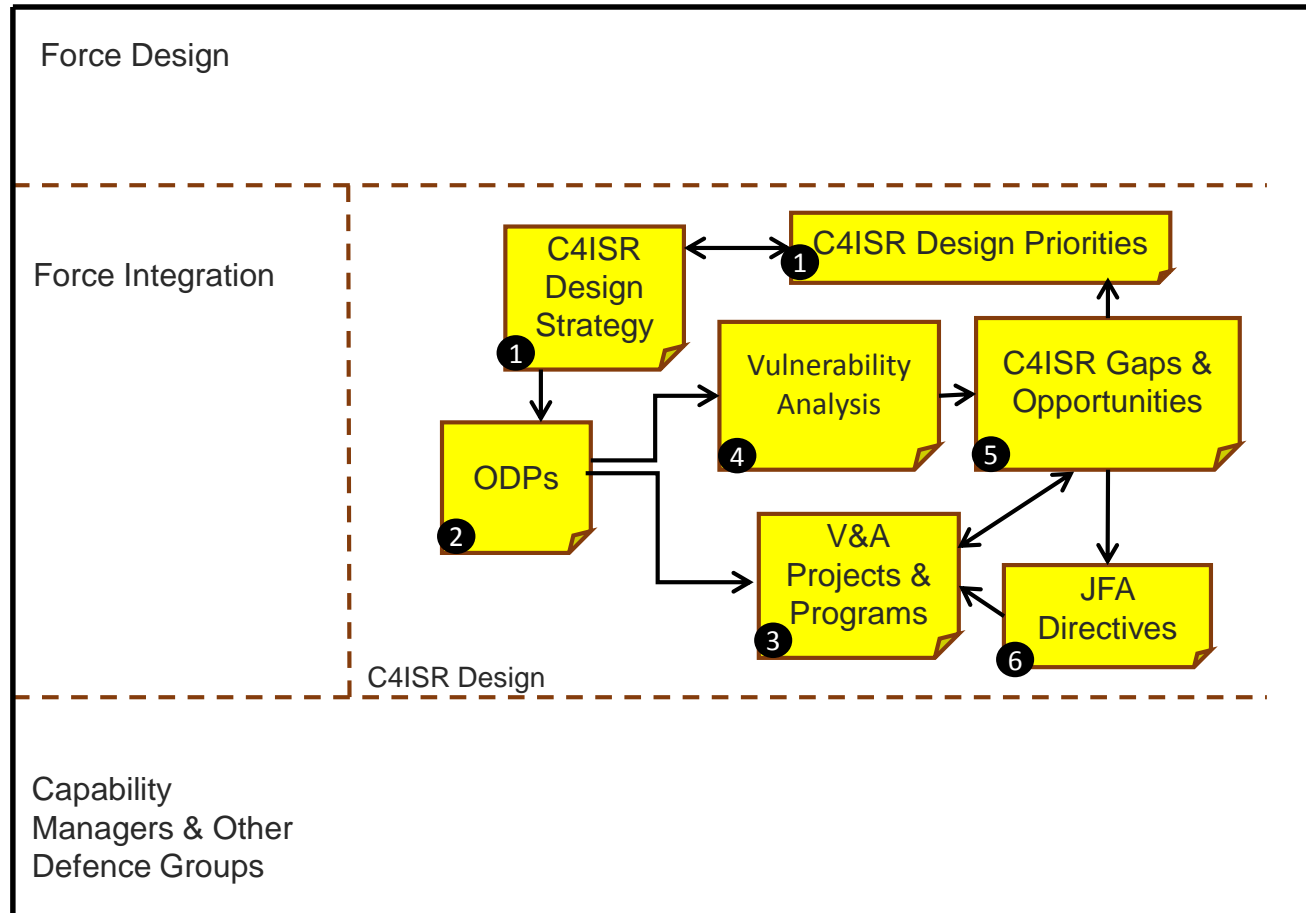
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C4ISR Design – Process (6)



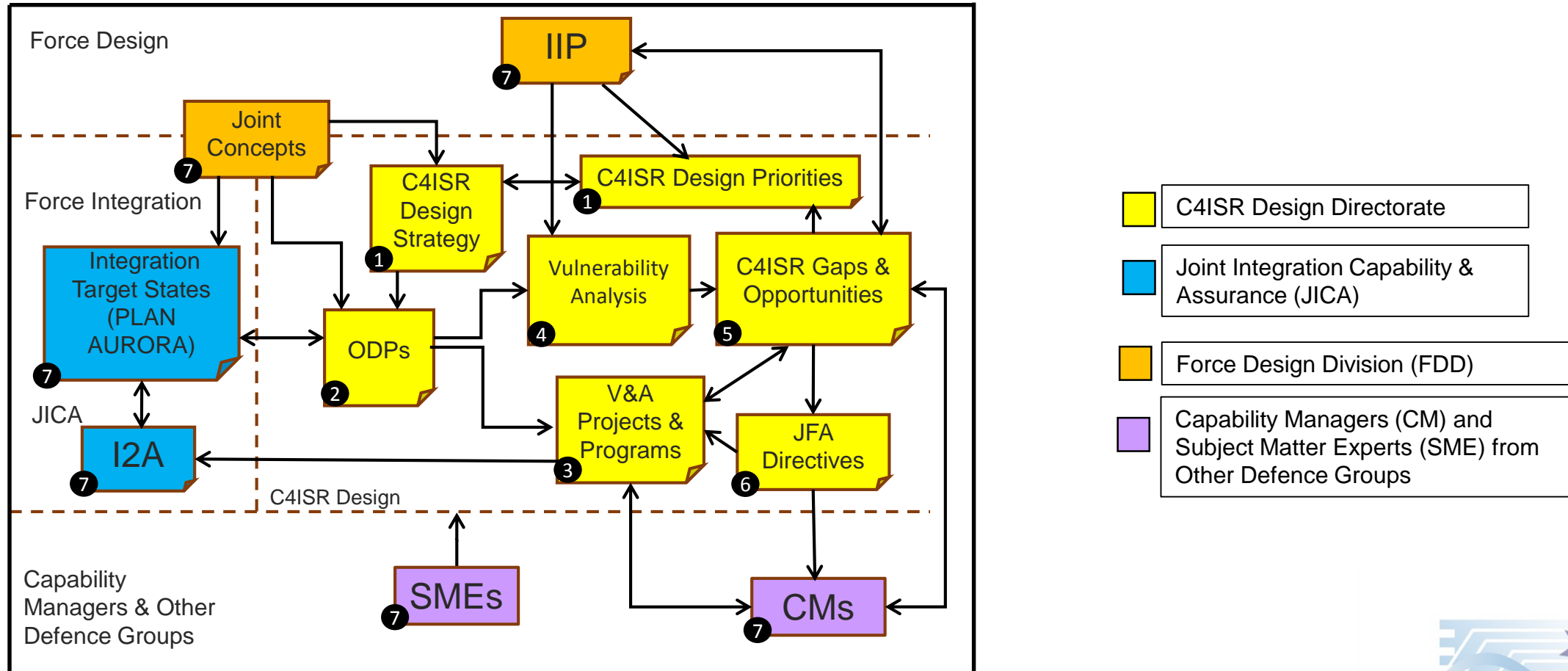
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C4ISR Design – Process (7)



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Focus Questions



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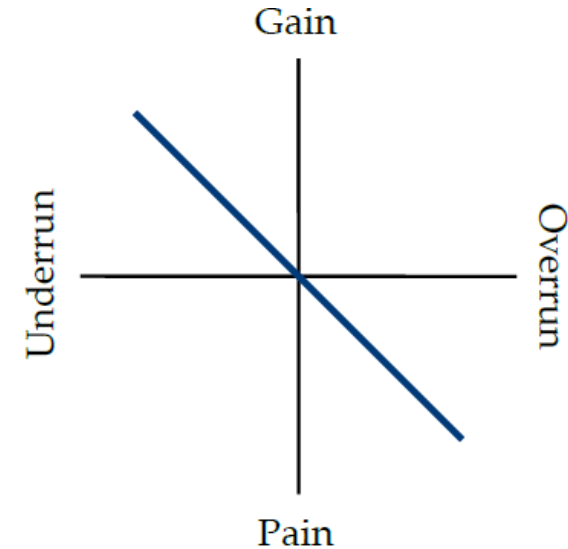
1. Conditions to allow your business to contribute to this capability?

- Open – need to be able to work together
- Speed – short, contained, fail-fast-and-learn PoCs
- COTS – faster, value-for-money, less risk, not reinventing
- Functional requirements, not detailed specs – allows innovation
- Some need direct contract with C'wealth. SMB can't invest for years
- C2 integration patterns: define standards → plug 'n' play → pub/sub
 - Federated IdM
 - Globally agreed ORBAT identifier
 - Military Message brokerage service (pub/sub hub)
 - Area Authority Service (AO, AInt, AInf, TAOR etc)



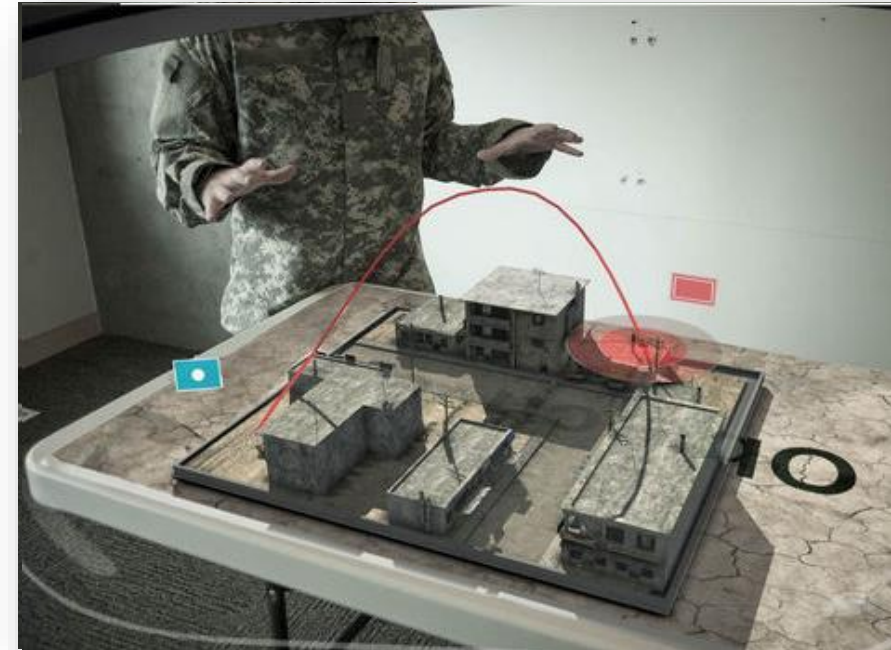
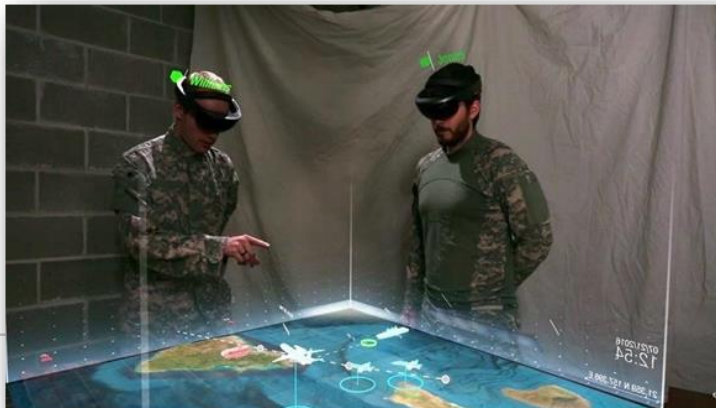
2. Hybrid alliance strategy effectively deliver the capability outcomes?

- Yes! Work collaboratively:
 - Not C'wealth vs Industry, but 'with'
 - Open...C2 Integration Patterns provide trusted integration
 - respect background IP
- More for PSI? How to flow gainshare & penalties down?
- Some capabilities need direct contract with C'wealth
- Build to future requirements, not past (ie a faster horse)
- Agile™ fixes budget, schedule; functionality variable. Different approach from traditional waterfall?



3. Using visualisation technology to best deliver capability outcomes?

- Just presentation layer. 'Loosely coupled' allows us to take advantage of emerging technologies, whatever they are, and rapidly
- Get underlying architecture right
- Functional req'ts, not detailed specs
- HMI critical. Address holistically & objectively
- SEWG input: vertigo after 1 hr use VR goggles



4. How can commercial models enable fast and reactive development while maintaining integrity of systems that require high assurance?

- Risk is in the inter-system dependencies → manage this
 - Risk Management exercise – not going to get 100%
 - C2 Integration Patterns
- Current accreditation model frozen at point in time. Need continuous releases to counter emerging threats, 'zero day' safeguards, resilience
 - Resilience: not reliant on reliable bandwidth, peer:peer, browser-based
 - Robust process evidence (assurance) eg CMMI 5, 9001, Common Criteria
 - Use certified components where possible





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Focus Question Breakouts



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- Workgroup 1
- Workgroup 2
- Workgroup 3
- Workgroup 4

WGCDR Michael Burgess-Orton

Mr Les Young

MAJ Ben Grant

LCDR Brad Ryan





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Ms Alison Petchell

Assistant Secretary Critical Systems



Industry Engagement Objectives



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- Understanding market dynamics and potential suppliers' capabilities.
- Refining the Commonwealth's requirements.
- Inform potential suppliers to reduce uncertainty.
- Allow time for potential suppliers to organise themselves to respond to a potential market approach.



Industry Engagement



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Defence's ability to be a smart buyer relies on a stronger relationship with Australian defence industry to provide expertise in managing projects (2016 Defence White Paper).



Defence capability decisions will continue to seek to achieve value for money, based on the Commonwealth Procurement Rules, and include explicit consideration of:

- Australia's sovereign requirements;
- identify opportunities to maximise Australian industry involvement.





Ms Janice Law

Assistant Secretary Security, Interoperability and Simulation Delivery



- Delivery partner focus – greater attention to working together on requirements definition and technology solutions
- Attention to scope
- Ensure that responsibilities are clearly outlined early on and managed throughout the life of the project
- Project governance and reporting hygiene is maintained
- Clear understanding of GFx requirements by all parties
- ICTDD is looking to establish a System Delivery Management Office (SDMO) to reduce duplication and drive efficiency through the key functional areas (eg security, finance, tech assurance and procurement)



Industry Back Brief



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Q1: What conditions will allow your business to contribute to this capability?

- Life-cycle support for capabilities- build in at the beginning
- Vendor-agnosticism
- VFM is king
- PSI takes time to set up
- Working groups
- Delivery model – discussions
- Schedule is critical
- How do we work together? Correct commercial structures



Industry Back Brief



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Q2: Will a hybrid alliance strategy effectively deliver the intended capability outcomes?

- Supportive of a collaborative approach
- Appropriate business architectures
- Behaviours-based approach to contracting
- Appropriately bound systems integrator SI/SOW/Shared Services working together – one size does not fit all
- Appropriately build in the innovation life-cycle / innovation hub
- Can C'wth handle failure?
- C'wth must handle the boundaries appropriately
- ISO44001



Industry Back Brief



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Q3: How can we utilise current and near future visualisation technology to best deliver the intended capability outcomes?

Data Management

- Fusing of data
- One ontology
- Access to data / MLS
- Admiralty index

Doctrine to encompass C2 ISR & modern tech

- Merge in C2ISR space
- Evolutionary development – challenges
- Revisit doctrine – does it need changes?

Decision Confidence

- CCIRM – what do we need to make decisions?
- Tempo
- Information gaps

Augmented Reality

- What does this do for different levels of C2?
- Annotation of metadata
- Relevance of data
- Balance between SA and specific tasking
- Gaming industry a lot to offer. Display in logical, concise way
- Not all visual – other senses to consider



Industry Back Brief



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Q4: Can commercial models enable fast and reactive development whilst maintaining integrity of systems that require high assurance?

- What/so what/now what?
- Acquisition strategy focus
- Incremental development / staged solutions aligned to strategy
- Incorporate innovation from other areas of industry
- Challenge of security
- Fail fast / how do we deal with failure?
- Continuous Joint C2 capability development
- Open information / dealing appropriately with constraints





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Close

Safe travels

