

Australian Government

SDIP 3 - Sustainment and enhancement of the combined-arms land system



Defence acknowledges the Traditional Custodians of Country throughout Australia. Defence recognises their continuing connection to traditional lands and waters and would like to pay respect to their Elders both past and present.

Defence would also like to pay respect to the Aboriginal and Torres Strait Islander peoples who have contributed to the defence of Australia in times of peace and war.

© Commonwealth of Australia 2024

ISBN: 978-1-925890-66-2

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968* (Cwth), no part may be reproduced by any process without prior written permission from the Department of Defence.

Overview of Annex B

This Annex contains the Detailed Sovereign Defence Industrial Priorities (Detailed SDIPs) for SDIP 3, in accordance with Chapter 3.

The SDIPs are:

SDIP 1. Maintenance, repair, overhaul and upgrade (MRO&U) of Australian Defence Force aircraft
SDIP 2. Continuous naval shipbuilding and sustainment
SDIP 3. Sustainment and enhancement of the combined-arms land system
SDIP 4. Domestic manufacture of guided weapons, explosive ordnance and munitions
SDIP 5. Development and integration of autonomous systems
SDIP 6. Integration and enhancement of battlespace awareness and management systems
SDIP 7. Test and evaluation, certification and systems assurance

There are many areas where defence industry is already providing a service or capability to Defence; for example, the provision of enabling information and communication technology support including data centres, cyber and health services. Defence will continue to work with industry to ensure we have the level of industrial capability required in Australia to deliver defence outcomes.

Defence will refine the information in these Annexes through consultation with industry, and in line with the biennially-updated National Defence Strategy. Defence will work with industry to identify shortfalls, critical paths and areas for growth, using the approach described in Chapter 3 (Figure 4). The aim is to consistently and continuously guide and grow the defence industrial base, aligned to Defence's needs.

Figure 1 - Approach to industrial prioritisation

Grow

Higher sovereign benefits, lower ease of localisation

Technologies and capabilities for which Australia must have sovereign access and control, but where significant government intervention is likely required to grow the industrial capabilities necessary.

Monitor

Lower sovereign benefits, lower ease of localisation

Technologies and capabilities for which local industry is not mature and the industry provides low sovereign benefits. These should not be immediately proritised for government intervention but should be monitored and reassessed as the strategic environment changes.

Guide

Higher sovereign benefits, higher ease of localisation

Technologies and capabilities for which Australia must have sovereign access and control, but where industry is mature and therefore likely to be able to deliver these capabilities without significant government intervention. However, government may choose to invest in research & development in order to maintain capability edge.

Localise

Lower sovereign benefits, higher ease of localisation

Technologies and capabilities for which local industry is mature but the industry does not provide further significant sovereign benefits. Low cost options to improve capability and promote commonality and Australian industry capability should be prioritised.

Capability and Delivery Managers

The Vice Chief of the Defence Force is responsible for defining and communicating the capabilities Defence requires of Capability Managers. Capability Managers and Delivery Managers are responsible for the growth and health of the industrial capabilities required to deliver and sustain the directed defence capabilities.

Industrial capability lifecycle

The information provided for each Detailed SDIP contains Defence's requirements against the industrial capability lifecycle.

The industrial capability lifecycle consists of:

Innovation, Science	Design &	Integration &	Manufacture &	Sustainment &
& Technology	Development	Adaptation	Assembly	Support

- Innovation, Science & Technology innovative technology solutions that have been identified as meeting a defence capability need and providing an asymmetric advantage for Defence to develop, explore and mature to pull through to capability. These would be candidates for consideration under the Advanced Strategic Capabilities Accelerator (ASCA).
- Design & Development areas that require further maturation and development beyond the prototype phase to meet a defence capability need.
- Integration & Adaptation mature industry solutions or systems that need to be integrated with other defence systems and/or adapted to meet a defence capability need.
- **Manufacture & Assembly** industry solutions, systems or components that Defence has determined must be manufactured and/or assembled in Australia, to ensure sovereignty and/or supply chain security and resilience.
- Sustainment & Support industrial capabilities and services that Defence has determined must be delivered by industry in Australia to sustain and support defence capability.

SDIP 3 - Sustainment and enhancement of the combined-arms land system

Capability and Delivery Manager

The Capability Manager for the sustainment and enhancement of the combined-arms land system SDIP is the Chief of Army. The Delivery Manager is the Deputy Secretary Capability Acquisition and Sustainment.

Background

The Defence Strategic Review (DSR) highlighted the need for a fully enabled, integrated amphibious-capable combined-arms land system. It identified that as a priority, Australia's Army must be able to provide:

- A littoral manoeuvre capability by sea, land and air.
- Long-range fires, including land-based maritime strike.
- Air and missile defence.
- Close-combat capabilities, including a single armoured combined-arms brigade.

The DSR also stated that the delivery of landing craft, long-range fires and infantry fighting vehicles should be synchronised.¹

A fully enabled, integrated amphibious-capable combined-arms land system is critical to Australian military strategy and enabling the integrated force to achieve its mission. A focused defence industry is crucial to the design, generation, and sustainment of the vehicles, equipment and training systems essential to the continued function of the combined-arms land system.

Combined-arms is the synchronised and simultaneous application of an integrated team, made up of components of the land force, designed to win in close combat. Combined-arms teams are tailored to a specific combination of mission, threat and terrain. When properly equipped, adequately grouped and appropriately prepared, they can generate an effect greater than employing each component individually. They are underpinned by the principle of scalability, and modular approaches to equipment and systems, and enable commanders to rapidly pivot between tasks.

These teams are assembled on a case-by-case basis and comprise combat elements, including tanks, individuals with body armour and weapons systems mounted in armoured and protected vehicles. They are supported by combat support elements that provide integrated sustainment, such as ground-based air defence teams, artillery, and engineers with specialist equipment to shape terrain and enhance mobility.

Importantly, these combined-arms teams include elements enabled by the other SDIPs, including:

- Littoral manoeuvre, as part of continuous naval shipbuilding and sustainment.
- Battlefield aviation, as part of MRO&U of Australian Defence Force aircraft.
- Autonomous capability, as part of development and integration of autonomous systems.
- Combat management systems, as part of integration and enhancement of battlespace awareness and management systems.
- Ordnance, as part of domestic manufacture of guided weapons, explosive ordnance and munitions.
- > System and component test and evaluation, certification and systems assurance.

Land forces train and fight as a part of the integrated force, in support of whole-of-government efforts, and with our trusted partners. Land forces undertake close combat when necessary, and continue to prove decisive in military conflict.

DSR pages 58, 60 and 54.

Prioritisation approach

Defence will prioritise the industrial capabilities that address specific challenges in our supply chain and adapt these capabilities to address emerging threats. Ongoing prioritisation will be guided by the National Defence Strategy and major project announcements. Beyond 2025, we will further expand these priorities to support the implementation of innovations resulting from ASCA mission activities.

Epoch 1 outcomes

In Epoch 1, we will establish and reinforce an industrial base that will support the ongoing viability of domestic innovation, design, integration, manufacture and sustainment of land materiel and set conditions for expansion in Epoch 2. We will build a collaborative and strategic relationship with the Australian industrial base to better understand its capacity, capability and future viability, with a view to enabling the expansion of its customer base in adjacent sectors and overseas.

In relation to the land capability areas, major activities broadly involve:

Land platforms

- Establishment of new production facilities in Victoria for infantry fighting vehicles and self-propelled howitzers.
- Consolidation of production capacity in Queensland for combat reconnaissance vehicles.
- Incremental enhancement of protected mobility.
- Commence design and integration of command, control, communications and computers (C4) systems, in conjunction with the integration and enhancement of battlespace awareness and management systems SDIP, including initial designs of open standards-based implementation.

Individual combatant

• Continued introduction of small arms weapons, combat clothing and protective equipment.

Expeditionary basing

• Fielding of the fuel and power distribution systems.

Long-range fires and ground-based air defence

- Consolidation of the introduction into service of the National Advanced Surface-to-Air Missile System (NASAMS) and support solutions.
- Initial introduction into service of High Mobility Artillery Rocket System (HIMARS) and long-range missiles, in conjunction with the domestic manufacture of guided weapons, explosive ordnance and munitions SDIP.

Epoch 2 outcomes

In Epoch 2, we will reaffirm Epoch 1 achievements, consolidate domestic industrial capacity, and enhance supply chain resilience to support land capabilities and national defence mobilisation activities. Furthermore, we will take the opportunity of the maturity of autonomous functionality to enhance, augment or even replace systems.

In relation to the land capability areas, major activities broadly involve:

Land platforms

- Consolidation of armoured vehicle production and maturing of MRO&U capabilities.
- Implementation of protected mobility enhancements.
- Maturation of integrated C4 systems, including on-board computer and processing, aligning to open standard architectures.
- Design and integration of C4 systems, in conjunction with the integration and enhancement of battlespace awareness and management systems SDIP, including initial designs of open standards-based implementation.

Individual combatant

- Consolidate domestic small arms manufacturing capability.
- > Implementation of comprehensive individual and collective training and simulation systems.
- Commence digitisation of dismounted combatants via wearable personal electronic devices, integrated radio, and communications equipment, contributing to enhanced command and control and battlespace awareness.

Expeditionary basing

- Fielding specialist deployable infrastructure.
- Consolidation of support systems for fuel and power distribution systems.
- Delivery of specialist shelters for C4, optimised for the operating environment and manoeuvre of tactical command posts and headquarters functions.

Long-range fires and groun-based air defence

- Consolidation of HIMARS introduction into service and support solutions.
- Fielding of land-based maritime strike.

Detailed Sovereign Defence Industrial Priorities

The Detailed SDIPs for the combined-arms land system are aligned to the land capability areas and the 2 epochs.

Table 1 - Detailed SDIPs for SDIP 3, Land platforms, Epoch 1 (2023-25)

Description	Innovation, Science & Technology	Design & Development	Integration & Adaptation	Manufacture & Assembly	Sustainment & Support
Armoured vehicles		V	V	V	v
Protected vehicles		V	V	V	V
Commercial & logistics vehicles		V	V		v
Specialist vehicles		V	V		V
Propulsion systems	V	V			V
Protection systems	V	V	V	V	V
Military appliques to support military operations	V	V	V	V	v
Communications & machine recording ²	V	V	V	V	
Training & simulation systems - collective	V	V	V	V	~
Training & simulation systems - individual	V	v	V	V	v

2 Nested within Combat Management Systems as part of Battlespace Awareness and Management

Table 2 - Detailed SDIPs for SDIP 3, Individual combatant, Epoch 1 (2023-25)

Description	Innovation, Science & Technology	Design & Development	Integration & Adaptation	Manufacture & Assembly	Sustainment & Support
Combat uniforms	V	V	V	V	V
Body armour	V	V	V	~	V
Protective equipment	V	V	V	V	V
Chemical, biological, radiological & nuclear defence equipment	V	V			V
Small arms	V	V	V	V	V
Rations	V	V		V	V
Soldier situational awareness	V		V		V
Training & simulation systems - collective	V	V	V		V
Training & simulation systems - individual	V	V	V		V

Description	Innovation, Science & Technology	Design & Development	Integration & Adaptation	Manufacture & Assembly	Sustainment & Support
Shelter systems			V		V
Specialist shelter systems		V	V	V	~
Fuel distribution systems			V		V
Power distribution systems	~	V	V	V	~
Water production Systems					V
Waste systems	~	V			
Specialist deployable storage & handling	V	V	~	~	~

Table 3 - Detailed SDIPs for SDIP 3, Expeditionary basing, Epoch 1 (2023-25)

Table 4 - Detailed SDIPs for SDIP 3, Long-range fires and ground-based air defence, Epoch 1 (2023-25)

Description	Innovation, Science & Technology	Design & Development	Integration & Adaptation	Manufacture & Assembly	Sustainment & Support
Long Range Weapons ³ Systems (HIMARS)			V		
Integrated Air & Missile Defence (IAMD) Systems – Land (NASAMS)		V	V	V	V
Counter UAS	V	V	V	V	V
Multi-modal arrays	V	V	V	~	~
Training & simulation systems - collective		V	V		
Training & simulation systems - individual		V	V		

3 Nested within domestic manufacture of guided weapons, explosive ordnance and munitions SDIP

Table 5 - Detailed SDIPs for SDIP 3, Land platforms, Epoch 2 (2026-30)

Description	Innovation, Science & Technology	Design & Development	Integration & Adaptation	Manufacture & Assembly	Sustainment & Support
Armoured vehicles			V	V	V
Protected vehicles		V	V	V	V
Commercial & logistics vehicles			V		v
Specialist vehicles			V		V
Propulsion systems	V	V	V		
Protection systems		v	V	V	V
Military appliques to support military operations		V	V	V	V
Communications ⁴ & machine recording	V	V	V	V	V
Training & simulation systems - collective	V	V	v	V	v
Training & simulation systems - individual	V	V	V	V	v

4 Nested within Combat Management Systems as part of integration and enhancement of battlespace awareness and management systems SDIP

Table 6 - Detailed SDIPs for SDIP 3, Individual combatant, Epoch 2 (2026-30)

Description	Innovation, Science & Technology	Design & Development	Integration & Adaptation	Manufacture & Assembly	Sustainment & Support
Combat uniforms	V	V	V	V	V
Body armour	V	V	V	V	V
Protective equipment	v	V	V	V	V
Night fighting equipment			V		V
Chemical, biological, radiological & nuclear defence equipment	v	V			v
Small arms			V	V	V
Rations				V	V
Soldier situational awareness	v	V	V	V	v
Wearable monitoring equipment	V	V	V	V	V
Training & simulation systems - collective	V	V	V		V
Training & simulation systems - individual	V	v	V		v

Continuation from Epoch 1
New in Epoch 2

Table 7 - Detailed SDIPs for SDIP 3, Expeditionary basing, Epoch 2 (2026-30)

Description	Innovation, Science & Technology	Design & Development	Integration & Adaptation	Manufacture & Assembly	Sustainment & Support
Shelter systems			V		V
Specialist shelter systems		V	V	V	V
Fuel distribution systems			V		V
Power distribution systems		V	V	V	V
Water production systems			V		V
Waste systems			V		V
Chemical, biological, radiological & nuclear defence equipment	V	V	V	V	V
Specialist deployable storage & handling		V	V	V	V

Continuation from Epoch 1
New in Epoch 2

Table 8 - Detailed SDIPs for SDIP 3, Long range fires and ground-based air defence, Epoch 2 (2026-30)

Description	Innovation, Science & Technology	Design & Development	Integration & Adaptation	Manufacture & Assembly	Sustainment & Support
Long range weapons⁵ systems (HIMARS)			V		V
Integrated air & missile defence (IAMD) systems – land (NASAMS)		V	V	V	V
Counter UAS	v	V	V	V	V
Multi-modal arrays	v	V	V	V	V
Training & simulation systems - collective		V	V	V	V
Training & simulation systems - individual		V	V	V	V

5 Nested within domestic manufacture of guided weapons, explosive ordnance and munitions SDIP