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**Australian Government**  
**Defence**



# Australia's Guide to the Legal Review of New Weapons, Means or Methods of Warfare

A handwritten signature in black ink, appearing to read "D. Copeland".

**Damian Copeland**

Colonel

Director of Operations and International Law

10 April 2024

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**References:**

- A. *Additional Protocol 1 to the Geneva Conventions of 12 August 1949* (AP 1), Article 36
- B. *Defence Capability Manual* v1.3 dated 14 June 23
- C. Administration and Governance Provision – *Legal Services in Defence* (AG7.10), Defence Instruction Administrative Policy, dated 25 July 2023 (ADMINPOL)
- D. Australian Defence Force Integration Doctrine 0 Series, *Law of Armed Conflict*, October 2023
- E. Operational Logistics Manual (OPLOGMAN), 13 June 2022
- F. *AE 172 Article 36 Legal Review Report* (Revised 16 Nov 23)

**Introduction:**

1. *Australia's Guide to the Legal Review of New Weapons, Means or Methods of Warfare* (the Guide) is designed to establish a clear process for conducting the legal review of a Defence capability for compliance with Article 36 of reference A ('Article 36 legal review'). The Article 36 review process is intended to complement and inform Government and Defence decisions during each phase of the One Defence Capability System (ODCS) described in reference B. It should be sought as early as possible during the ODCS process. The overarching goal of an Article 36 legal review is to ensure each new weapon, means or method of warfare complies with Australia's obligations under international law before introduction into service and operational use.

2. The Directorate of Operations and International Law (DOIL) within Defence Legal is responsible for conducting Article 36 legal reviews on behalf of the Director-General of the Military Legal Service (DGMLS). DOIL is the primary POC and liaison for all reviews.

3. The Guide contains three parts:

- **Part I** is written for all Defence personnel, especially those responsible for the acquisition of new capabilities such as Program Leads, Capability Managers, and others involved in capability acquisition. Part I provides a broad overview of the process, including clarification of roles and responsibilities, timeframes, best practices, and information required for weapons reviews.
- **Part II** is written for legal officers who conduct weapons reviews and multi-disciplinary experts (technical, space, cyber, medical, environmental, etc.) who provide subject matter expertise to support the Article 36 review process. Part II explains the legal analysis and relevant law required to complete the review.
- **Part III** is written for legal officers who conduct reviews of certain new and emerging technologies which are enabled by Artificial Intelligence (AI) or are intended to perform autonomous functions. Part III describes an additional 'functional review' step for capabilities that fall into this category.

4. The Guide should be read in conjunction with references A through F and relevant treaties to which Australia is party.

## PART I – ALL DEFENCE PERSONNEL

### The Article 36 Obligation

1. Article 36 of reference A (AP 1) requires:

*In the study, development, acquisition or adoption of a new weapon, means or method of warfare, a High Contracting Party is under an obligation to determine whether its employment would, in some or all circumstances, be prohibited by this Protocol or by any other rule of international law applicable to the High Contracting Party.*

2. As a party to AP 1, Australia is obligated to determine the legality of a new weapon, means or method of warfare under international law prior to its use in armed conflict. The Article 36 obligation applies at all times, including outside armed conflict, to ensure all weapons, means and methods of warfare used in military operations are capable of employment in accordance with Australia's international legal obligations (see reference D).

### Defence Policy Requirement

3. The Article 36 obligation is given practical effect by the following Australia Defence Force (ADF) policy:

- a. Defence ADMINPOL AG7.10 (reference C) requires Defence personnel to obtain a legal review from Defence Legal (DOIL) for 'new or materially modified weapons, means and methods of warfare' before "introduction into service.'
- b. ADF-I-0, *Law of Armed Conflict* (reference D) paragraph 5.6 provides a 'new or materially modified weapon or weapon systems must be legally reviewed before introduction into service.'
- c. OPLOGMAN, paragraph 5.24 (reference E), provides: 'Where the operational user requirement involves the acquisition of modification of a means or method of warfare Defence Legal advice must also be sought through the Director General Military Legal Service: [DL.DGMLS@defence.gov.au](mailto:DL.DGMLS@defence.gov.au).'

### Legal Review Threshold – Which capabilities are subject to review?

4. Article 36 legal reviews are required for new weapons, means or methods of warfare prior to introduction into service and operational use. Australia interprets the Article 36 obligation to apply to existing in-service weapons, means or methods of warfare which have been materially modified (see references B and C). The initial determination regarding whether an

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Article 36 legal review is required or recommended for a particular capability if a threshold assessment made by DOIL on a case-by-case basis (see Part II for additional details).

**Definitions**

5. The following definitions apply to Australia's Article 36 legal review process:
- a. **Weapon:** any arms, munition, device, whether tangible or intangible, designed or intended to be used to cause:
    - (1) injury to, or death of, persons; or
    - (2) damage to, destruction of or neutralisation of objects.
  - b. **Means of warfare:** includes weapons as well as weapon systems, which includes all related equipment, materials, and delivery mechanisms necessary for a weapon to function as intended.
  - c. **Methods of warfare:** the manner in which weapons and certain capabilities are used in warfare to harm, destroy, or neutralise the enemy.
  - d. **Neutralisation:** the act of removing a threat by rendering an object ineffective or unusable.
  - e. **Materially modification:** An existing capability is considered to be materially modified when its function, intended use, or anticipated effects are altered from that originally considered during an Article 36 legal review.
6. Legal advice should be sought from DOIL at the earliest opportunity in the ODCS to determine whether a weapons review is required for a Defence capability. Contact us at [weapons.legalreview@defence.gov.au](mailto:weapons.legalreview@defence.gov.au) to inquire.

**Roles and Responsibilities**

7. **Legal Review Requestor** (the Requestor) will generally be the relevant Capability Manager, Project Manager, or any other similarly-placed or relevantly-assigned position. The Requestor's responsibilities include:
- a. As per reference B, notify DOIL of a developing Defence capability project/program as early as possible during ODCS.

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- b. Provide DOIL with all available and relevant information to inform the legal review by completing Section A of the reference F (attached as Annex A) and attaching all relevant supporting documentation to the AF 172 in section 21.
  - c. Update DOIL when additional relevant information becomes available during ODCS to enable interim review(s) to be conducted as required and a final legal review prior to acquisition.
  - d. Consult DOIL regarding any material modifications to existing in-service capabilities and to discuss whether further legal review is required.
8. **Director DOIL** (the Director) will:
- a. Manage the conduct of Article 36 legal reviews on behalf of the DGMLS.
  - b. Make the preliminary legal assessment regarding whether a certain capability requires an Article 36 legal review, delegating this responsibility within DOIL and consulting with other offices across Government, as appropriate.
  - c. Develop internal DOIL plans and procedures to provide instruction to all Requestors and Legal Reviewers on the content and requirements of Article 36 legal reviews.
  - d. Ensure all Legal Reviewers are certified to perform Article 36 legal reviews.
  - e. Conduct training and outreach for legal officers and relevant stakeholders on the Article 36 obligation and the legal review process.
  - f. Complete the secondary level review of all Article 36 legal reviews and delegate this responsibility within DOIL, as appropriate.
9. **DOIL Article 36 Review Manager** will:
- a. Manage the Article 36 Review Management Team.
  - b. Identify and appoint an appropriately experienced and certified Legal Reviewer to conduct the Article 36 legal review for each capability requiring review.
10. **DOIL Article 36 Review Management Team** (DOIL Team) will:
- a. Ensure all legal review requests are actioned in a timely and accurate manner in accordance with this Guide.
  - b. Manage the Article 36 workflow, ensuring timely coordination with relevant parties.

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- c. Manage, track and maintain due records of Article 36 legal review records, including relevant communications.
- d. Support the Director in conducting training and outreach for legal officers and other relevant stakeholders on the Article 36 obligation and the legal review process.
- e. Serve as the primary point of contact for Article 36 questions from external parties.
- f. Monitor changes in international law relevant to weapons, means and methods of warfare, particularly treaties to which Australia is a party, and notify appropriate agencies/offices of any such changes and their potential impact on previous legal reviews.

**11. Article 36 Legal Reviewer (the Reviewer) will:**

- a. Prior to conducting a legal review, successfully complete the DOIL Article 36 legal review certification course;
- b. Conduct a timely Article 36 interim and/or final legal review, in accordance with this Guide, using the latest AF 172 Report.
- c. Liaise with the Requestor to identify, obtain, and confirm relevant information necessary for the performance of the legal review and copy the DOIL Team ([weapons.legalreview@defence.gov.au](mailto:weapons.legalreview@defence.gov.au)) on all such communications.
- d. Consult with the DOIL Team immediately should any issues arise, particularly those involving emerging areas of law and policy.
- e. Keep the DOIL Team apprised of the status of the review and any potential impediments to completing the review in a timely manner.

**Article 36 Legal Reviews and the One Defence Capability System (ODCS)**

12. Article 36 legal reviews are required under international law and Defence policy, and also serve as important tools to inform capability development and acquisition decisions during all ODCS phases. Article 36 legal reviews identify legal risks associated with capabilities prior to the significant investment of Government funds, time and effort. The ODCS consists of the following phases:

- a. Strategy and Concepts – Consists of the identification of capability needs informed by Government priorities (provided via strategic guidance) and the exploration and

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development of sets of capabilities and associated concepts to best meet Government priorities and address the evolving threat environment. (see reference B, Chapter 3)

- b. Risk Mitigation and Requirement Setting – Consists of the development and progression of capability options through the investment approval process leading to a government decision to proceed to acquisition (Second Pass approval). Fundamental activities include preparing the requirements statements and for the release of tender documentation for sole source or competition, mitigating key risks, ensuring budgets, resources and timescales are properly aligned, and securing government approval to proceed with acquisition. (see reference B, Chapter 4)
- c. Acquisition – This phase begins with the Government’s Second Pass approval and concludes when the capability is procured, delivered to the capability manager, and available for use (i.e., introduced into service). The acquisition phase continues the risk management analysis and also establishes governance arrangements to prepare for capability’s introduction into service. (see reference B, Chapter 5)
- d. In Service and Disposal – Capabilities are available for use and the Capability Manager is responsible for the sustainment of the capability in this phase. At the end of a capability’s life, the capability is withdrawn from service (referred to as disposal) (see reference B, Chapter 5)

**Figure 1**



### Interim and Final Legal Reviews

13. There are two types of legal reviews which occur during the ODCS: *interim* and *final* legal review. In accordance with Defence policy (see reference C), the final legal review

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*must* be completed prior to introduction into service. *The best practice is to complete the final legal review prior to the final acquisition decision and to complete interim review(s) as early as possible in the ODCS process.*

14. An interim Article 36 legal review is appropriate when final information and data on a certain capability is not yet available. The interim review provides preliminary advice regarding whether a capability appears able to comply with Australia's international law obligations, based on the limited information available. Interim reviews are designed to identify legal risks during the early phases of development or acquisition of a capability and are not intended to be the final review of the proposed capability. There can be multiple interim reviews throughout the ODCS process to inform Government or Defence decision-makers, as deemed appropriate on a case-by-case basis. The interim review is important to avoid costly development or acquisition of a capability that cannot be used lawfully in operations or is subject to significant operational restrictions.

15. ADF policy (see references C,D and E) requires a final Article 36 legal review to be completed prior to introduction into service. It is best practice to ensure an Article 36 legal review is completed prior to the final acquisition decision, as it is an important consideration for Government and Defence decision makers (see Figure 1 above). The final legal review remains valid as long as there are no material modifications to the capability or the manner in which it is used which was not considered in the final legal review. If there are material modifications, a further Article 36 legal review will be required to consider those modifications.

**Requesting an Article 36 Legal Review**

16. Preliminary Assessment: The first step to initiate an Article 36 legal review is to seek the advice of DOIL to determine whether a legal review is required for a new or materially modified capability. This step can be initiated by emailing the DOIL Team at [weapons.legalreview@defence.gov.au](mailto:weapons.legalreview@defence.gov.au) and providing sufficient information on the capability's intended use and anticipated effects to inform DOIL's assessment. See Part II, paragraphs 1-5 for additional information regarding the preliminary assessment.

17. If DOIL notifies the Requestor that a legal review is required or recommended, the Requestor will complete Part A (Initial Request) of reference F. All Mandatory sections in the AF 172 are identified by an asterisk (\*) and should be completed prior to signing Section A as the Requestor. Mandatory information to inform the legal review includes the following:

- a. ODCS phase (section 3);
- b. Key capability milestones/progression dates (section 11)



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- c. Details of similar capabilities in use by the ADF or other countries (including earlier models of the same capability) (sections 12 and 13);
- d. Information on the capability including:
  - (1) a brief description of the capability and its function(s) (section 14)
  - (2) its intended use(s) (section 15);
  - (3) its anticipated effects (section 16);
  - (4) explanation of how a capability is intended to cause injury/death to combatants and/or damage or neutralisation to objects (section 17)
  - (5) any characteristics or features that assist the capability with identifying and striking its intended target (section 18)
  - (6) evidence the capability is able to accurately and effectively engage/prosecute its intended target (section 20)

18. The timeliness and quality of an Article 36 legal review is dependent upon the relevance, quality and quantity of information provided by the Requestor and relied upon by the Reviewer to complete the legal review. In other words, the legal review will be better informed if the Reviewer has access to all relevant and available background information on a capability. Relevant information includes all information which informs and supports the responses to sections 14-20 of the AF 172 and provided in paragraph 17 of this Guide. The Requestor is responsible for providing all relevant and available information necessary to assess a capability's compliance with Australia's obligations under international law, in consultation with the Reviewer. Section 21 of the AF 172 provides examples of supporting information and data to help inform the legal review.

19. Notify the DOIL Team early regarding any relevant information or data that is unavailable at the time of the request and provide an estimate (if possible) for when this information or data will become available.

20. The request is complete once Part A of the AF 172 Report has been completed, signed by the Requestor, and submitted to DOIL at [weapons.legalreview@defence.gov.au](mailto:weapons.legalreview@defence.gov.au) with all relevant attachments.

**Classification Level and Proprietary Information**

21. Legal reviews can be conducted at all classification levels. If the AF 172 request or supporting documents contain Secret information or a higher classification, please send DOIL

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an email on DPN at [weapons.legalreview@defence.gov.au](mailto:weapons.legalreview@defence.gov.au) to coordinate the exchange of documents. DOIL will then assign the legal review to a Reviewer with the appropriate security clearance and compartment briefs, if necessary.

22. In the event the AF 172 and supporting documents contain relevant proprietary information, the Reviewer and the DOIL secondary reviewer can sign appropriate non-disclosure agreements (NDAs).

## PART II – LEGAL REVIEWERS

### **Preliminary Assessment – Is a legal review required?**

1. When notified by the Requestor of a new or materially modified ADF capability, DOIL will conduct a preliminary assessment to determine whether an Article 36 legal review is required. This assessment may include consultation with ADF multi-disciplinary subject matter experts as deemed appropriate.
2. Article 36 of AP 1 requires a legal review in the “study, development, acquisition or adoption of a new weapons, means or method of warfare”. This preliminary assessment by DOIL will therefore determine whether a capability falls within Australia’s definitions of “weapon” or “means of warfare” or “method of warfare” as provided in Part I, paragraph 5 of the Guide.
3. Upon completion of the preliminary assessment, a DOIL Team member will notify the Requestor (copying [weapons.legalreview@defence.gov.au](mailto:weapons.legalreview@defence.gov.au)) of one of the following outcomes:
  - a. An Article 36 legal review is required under AP 1.
  - b. An Article 36 legal review is recommended as a matter of policy. For example was the transfer and gifting of Australian Defence industry material to a third state. Although not required as a matter of law, a legal review of certain capabilities was conducted prior to international transfer as a matter of policy.
  - c. An Article 36 legal review has already been completed; or
  - d. The capability is not assessed to be a “weapon, means or method of warfare” requiring legal review under Article 36 of AP 1.
4. If a legal review is required or recommended, DOIL will conduct a search of its records to verify that an interim or final legal review has not already been conducted for the weapon, means or method of warfare.
5. If no prior reviews are found, the DOIL Team will email the Requestor a blank AF 172, *Article 36 Legal Review Report Form*, and request that Section A of the AF 172 be filled out and signed in accordance with this Guide and returned to DOIL for further processing at [weapons.legalreview@defence.gov.au](mailto:weapons.legalreview@defence.gov.au).

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### **Assigning an Article 36 Reviewer**

6. Upon receipt of a completed AF 172 from the Requestor, the DOIL Team will conduct a streamlined review of the AF 172 and its attachments to determine whether sufficient information has been supplied to begin the review process. If key information is missing, the DOIL Team will contact the Requestor promptly to request additional information.
7. The DOIL Team will then conduct an initial search of its records for prior legal reviews of similar capabilities and to assess whether there are any international or ADF policy considerations related to the weapon, means or method of warfare. The DOIL Team will also conduct a search of its DSN records to verify there is no key information of a classification level of Secret or higher, as this will inform who is assigned as the Reviewer.
8. The DOIL Article 36 Review Manager or a member of the DOIL Team will assign the review to a certified Reviewer and inform the Reviewer of any prior relevant legal reviews and policy consideration. Thereafter, the Reviewer may contact the Requestor directly to identify, obtain, and confirm relevant information necessary for the performance of the legal review, and should copy the DOIL Team ([weapons.legalreview@defence.gov.au](mailto:weapons.legalreview@defence.gov.au)) on all such communications. The Reviewer should also consult the DOIL Team regarding any issues that arise during the course of the review, particularly those involving emerging areas of law and policy.

### **Article 36 Reviewer Certification**

9. Article 36 Reviewers must successfully complete the DOIL Article 36 Legal Review Certification Course prior to conducting a review. DOIL maintains in its records a roster of all certified Reviewers and each certified Reviewer receives a certificate signed by the DOIL Director upon certification. For information on the latest course offerings, contact the DOIL team at [weapons.legalreview@defence.gov.au](mailto:weapons.legalreview@defence.gov.au).

### **Article 36 Legal Review Steps**

10. An Article 36 legal review will generally include the following steps:

Step 1 - Specific Prohibitions and Restrictions. Assess whether the weapon, means or method of warfare is specifically prohibited or restricted by a treaty to which Australia is a party or by customary international humanitarian law.

Step 2.- General Prohibitions and Restrictions. Assess whether the weapon, means or method of warfare is generally prohibited or restricted under treaties to which Australia is party or by customary international humanitarian law.

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Step 3 – Policy Considerations (as applicable). Assess whether there are any relevant policy considerations, including non-binding international instruments, public statements of Australia’s intent or position, and/or emerging areas of law.

Step 4 – Functional Review (as applicable). If the weapon, means or method of warfare is enabled by Artificial Intelligence (AI) or is intended to perform autonomous functions, an additional ‘functional review’ step may be required (see Part III of this Guide).

**Step 1 – Assess whether the weapon, means or method of warfare is specifically prohibited or restricted by a treaty to which Australia is party.**

11. The legal analysis for this step should be concisely recorded in section 24 of the AF 172.

12. When conducting the legal analysis, the Reviewer should:

- a. Identify treaties that may regulate the specific type of weapon, means or method of warfare using Table 1 below as guidance.
- b. Assess whether the specific type of weapon, means or method of warfare is:
  - (1) prohibited under the identified treaties in all circumstances.
  - (2) restricted under the identified treaties and explaining which restriction/s apply.
  - (3) not prohibited or restricted under Australia’s treaty obligations.
- c. Provide factual support for the assessment using the relevant background information provided by the Requestor.

13. Additional Guidance:

- a. This portion of the legal assessment focuses on prohibited or restricted types of weapons, means and method of warfare, whereas Step 2 focuses on prohibited or restricted effects produced by the weapons, means and methods of warfare.
- b. The legal assessment should be limited to the normal or intended use of the weapon, means or method of warfare. The Reviewer does not need to foresee or analyse all possible uses of the weapon, means or method of warfare.

**Table 1. Summary of Specific Prohibitions and Restrictions Weapons (alphabetical order)**

Types of Weapons, Means or Method of Warfare	Treaties	Nature of Specific Prohibition or Restriction
<i>Anti-personnel land mines</i>	<p><b>Arms Control Treaty:</b></p> <p>1997 Ottawa Convention applicable in all circumstances.</p>	<p>Specific Prohibition of the use, development, production, acquisition, stockpiling, transfer (direct or indirect) of “anti-personnel mines” in all circumstances.</p> <p>Also obligates States to destroy or ensure destruction of anti-personnel landmines in accordance with the Convention.</p> <p>“anti-personnel landmines” are defined as “a mine designed to be exploded by the presence, proximity or contact of a person and that will incapacitate, injure or kill one or more persons.” Mines designed to be detonated by the presence, proximity, or contact with a vehicle which are equipped with anti-handling devices are not considered anti-personnel landmines.</p> <p>This specific prohibition is reflective of both the prohibition of unnecessary suffering and distinction principles.</p>
<i>Asphyxiating gas</i>	<p><b>LOAC Treaties:</b></p> <p>1899 Hague Declaration IV applicable in IAC between Parties.</p> <p>1925 Geneva Gas Protocol</p> <p>1998 Rome Statute, Article 8(2)(b)(xviii) applicable in IAC.</p>	<p>Specific Prohibitions on the use of asphyxiating gas during armed conflict:</p> <p>1899 Hague Declaration IV, 2 prohibits “the use of projectiles the sole object of which is the diffusion of asphyxiating or deleterious gases.”</p> <p>1925 Geneva Gas Protocol prohibits: “the use in war of asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices.” The Protocol also extends the prohibition to “the use of bacteriological methods of warfare.”</p> <p>1998 Rome Statute, Article 8(2)(b)(xviii) cites the employment of “asphyxiating, poisonous or other gases and all analogous liquids, materials or devices” as a violation of international law.</p>

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		The prohibition is reflective of both the prohibition of unnecessary suffering and distinction principles.
<i>Biological/ bacteriological weapons</i>	<p><b>Arms Control Treaty:</b></p> <p>1972 Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (“Biological Weapons Convention”) applicable in all circumstances.</p>	<p>Specific Prohibition on the development, production, stockpiling, or otherwise acquisition or retention of:</p> <ul style="list-style-type: none"> <li>• “microbial or other biological agents or toxins whatever the origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes; and</li> <li>• Weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict.’</li> </ul> <p>While the text of the treaty does not expressly prohibit the ‘use’ of biological/ bacteriological weapons, State Parties confirmed that Article 1 effectively prohibits use.</p>
<i>Blinding laser weapons</i>	<p><b>LOAC Treaty:</b></p> <p>1995 Protocol IV to CCW applicable in IAC and NIAC for states that have ratified the scope extension</p>	<p>Specific Prohibition on the use in armed conflict and transfer of “laser weapons specifically designed, as their sole combat function or as one of their combat functions, to cause permanent blindness to unenhanced vision, that is to the naked eye or to the eye with corrective eyesight devices.”</p> <p>The prohibition reflects the prohibition of unnecessary suffering principle caused by permanent blindness to combatants and the social costs of caring for large numbers of blinded veterans post conflict.</p>
<i>Chemical weapons</i>	<p><b>Arms Control Treaty:</b></p> <p>1993 Chemical Weapons Convention.</p>	<p>Specific Prohibition on the use, development, production, acquisition, stockpiling or retention of chemical weapons including undertaking never under any circumstance to:</p> <ul style="list-style-type: none"> <li>• “engage in any military preparations to use chemical weapons” and</li> <li>• “assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party” by the Convention.</li> </ul>

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<i>Cluster munitions</i>	<p><b>Arms Control Treaty:</b></p> <p>2008 Cluster Munitions Convention</p>	<p>Specific prohibition on the use, development, production, acquisition, stockpiling, retention, transfer (direct or indirect) of cluster munitions.</p> <p>Specific prohibition on assisting, encouraging or inducing anyone to engage in any activity prohibited under the Convention.</p>
<i>Environmental Modification Techniques</i>	<p><b>LOAC Treaty:</b></p> <p>1977 Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD)</p>	<p>Specific prohibition from engaging in or assisting, encouraging or inducing any other State to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other States party.</p> <p>The term “environmental modification techniques” refers to any technique for changing – through the deliberate manipulation of natural processes – the dynamics, composition or structure of the earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space.</p>
<i>Expanding Bullets</i>	<p><b>LOAC Treaties:</b></p> <p>1899 Hague Declaration IV, 3 Concerning Expanding Bullets applicable in IAC</p> <p>1998 Rome Statute, Article 8(2)(b)(xix)</p>	<p>Specific Prohibition on the use during armed conflict of ‘bullets which expand or flatten easily in the human body, such as bullets with a hard envelope which does not entirely cover the core or is pierced with incisions.’</p> <p>This prohibition is reflective of the prohibition of unnecessary suffering principle.</p>
<i>Explosive or Incendiary Bullets</i>	<p><b>LOAC Treaty:</b></p> <p>1868 St. Petersburg Declaration applicable in International Armed Conflict applicable in IAC.</p>	<p>Specific Prohibition on the use during armed conflict of “projectiles of a weight below 400 grammes which is either explosive or charged with fulminating or inflammable substances.”</p> <p>This prohibition is reflective of the prohibition of unnecessary suffering principle.</p>
<i>Incendiary weapons</i>	<p><b>LOAC Treaty:</b></p> <p>1980 Protocol III to CCW applicable in IAC and NIAC for states that have ratified the scope extension.</p>	<p>Specific Restrictions on the use of incendiary weapons during armed conflict:</p> <ul style="list-style-type: none"> <li>• to attack by air-delivered incendiary weapons any military objective located within a concentration of civilians;</li> </ul>



		<ul style="list-style-type: none"> <li>• to attack by (other than air-delivered incendiary weapon) any military objective located within a concentration of civilians except where the military objective and the concentration of civilians are clearly separated and if feasible precautions are taken to minimise loss of civilian life and damage to civilian objects.</li> <li>• to make forests or other kinds of plant cover the object of attack by incendiary weapons except when such natural elements are used to cover, conceal or camouflage combatants or other military objectives, or are themselves military objectives.</li> </ul> <p>“Incendiary weapon” refers to any weapon or munition which is primarily designed to set fire to objects or to cause burn injury to persons through the action of flame, heat, or combination thereof, produced by a chemical reaction of a substance delivered on the target.</p> <p>Incendiary weapons can take the form of flame throwers, fougasses, shells, rockets, grenades, mines, bombs and other containers of incendiary substances.</p> <p>Incendiary weapons do not include munitions which may have incidental incendiary effects, such as illuminants, tracers, smoke or signalling system; munitions designed to combine penetration, blast or fragmentation effects with an additional incendiary effect, such as armour-piercing projectiles, fragmentation shells, explosive bombs and similar combined-effects munitions in which the incendiary effect is not specifically designed to cause burn injury to persons, but to be used against military objectives, such as armoured vehicles, aircraft and installations or facilities.</p>
<p><i>Mines, booby traps and other devices</i></p>	<p><b>LOAC Treaties:</b></p> <p>1980 Protocol II to CCW applicable in IAC and NIAC for states (including Australia) that have ratified the scope extension.</p>	<p>Specific Restrictions on the use during armed conflict:</p> <ul style="list-style-type: none"> <li>• the use of certain types of anti-personnel land mines is prohibited (e.g., those of a nature to cause superfluous injury or unnecessary suffering); the use of other types of anti-personnel mines is restricted (see the specific</li> </ul>

	<p>The Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction of 1997 (1997 Ottawa Convention)</p>	<p>prohibition on APML prohibited under the 1997 Ottawa Convention).</p> <ul style="list-style-type: none"> <li>• the use of anti-vehicle mines is permitted where: (1) they are not designed to be detonated by mine-detectors; and (2) where they have anti-handling devices they are deactivated when the mine deactivates; and (3) they are cleared, removed, destroyed, or appropriately maintained after cessation of hostilities.</li> <li>a. the use of booby traps is restricted to ensure they are used discriminately, only directed against combatant and feasible precautions are taken to ensure civilians do not become victims. Booby traps may not be used near populated areas unless placed in close vicinity of a military objective and measures taken to protect civilians (e.g., signs, warnings)</li> </ul> <p>The restrictions are primarily concerned with the protection of civilians.</p>
<p><i>Non-Detectable Fragments</i></p>	<p><b>LOAC Treaty:</b></p> <p>1980 Protocol I to Convention on Certain Conventional Weapons (CCW) applicable in IAC and NIAC for states that have ratified the scope extension.</p>	<p>Specific Prohibition on the use during armed conflict of “any weapon the primary effect of which is to injure by fragments which in the human body can escape detection by X-rays.”</p> <p>The prohibition reflects the prohibition of unnecessary suffering principle caused by non-detectable fragments impeding medical treatment of combatants.</p>
<p><i>Poison, Poisoned weapons</i></p>	<p><b>LOAC Treaties:</b></p> <p>1899 Hague Convention II</p> <p>1907 Hague Convention IV applicable in IAC.</p> <p>1998 Rome Statute, Article 8(2)(b)(xvii) applicable in IAC.</p>	<p>Specific Prohibition on the use during armed conflict of ‘poison or poisoned weapons.’</p> <p>This prohibition is reflective of both the prohibition of unnecessary suffering and distinction principles.</p>

**OFFICIAL****STEP 2 – The Reviewer will assess whether the capability is generally prohibited or restricted under treaties to which Australia is party.**

14. In contrast to the specific prohibitions and restrictions considered in Step 1, which apply to certain *types* of weapons, means, and methods of warfare (listed in Table 1), general prohibitions and restrictions are concerned more broadly with the *effects* of all weapons, means and methods of warfare.

15. The Reviewer should first assess the capability under the LOAC principles of distinction and prohibition of unnecessary suffering.

16. **Prohibition against indiscriminate weapons:** Is the weapon, means or methods of warfare indiscriminate by nature? The following considerations apply:

- a. The principle of ‘distinction’ should be concisely stated in section 25a of the AF 172 (e.g. *A weapon is indiscriminate if it cannot be directed at a specific military objective or its effects cannot be limited as required by AP 1*).
- b. When conducting the legal analysis, the Reviewer should:
  - (1) Apply the legal standard in paragraph 16 above to the subject weapon, means, or method of warfare.
  - (2) Determine and specify whether the weapon, means or method of warfare is:
    - capable of being used lawfully in all circumstances (based on its normal or intended use).
    - capable of being used lawfully only in certain circumstances and if so, identifying those circumstances.
    - indiscriminate in nature and incapable of being used lawfully in any circumstances.
  - (3) Support the determination made in paragraph (2) above using the relevant background information provided by the Requestor and the considerations listed below in paragraph f (as appropriate).
- c. If the subject capability is a munition or other capability which relies upon the other components of a weapon system to aim, identify and/or strike the intended target, recommend using language similar to the following in section 25a:

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“This ammunition has no capacity to discriminate between targets on its own. As such, an assessment regarding the principle of ‘distinction’ is unnecessary for purposes of this review, as the assessment would be based on the ammunition’s performance in combination with the host weapon system from which it is discharged. Each host weapon system must undergo a separate Article 36 legal review and the user of the host weapon system must ensure the fire has a discriminatory effect at the time of employment.”

d. Distinction is a fundamental principle of LOAC which is reflected in AP 1.

(1) Article 48 of AP 1 states:

“In order to ensure respect for and protection of the civilian population and civilian objects, the Parties to the conflict shall at all times distinguish between the civilian population and combatants and between civilian objects and military objectives and accordingly shall direct their operations only against military objectives.”

(2) Article 51(4) of AP 1 prohibits indiscriminate attacks, defined as attacks:

- which are not directed at a specific military objective;
- which employ a method or means of combat which cannot be directed at a specific military objective; or
- which employ a method or means of combat the effects of which cannot be limited as required by this Protocol.

e. Additional Guidance:

- (1) The principal of distinction recognises that only attacks against military objectives are justified by military necessity.
- (2) A weapon, means or method of warfare that is indiscriminate in nature is unlawful in all circumstances.
- (1) The legal assessment should be limited to the normal or intended use of the weapon, means or method of warfare. The Reviewer does not need to foresee or analyse all possible uses of the weapon, means or method of warfare.

f. Considerations to inform legal assessment (as applicable):

- (1) Are the capability’s effects capable of being controlled in time and space?

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- (2) Are the capability's effects capable of being limited to the intended target?
- (3) What characteristics and features does the capability have that assist with identifying and striking its intended target? (See section 18 of the AF 172)
- (4) Has the capability been tested for accuracy and precision? What do the results of these tests show? (See sections 16 and 20 of the AF 172)
- (5) Is the capability substantially similar to other in-service ADF or allied capabilities which are considered lawful? While this will not automatically result in the capability being assessed as lawful, it comprises relevant information for the Reviewer to consider.
- (6) Have other States declined to use this capability or a substantially similar capability based on the principle of distinction? While this will not automatically result in the capability being assessed as unlawful, it comprises relevant information for the Reviewer to consider.

**17. Prohibition of unnecessary suffering:**

- a. The prohibition against weapons that cause unnecessary suffering should be concisely recorded in section 25b of the AF 172 (e.g. *Weapons, means, or methods of warfare are prohibited if they are of a nature to cause suffering or injury beyond what is necessary to achieve legitimate military objectives*).
- b. When conducting the legal analysis, the Reviewer should:
  - (1) Apply the above legal standard in paragraph 17(a) to the subject weapon, means or method of warfare.
  - (2) Determine and specify whether the weapon, means or method of warfare is:
    - capable of being used lawfully in all circumstances.
    - capable of being used lawfully only in certain circumstances and specifying those circumstances.
    - incapable of being used lawfully in any circumstances.
  - (3) Support the determination made in paragraph (2) above using the relevant background information provided by the Requestor and the considerations listed below in paragraph f (as appropriate).

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- c. “Prohibition of unnecessary suffering and superfluous injury” is a fundamental principle of LOAC, which is reflected in AP I.
- (1) Specifically, Article 35(2) of AP I prohibits:  
  
“the employment of weapons, means or methods of warfare designed, modified and employed for the purpose of causing superfluous injury or unnecessary suffering.”
  - (2) This Guide and the AF 172 generally refer to this principle as “prohibition of unnecessary suffering” as a shorthand for purposes of the Article 36 legal review process.
- d. Additional guidance:
- (2) This principle addresses the suffering and injury inflicted upon targetable persons who are struck by the weapon or means of warfare. Persons who are not targetable (e.g. civilians) are protected by other rules of LOAC.
  - (3) This principle does not prohibit suffering, injury or death to targetable persons; rather, necessary suffering, injury or death to targetable persons is lawful as long as it not excessive in relation to the military advantage anticipated.
  - (4) The legal assessment should be limited to the normal or intended use of the weapon or means of warfare. The Reviewer does not need to foresee or analyse all possible uses of the weapon or means of warfare.
- e. Examples of weapons, means or methods of warfare which are generally recognized to cause unnecessary suffering in certain or all circumstances:
- (1) expanding or explosive bullets
  - (2) poison
  - (3) blinding laser weapons
  - (4) biological and chemical weapons
  - (5) projectiles filled with broken glass

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- f. Considerations to inform legal assessment (as applicable):
- (1) Balance the expected military advantage obtained from using the weapon or means of warfare against the reasonably foreseeable suffering and injury the weapon or means of warfare is likely to cause.
  - (2) Is the weapon or means of warfare designed to increase suffering or injury, whether immediately or long-term, in a manner which would be excessive in relation to the anticipated military advantage?
    - Is the weapon or means of warfare likely to cause permanent disfigurement or disability?
    - Is the weapon or means of warfare designed to needlessly increase the pain or severity of wounds?
  - (3) Have other States declined to use this weapon or a substantially similar weapon based on the belief the weapon causes unnecessary suffering? While this will not automatically result in the capability being assessed as unlawful, it comprises relevant information for the Reviewer to consider
  - (4) Does the weapon or means of warfare produce effects which are substantially similar to weapons or means of warfare already in-service by the ADF and allies?

**18. Other General Prohibitions and Restrictions:** Is the intended use otherwise prohibited or restricted under Australia's international law obligations?

- a. This legal assessment should be recorded in section 26 of the AF 172 and is intended to consider any other general prohibitions, restrictions, and employment consideration which may be applicable to the capability under Australia's international law obligations.
- b. The inclusion of employment considerations in an Article 36 legal review is not required; however, their inclusion can be beneficial to inform SOPs and TTPs related to the capability's operational use and alert relevant stakeholders regarding when legal should be consulted once the capability is being used operationally by the ADF.
- c. The following are examples of additional international law obligations which may be considered during the Article 36 legal review process, as appropriate. These examples are intended to be illustrative, not exhaustive.

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- (1) Article 35(3) of AP I prohibits means or methods of warfare, which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment.
  - If this provision is implicated, the Reviewer should obtain appropriate data from the Requestor describing the likely environmental impact of the weapon, means or method of warfare.
  - The long-term nature of the damage referred to in Article 35(3) of AP I does not apply to short-term, limited environmental damage, such as that resulting from the use of explosive munitions.
  
- (2) Australia is a party to the *Protocol on Explosive Remnants of War to the 1980 Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to Have Indiscriminate Effects* (Protocol V), which obliges Parties to:
  - Mark and clear, remove or destroy explosive remnants of war present in their territory after the cessation of hostilities.
  - Record and retain information on the use or abandonment of explosive ordnance in order to facilitate its post-conflict clearance.
  - Protect the civilian population and humanitarian missions and organizations in the territory from the effects of explosive remnants of war.
  
- (3) Australia is party to the *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies* (Outer Space Treaty), and the *Agreement Governing the Activities of States on the Moon and Other Celestial Bodies* (Moon Agreement). These treaties generally only prohibit weapons of mass destruction from being placed in orbit around the Earth, installed on celestial bodies, or stationed in outer space in any manner. As such, they will generally not be relevant to Article 36 legal reviews conducted in accordance with this Guide. However, there are several provisions to consider when conducting Article 36 legal reviews of a space capability. They include the following:
  - Article IV of the Outer Space Treaty provides that the “Moon and other celestial bodies shall be used by all States Parties to the Treaty exclusively for peaceful purposes. The establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military manoeuvres on celestial bodies shall be forbidden.”



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- Article IX of the Outer Space Treaty provides that “States shall conduct all their activities in outer space, including the Moon and other celestial bodies, with due regard to the corresponding interests of all other States Parties to the Treaty.” It is worth noting that the meaning of “due regard” within the context of the Outer Space Treaty is generally unsettled; nonetheless, this provision may be relevant to cite as a future employment consideration.
- Article IX of the Outer Space Treaty provides that States shall avoid causing harmful contamination and adverse changes in the environment of the Earth resulting from the introduction of extra-terrestrial matter in outer space and engage in “appropriate international consultations” if any of the State’s activities may cause harmful interference with the activities of another State in outer space.
- Articles I and II of ENMOD provide that States undertake not to engage in military or other hostile use of environmental modification techniques (e.g. changing outer space through deliberate manipulation of natural processes) having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party.

**Step 3 - Are there relevant Australian or ADF policy considerations, including non-binding international instruments, national policy, and emerging areas of law?**

19. With the evolution of technology and the challenges of reaching international consensus amidst current world politics, the Reviewer may need to consider more than just the international law regulating weapons, means and methods of warfare when appropriate. Policy and non-binding instruments often influence future developments in the law so these considerations are important for informing when Defence may be investing in capabilities which could be prohibited or restricted in the future. In addition, such considerations are key for ensuring consistency in Australia messaging in relation to the development, acquisition, and use of weapons, means and methods of warfare.

20. Upon receiving an Article 36 legal review request, the DOIL Team will conduct an initial screening for potential policy considerations and consult with other agencies and offices across Government as necessary. When assigning the legal review to a Reviewer, the DOIL Team will flag any potential policy considerations and provide guidance to the Reviewer regarding how to address the policy considerations. If the Reviewer becomes aware of potential policy considerations which were not flagged by the DOIL Team, the Reviewer will consult with the DOIL Team regarding the matter before proceeding further with the legal review.

21. Below are several example considerations under this step:

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- a. United National General Assembly Resolutions including the recent (November 2023) resolution regarding Lethal Autonomous Weapons System (A/78/L.56).
- b. Australia's Artificial Intelligence Ethics Principles.
- c. Australia's statement at the 66<sup>th</sup> session of the Committee on the Peaceful Uses of Outer Space regarding ways and means of maintaining outer space for peaceful purposes, which reaffirmed Australia's 2022 commitment to never conduct destructive, direct-ascent anti-satellite (ASAT) missile testing and encouraging other States to do the same.
- d. The Martens Clause, which Australia interprets to prevent "the assumption that anything which is not explicitly prohibited by the relevant treaties is therefore permitted."<sup>1</sup>

**Article 36 Legal Review Conclusions**

22. An Article 36 legal review will generally reach one of the following conclusions recorded in section 28 of the AF 172:

- a. the employment of the weapon, means or method of warfare is lawful;
- b. the employment of the weapon, means or method of warfare is generally lawful, but with the following restrictions/caveats;
- c. the employment of the weapon, means or method of warfare is generally lawful, but with the following employment considerations; or
- d. the employment of the weapon, means or method of warfare is unlawful in all circumstances.

23. In the extra space provided under section 28, the Reviewer should provide a brief summary of the key information supporting the conclusion as well as any restrictions, employment considerations, or other recommendations.

**Issues Arising under Domestic Law**

24. Although it is outside the scope of the Article 36 legal review process to consider domestic law issues related to the development and employment of a particular capability, these issues may nonetheless arise during the course of conducting a legal review. When they

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<sup>1</sup> Australian Position Paper, *The Australian Article 36 Review Process*, submitted to Second Session of the CCW GGE on LAWS (30 August 2018) CCW/GGE.2/2018/WP.6

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arise, the Reviewer should notify the DOIL Team so the DOIL Team can refer the matter to the appropriate agency or office across Government. One example of a situation which could raise domestic law concerns is a capability which collects, uses, and/or stores personal data (e.g. Privacy Act considerations).

### **Outcome of the Article 36 Legal Review**

25. The product of an Article 36 legal review is the AF 172 Report which assesses the legality of a weapon, means or method of warfare in accordance with Australia's international law obligations and informs Government decision-makers of any restrictions or recommendations related to the operational use of the weapon, means or method of warfare. This legal review is a key step for approval authorities to consider before determining whether the ADF should proceed with the development or acquisition of a particular weapon, means or method of warfare.

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## PART III – FUNCTIONAL REVIEW STEP

### LEGAL REVIEW OF AUTONOMOUS WEAPON SYSTEMS

1. The focus of Part II is a determination of the legality of a new weapon, means or method of warfare *per se*. Where an autonomous weapon system (AWS) performs functions through computer software or artificial intelligence (AI) that are governed by rules of LOAC (e.g. target identification), Part III should help determine whether that function (or functions) can be performed in accordance with Australia's international law obligations.
2. The purpose of the functional review step is to analyse each AWS function that is regulated by LOAC rules, including distinction, proportionality and precautions, and to consider the legal risks arising from the performance of those functions in different environments and operational circumstances. These legal risks are addressed by recommendations to either restrict or modify the AWS' use to mitigate the legal risk.
3. Part III of this Guide is intended to enable a determination as to whether specific AWS functions can be performed lawfully. The functional review step is in addition to the Article 36 legal review steps described in Part II. The outcome of the functional review is to be recorded in the LOAC Matrix at Section C of the AF 172.

### ELEMENTS OF THE FUNCTIONAL REVIEW

4. For each AWS function that is governed by LOAC rules, the following are the elements of the functional review step which may be considered:
  - a. identify the AWS' functions and the governing LOAC rules;
  - b. identify the standard of legal compliance required to determine legality;
  - c. identify the operational context in which the AWS will perform its functions;
  - d. obtain the AWS' technical, functional and performance data relevant to the identified AWS functions;
  - e. conduct a legal risk analysis for each AWS function governed by LOAC; and,
  - f. identify appropriate risk mitigation (e.g. human control) necessary to ensure the AWS function is performed lawfully.

**OFFICIAL****Element I: Identify the AWS functions that are governed by LOAC rules**

5. The Reviewer will need to analyse the AWS' normal or expected use to identify the functions that are performed autonomously and the relevant LOAC rules and principles that govern those. There may be multiple rules and therefore it is necessary to record these in the LOAC Matrix at Section C of the AF 172 (see example below).

<b>AWS function</b>	<b>LOAC rule</b>	<b>Nature of autonomy</b>	<b>Autonomous function(s)</b>	<b>Environmental context</b>	<b>Operational context</b>	<b>Legal risk</b>	<b>Mitigation</b>
Distinguish military objectives	Art 48, AP 1	Full autonomy	Locate, identify, classify enemy tanks				

**Element II: Identify the standards of legal compliance required to determine legality**

6. LOAC does not specify legal or technical standards required to determine the legality of weapons in compliance with art 36 of AP 1. In determining the standard to be applied to the specific AWS function to determine compliance with LOAC, the environmental and operational context must be taken into account. For example, where there is a high level of legal risk, e.g. where an AWS is intended to target military objectives in an area where civilians and civilian objects are present, the legal review will require a higher standard of compliance with art 48 of AP 1 than may be required in an environment absent the risk of collateral damage.

**Element III: Identify the environmental and operational context in which the AWS functions are likely to be performed**

7. Autonomy is concerned with an artificial agent acting in its environment. The ability of an AWS to interpret and act within its environment is fundamental to the lawful use of AWS. An AWS will interpret environmental data obtained through its sensors using software or AI. As the environment is likely to affect the operation of an AWS it is important for the review to consider the legal risks that the environment presents.

8. An assessment of the environment within a review will require the input of experts from a range of disciplines. For example, the expertise of computer scientists, engineers and military commanders is needed to understand the effect of the operating environment on the AWS.

9. The analyses of the environmental effects on the AWS' performance should, where possible, be informed by independent ADF testing. This is necessary to confirm performance standards and to ensure that the AWS performs to the required standards.

10. The AWS' normal or expected use is likely to include a range of operational environments and circumstances. The performance of specific AWS functions can be tested

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in each of these environments, including via simulation, to inform analysis of the risks presented by each environmental and operational context. An outcome of a review may be a recommendation to restrict the use of a weapon where environmental circumstances result in elevated legal risk. The environmental and operational context can be represented in the LOAC Matrix at Section C of the AF 172 (see below).

<b>AWS function</b>	<b>LOAC rule</b>	<b>Nature of autonomy</b>	<b>Autonomous function(s)</b>	<b>Environmental context</b>	<b>Operational context</b>	<b>Legal risk</b>	<b>Mitigation</b>
Distinguish military objectives	Art 48, AP 1	Full autonomy	Locate, identify, classify enemy tanks	Open and mixed density vegetation. High risk of false positive ID in urban environments	Potential EMS denied, smoke obscuration.		

11. The operational environment may be relevant to determining the need for further legal review during the AWS' in-service life. For example, an AWS which was determined to be lawful and capable of lawful use in one operational environment may not be capable of lawful use in a different environment.

#### **Element IV. Obtain the AWS' functional, technical and performance information**

12. The functional review will require information relating to the AWS' autonomous functionality. The Reviewer will need sufficient knowledge, or need to receive expert advice, on how the AWS' design and operation are relevant to the review analysis. As such, the Reviewer should obtain the functional, technical and performance information to determine how accurately and reliably the AWS is able to perform this function. This data should include results gained from testing across a range of expected operational scenarios and environmental contexts.

#### **Element V. Conduct a legal risk analysis of each AWS function governed by LOAC**

13. AWS functionality assessed as low legal risk may be permitted more autonomous operation. Similarly, autonomous functionality assessed as medium risk may require direct human oversight or reprogramming. A high or extreme legal risk may preclude a State from allowing the AWS to perform a particular function autonomously and require direct human control. The legal risk can be represented in the LOAC Matrix at Section C of the AF 172 (see below).

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AWS function	LOAC rule	Nature of autonomy	Autonomous function(s)	Environmental context	Operational context	Legal risk	Human Control Level
Distinguish military objectives – Enemy tanks	Art 48, AP 1	Capable of full autonomy or human oversight	Locate, identify, classify enemy tanks	Open and mixed density vegetation. High risk of false positive ID in urban environments.	Potential EMS denied, smoke obscuration.	Open – Low Urban - High	

### Element VI. Identify measures to mitigate legal risk

14. Having established a record of the AWS' functions and the applicable LOAC rules the Reviewer should undertake a legal risk analysis of each AWS function identified as being regulated by LOAC. This will identify those AWS functions where there is risk of unlawful actions in some or all circumstances and propose methods to mitigate the legal risk. Methods of risk mitigation may include increasing the level of human control, improving the human-machine interface or limiting the AWS' autonomous function in certain operational scenarios or preventing the AWS from performing that function without human control.

### Outcome of the Functional Review

15. For each AWS function that is governed by LOAC rules, the LOAC Matrix should describe the anticipated autonomous function, the environment and operational context relevant to the performance of the function, the legal risk and recommended method to mitigate the risk, e.g. recommended level of human control.

### Expanded Focus of the Review

16. In addition to a functional review step, the Article 36 legal review of AWS will be expanded to across the AWS lifecycle, from its inception, through acquisition and during its in-service use. By expanding the review process in this way, a State can achieve different review outcomes across three broad stages:

- a. the initial informative stage to inform those responsible for the initial design and development of the AWS of the State's international law obligations;
- b. a determinative stage (including the traditional Article 36 legal review steps) to determine the legality of the AWS prior to its use in armed conflict; and
- c. a governance stage to monitor the ongoing legality of the AWS during its use in armed conflict.