



Australian Government

**Australian Government response to the
Senate Standing Committee on Foreign Affairs,
Defence and Trade**

*Use of Unmanned Air, Maritime, and Land Platforms
by the Australian Defence Force*

March 2016

Recommendation 1

The committee recommends that the Department of Defence strengthen its public communications in relation to military unmanned platforms.

Government Response

Agree

The Department of Defence, through VCDF, will develop Strategic Communication Guidance that aligns current Group and Service communication strategies and prioritises opportunities to promote and explain the acquisition and employment of military unmanned platforms.

The focus of this guidance will be to identify and support public information activities for the Government and Defence that: promote the capability and reliability of military unmanned platforms; explain the policy and physical control mechanisms that govern their employment in operational and domestic environments; and, address public concerns and dispel misinformation regarding their use.

Recommendation 2

The committee recommends that the Australian Defence Force acquire armed unmanned platforms when the capability requirement exists and the Australian Government make a policy statement regarding their use. This policy statement will:

- agree that armed unmanned platforms will be used in accordance with international law;
- commit that armed unmanned platforms will only be operated by the [sic] Australian Defence Force personnel; and
- include appropriate transparency measures governing the use of armed unmanned platforms.

Government Response

Agreed in principle

The Government's decisions on Australia's future defence capabilities, including unmanned platforms, will be addressed in the forthcoming Defence White Paper. The Government will make statements in regard to the introduction of new capabilities addressed in the Defence White Paper at appropriate times.

If the Government decides to acquire armed unmanned systems, Defence will develop policy and doctrine concerning their use. All Australian Defence capabilities, including unmanned platforms, will continue to be operated in accordance with Australian domestic law and consistent with Australia's international legal obligations (in particular the provisions of the law of armed conflict).

The recommendation proposes that armed unmanned platforms will only be operated by Australian Defence Force (ADF) personnel. Defence's policy will allow the option for contracted staff to support administrative functions of armed unmanned platforms, such as their launch and recovery, test and evaluation and for training purposes. ADF members would retain responsibility and accountability for any use of force by those unmanned platforms.

Recommendation 3

The committee recommends that the Australian Defence Force notify the Australian Government of measures taken to address any identified gaps [in] training and dissemination programs regarding

the law of armed conflict and international humanitarian law when armed unmanned platforms are acquired.

Government Response

Disagree

Unmanned Australian Defence Force (ADF) platforms are subject to, and employed under the same legal framework (whether domestic or international) as manned ADF platforms. Specifically, both types of platforms are subject to the same legal considerations and constraints under the law of armed conflict.

As noted in the Report, the ADF has a recognised record of compliance with the law of armed conflict and international humanitarian law and has a high level of engagement with entities such as the International Committee of the Red Cross and the Australian Red Cross. The ADF also consistently provides foundation level training on the law of armed conflict and international humanitarian law to all ADF personnel, which is supplemented with in-depth and mission specific training on these topics, as well as rules of engagement as part of pre-deployment training. Reinforcement training in rules of engagement and the law of armed conflict is also conducted while forces are deployed.

The ADF has already anticipated the need for additional training for personnel in relation to a number of different areas of emerging technology, including unmanned platforms, and has already introduced a number of courses and training programs for individuals working within these fields to ensure that they are fully cognisant of Australia's domestic and international legal obligations.

The ADF continues to conduct careful analysis of the ability of any proposed new weapons to comply with Australia's international legal obligations through its weapons review processes conducted under Article 36 of Additional Protocol I of June 1977 to the Geneva Conventions of 12 August 1949. As part of the review of new weapons, analysis is conducted on the manner in which the weapon is proposed to be employed, thus enabling, if necessary, the modification of its use, as well as training requirements for those personnel operating the system, to ensure compliance with the law of armed conflict. The Government does not expect to alter this process as a result of any future introduction of armed unmanned systems.

The Government therefore sees no need for the ADF to report changes in its training programs upon acquisition of armed unmanned platforms, given the current level of training provided to ADF personnel, the use of a robust legal and governance framework for all ADF operations, and the ADF's strong record of compliance with the law of armed conflict.

Recommendation 4

The committee recommends the Australian Government:

- increase funding for innovation in the relation to unmanned platforms; and
- establish a Defence Unmanned Platforms Centre as a cooperative research centre in the area of military unmanned platforms.

Part 1 – “increase funding for innovation in the relation to unmanned platforms”

Government Response

Agreed in principle

The Australian Government recognises that Australian industry and academia are globally competitive in a number of key technologies related to “unmanned platforms” and autonomous systems. Defence will seek to maximise these strengths to support future capability development. However, the level of investment in innovation activities is driven by the future capability needs of Defence and will be aligned with broader Defence strategy and policy.

Part 2 – “establish a Defence Unmanned Platforms Centre as a cooperative research centre in the area of military unmanned platforms”

Government Response

Disagree

Establishing a cooperative research centre may not be the most effective means of delivering access to innovation in technologies and systems supporting future unmanned platforms and autonomous systems. Defence will investigate appropriate mechanisms to bring together industry, academia and publicly funded research agencies within the context of revisions to the Defence Innovation System to be outlined in the forthcoming Defence Industry Policy Statement. Defence will also investigate how this might impact current investments in autonomy and automation - such as the Australian Research Centre for Aerospace Automation (ARCAA).

Recommendation 5

The committee recommends that strategic engagement with the Australian unmanned platform industry be addressed in the forthcoming Defence Industry Policy Statement.

Government Response

Agreed in principle

The forthcoming Defence White Paper and accompanying Defence Industry Policy Statement, will set out the Government’s plans for Australian industry’s critical role in delivering and supporting Defence capability. This will include plans for a closer Defence-industry relationship, including with the unmanned platform industry, that will see industry engaged much earlier in the capability development process – including in the setting of requirements – in line with the recommendations of the First Principles Review.

Recommendation 6

The committee recommends that the Australian Government:

- consider establishing additional support facilities for the Triton in the Northern Territory; and
- review the future deployment and support needs of Australian Defence Force unmanned platforms in the Australia's north.

Government Response

Agreed in principle

The Australian Government seeks to ensure that all current and future capabilities are supported with the necessary facilities. The Department of Defence recognises the requirement for support facilities in the Northern Territory to deliver critical capabilities, but acknowledges the need to balance forward positioning against access to industry support, training facilities, ranges, logistic support and the costs of other fundamental inputs to capability.

Defence has already planned the establishment of a Forward Operating Base for Triton at RAAF Base Tindal which will include launch/recovery and maintenance elements. The consideration of support facilities is ongoing through Project AIR 7000 Phase 1B.

The Government's decisions on Australia's future defence capabilities, including unmanned platforms and associated support facilities, are addressed in the forthcoming Defence White Paper.

Recommendation 7

The committee recommends that the Australian Government support international efforts to establish a regulatory regime for autonomous weapons systems, including those associated with unmanned platforms.

Government Response

Agreed in principle

The Australian Government is participating in international discussions on autonomous weapons systems. Since 2014, Australian delegations (led by the Department of Foreign Affairs and Trade and supported by the Department of Defence) have been participating in discussions on lethal autonomous weapon systems at meetings of the Convention on Certain Conventional Weapons (CCW). These discussions are at the preliminary stage. The Government will remain engaged in these discussions.

The Government notes that the Committee recommendation has referred to both autonomous weapon systems and unmanned platforms. While there are unmanned platforms that have some autonomous features, these are not fully autonomous weapon systems. Unmanned platforms used by Defence are not fully autonomous weapon systems. These unmanned platforms are under the command of trained Australian Defence Force personnel. The Government supports the use of unmanned platforms, in accordance with Australian domestic law and consistent with Australia's international legal obligations.

Recommendation 8

The committee recommends that following the release of the Defence White Paper 2015 the Australian Defence Force review the adequacy of its existing policies in relation to autonomous weapons systems.

Government Response

Agreed in principle

As a matter of practice, after the Defence White Paper is released, the Department of Defence will review affected policies and practices and amend as needed. Defence does not have existing policy on autonomous weapon systems to review. Defence will continue to monitor this topic and develop policy on an as-needed basis.

Recommendation 9

The committee recommends that Defence, the Civil Aviation Safety Authority and Airservices Australia increase their cooperation to facilitate the safe use of unmanned platforms in Australian airspace.

Government Response

Agree

The Government supports efforts to improve and enhance cooperation between Defence, The Civil Aviation Safety Authority (CASA) and Airservices Australia. Addressing the emerging policy and regulatory challenges surrounding Unmanned Aircraft Systems (UAS) has, and will continue to be, a key focus of these efforts.

Under the auspices of the Defence Aviation Safety Program, Defence has sought to ensure close cooperation with CASA in the ongoing development of regulations and standards for UAS, harmonised where possible. The Agreement on the Promotion of Aviation Safety and Airworthiness between CASA and Defence was re-signed on 28 April 2015. The Agreement identifies UAS as a possible Topic Area in which regulatory systems may be aligned through the development of Implementation Procedures (IP). Defence is currently working with CASA to develop UAS IP during 2015.

The principal interface for operation of military UAS within civil airspace is through Airservices Australia. Reflecting the increased coordination and cooperation between civil and Defence agencies, a Memorandum of Agreement between Airservices Australia and Defence was signed on 29 May 2015 permitting the operation of the Heron UAS in both civil and military airspace within Australia. Defence will continue to actively engage with Airservices Australia and the Office of Airspace Regulation within CASA to facilitate the integration of military UAS into civil airspace.

Defence is represented on a number of interagency forums, including the Aviation Policy Group and the CASA UAS Standards Subcommittee, and will continue to seek to enhance cooperation with CASA and Airservices Australia to enable the safe and effective operation of UAS.