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# Australian Generic Vehicle Architecture (AS GVA)



# Army's Mission

*Prepare land forces for war in order to defend Australia and its national interests*

## Accelerated warfare:

- Rapidly evolving, accessible
- Long range sense and strike
- Cooperative engagement
- Our challenge is to underpin technological change to be **relevant, adaptable** and survivable in the modern operating environment.

# Army as a system

## Land Combat System Architecture (LCSA)

Land Combat System Interface

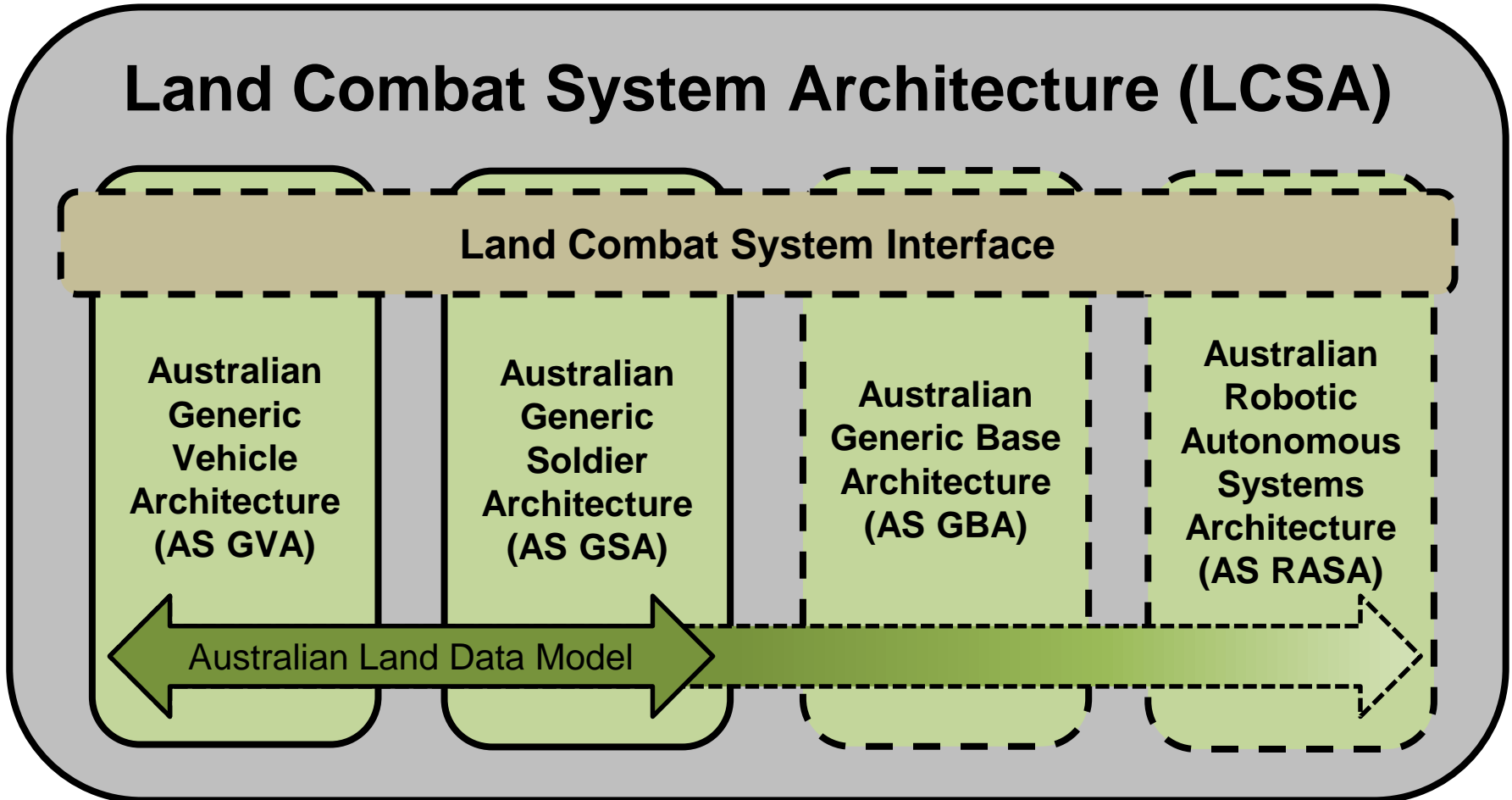
Australian  
Generic  
Vehicle  
Architecture  
(AS GVA)

Australian  
Generic  
Soldier  
Architecture  
(AS GSA)

Australian  
Generic Base  
Architecture  
(AS GBA)

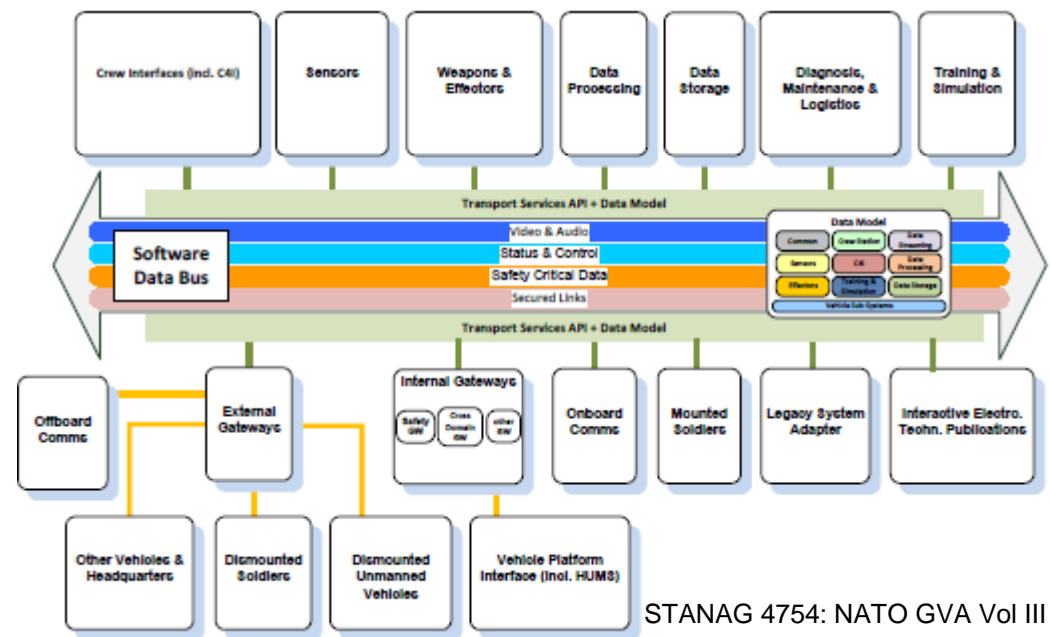
Australian  
Robotic  
Autonomous  
Systems  
Architecture  
(AS RASA)

Australian Land Data Model



# Objectives of AS GVA

- Integrated
  - C3, Mission and Combat systems working together
  - Effective, fused user interface
  - Overcome SWAP limitations
- Adaptable
  - Modular subsystems
  - Reduced integration effort
  - Open to enable innovation: AIC
- Affordable
  - Savings across portfolio
  - Avoiding vendor lock in
  - Accessing international MOTS
  - Preparing for capability evolution



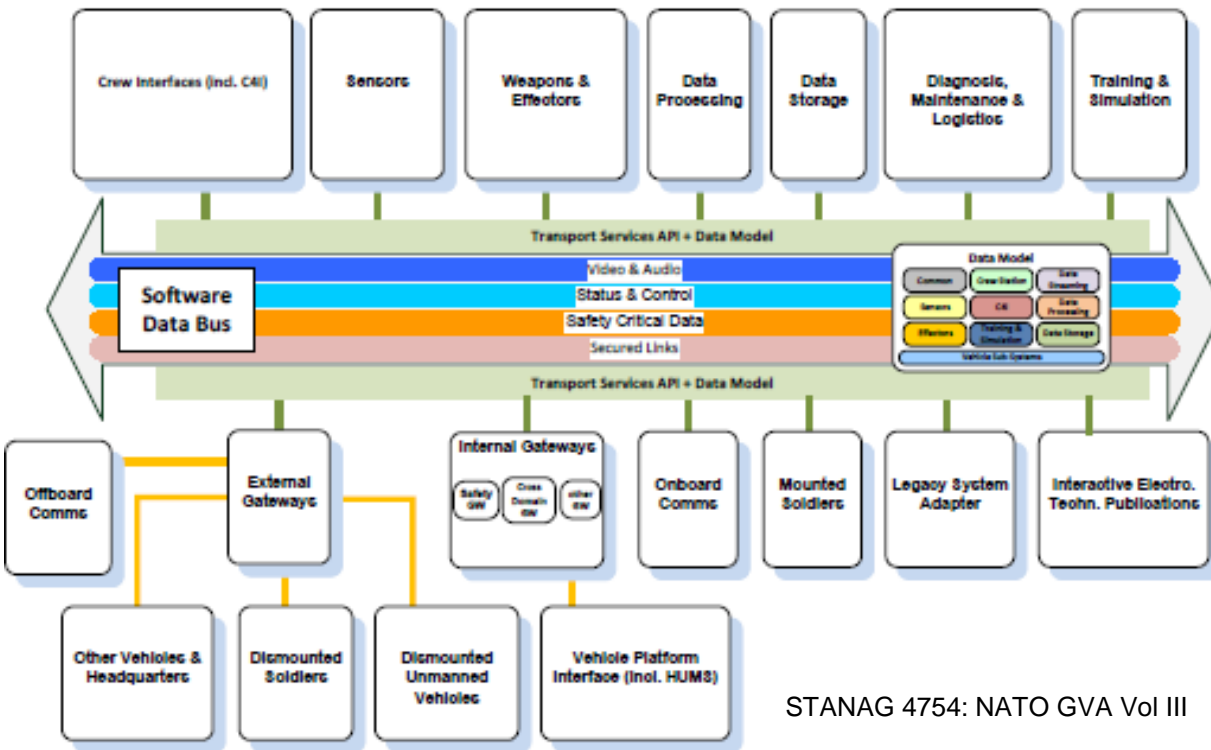
STANAG 4754: NATO GVA Vol III

**Focussed on enabling the capabilities needed by Army through pragmatic implementation to generate benefits over time**

# What is AS GVA?

- Defence Standard – DEF(AUST) 11316
- It is not:
  - A computing system
  - A design for a vehicle
- It is:
  - Interface definition
  - Electronic infrastructure requirements
  - Design constraints to enable integration, innovation and sub-system re-use across platforms
  - Applied to land vehicles, hosted sub-systems and software

# How does AS GVA Work?

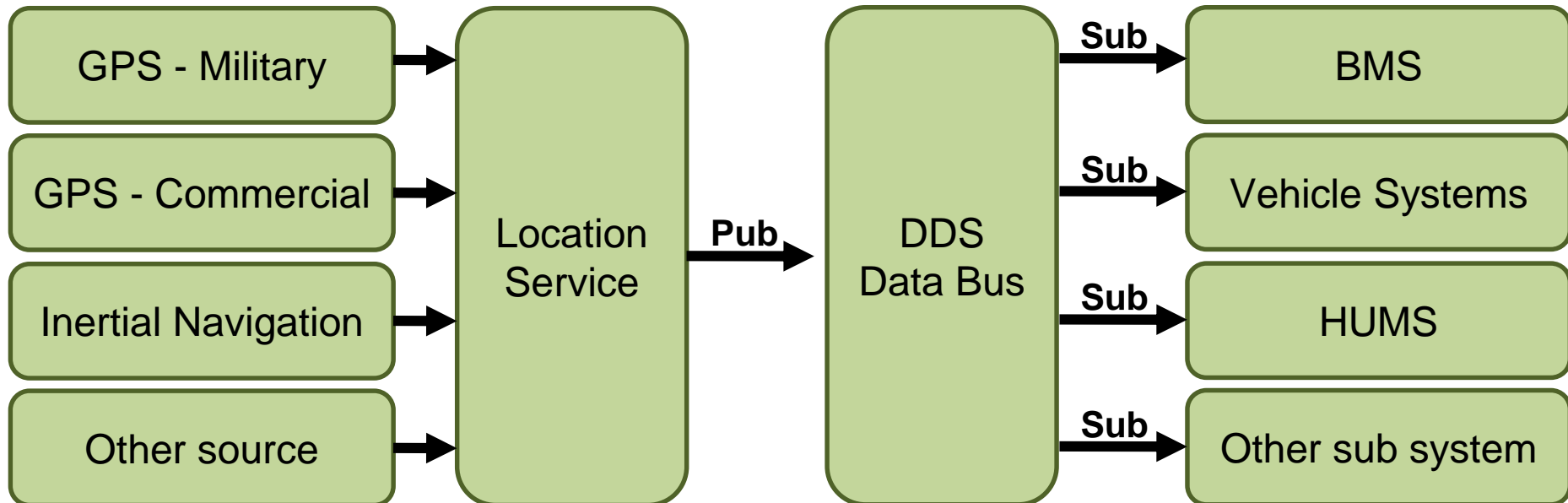


STANAG 4754: NATO GVA Vol III

- Ethernet
- DDS/DDSi
- AS LDM
- Video
- Platform Services
- Standard HMI
- Power
- Legacy Adaptors
- Connectors

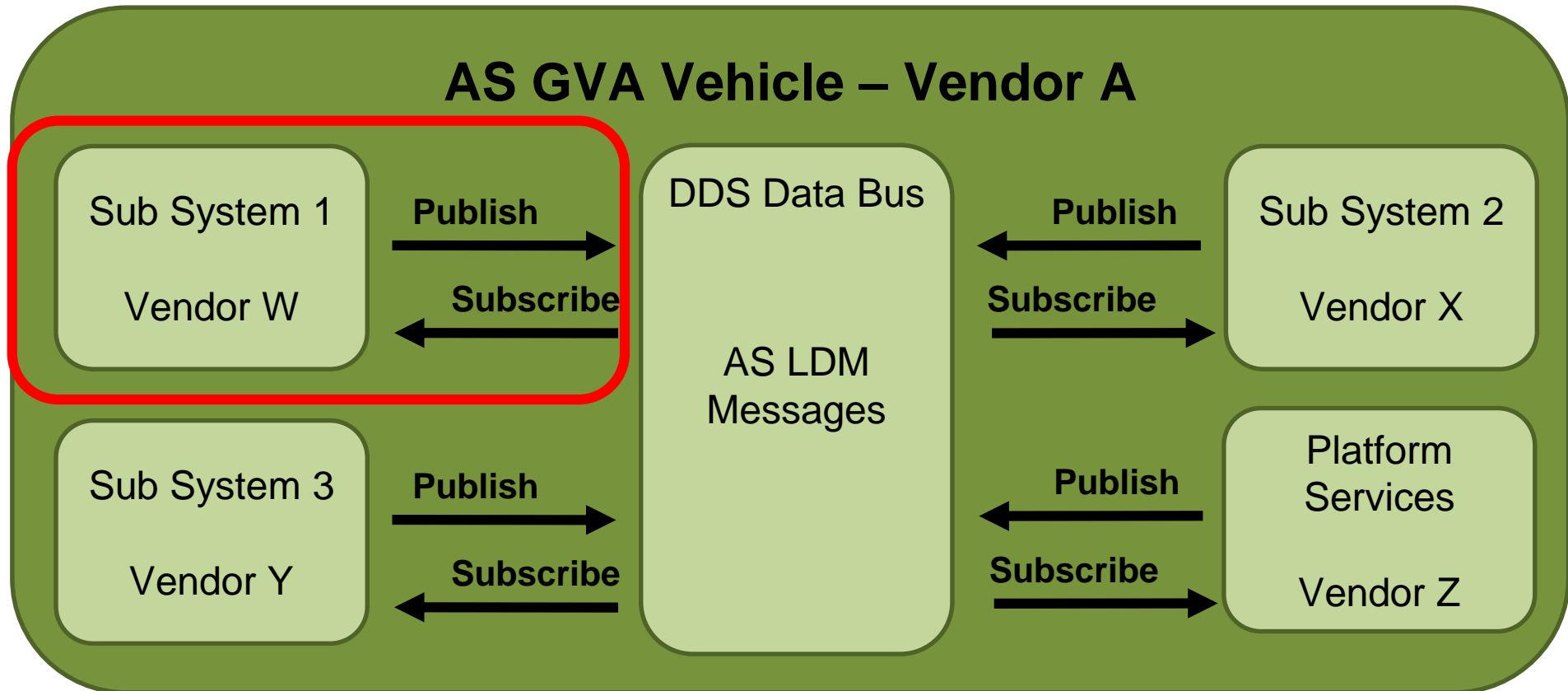
# Platform Services

- Defined infrastructure provided by vehicle platform
- Independent from a given sub-system
- Known services enable innovation



# Australian Land Data Model

Enabling de-coupled integration





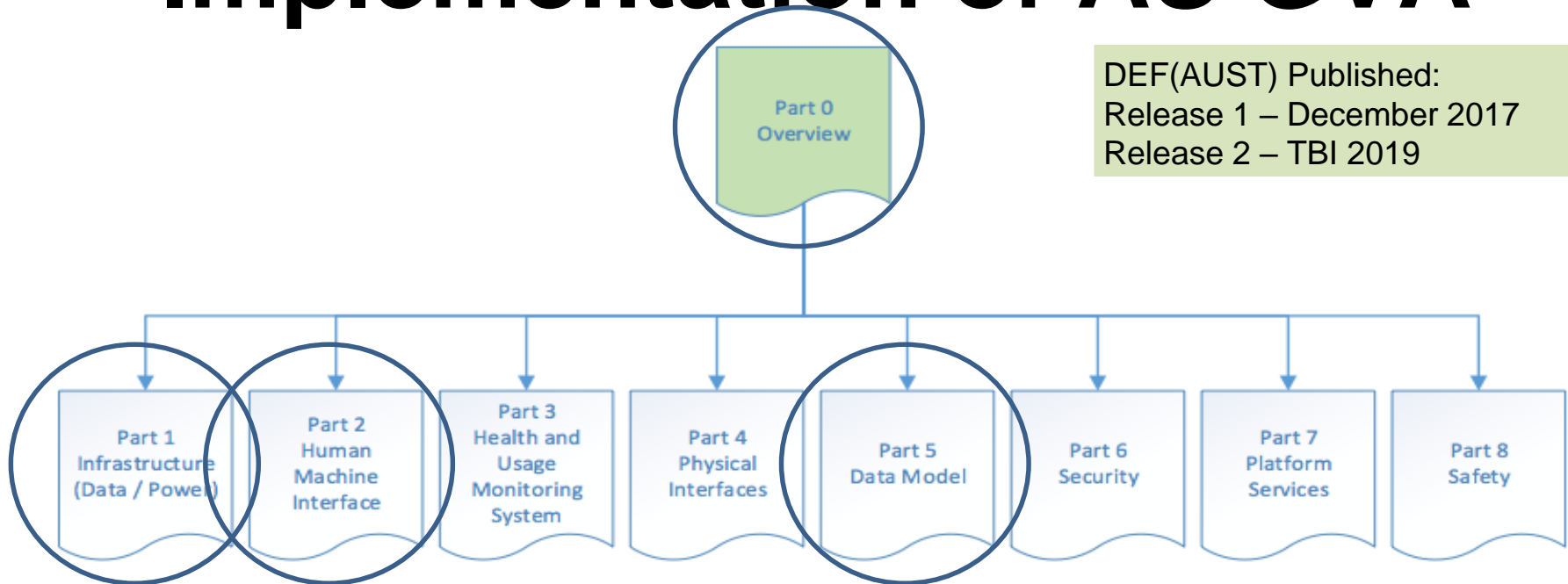


**Army**

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# Implementation of AS GVA

DEF(AUST) Published:  
Release 1 – December 2017  
Release 2 – TBI 2019



- AS GVA is the first published component of the LCSA
- Governed by Army – Interim AS GVA Office at LNIC
- Pragmatic approach – Conscious Choices

# Why do we need to consider AS GVA for Land 129-3?

- Land 129-3 will be hosted on vehicle platforms
- Army is adopting AS GVA
- Avoid unnecessary component duplication and bespoke interfaces
- Portability of the system across vehicle platforms
- Enable data exchange between other hosted systems

## ***CA Statement - 2016:***

***'Army expects all future land platforms to apply a systems approach to C4ISREW integration with the use of open architectures aligned to the UK MOD Standard 23-09, Generic Vehicle Architecture' (Feb 2016).***

# AS GVA

- Access the DEF(AUST)11316 AS GVA and AS LDM  
Email [asgva.office@defence.gov.au](mailto:asgva.office@defence.gov.au) requesting access to the DEF(AUST) and AS GVA GovDex community
- AS GxA Office will provide advice within capacity
- AS GxA Office will be conducting AS LDM technical training for software developers.



# Questions on AS GVA



**Back up slides**

# AS GVA Background

## CA Statement - 2016:

'Army expects all future land platforms to apply a systems approach to C4ISREW integration with the use of open architectures aligned to the UK MOD Standard 23-09, Generic Vehicle Architecture' (Feb 2016).

Voice

Manoeuvre

Fires

Gunnery

Surv

RWS

HU

Display





# What is AS GVA?

