



SIPRI COMPENDIUM ON ARTICLE 36 REVIEWS

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I. Introduction

Article 36 of the 1977 Additional Protocol I to the 1949 Geneva Conventions (Additional Protocol I) states that

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.¹

This article imposes a practical obligation on states to prevent the use of weapons, means or methods of warfare that violate international law by employing a mechanism that can determine the lawfulness of any new weapon, means or method of warfare before it is used in an armed conflict. This mechanism is colloquially referred to as a ‘weapon review’, ‘legal review’ or ‘Article 36 review’. The importance of conducting Article 36 reviews is widely recognized and is increasingly stressed in the light of ongoing developments in civilian and military technology. Rapid innovations in the field of information technology, including in advanced computing and communications, nanotechnology and synthetic biotechnology, will result in weapon and equipment advances that may transform the conduct of modern warfare. The use of Article 36 reviews is essential to determine whether the new possibilities offered by new technologies could cause any significant concern from a humanitarian perspective.

The ability of Article 36 reviews to control the future development of military technology could be undermined by the fact that only a very limited number of states are currently known to have a formal review mechanism in place. Moreover, Article 36 does not provide concrete guidance about how states should formalize the review process. To encourage more widespread compliance with the obligation of Article 36 and support confidence building in the area of weapon reviews, SIPRI has developed a compendium of existing national Article 36 review procedures. The purpose of the compendium is threefold.

1. To provide states with the opportunity to manifest their commitment to compliance with international law and thereby increase transparency and confidence building in the area of Article 36 reviews.

¹ 1977 Protocol I Additional to the 1949 Geneva Conventions, and Relating to the Protection of the Victims of International Armed Conflicts, opened for signature 12 Dec. 1977, entered into force 7 Dec. 1978.

SUMMARY

● Article 36 of the 1977 Additional Protocol I to the 1949 Geneva Conventions imposes a practical obligation on states to review the legality of all new weapons, means or methods of warfare before they are used in an armed conflict. To encourage more widespread compliance with the obligation of Article 36 and support confidence building in the area of legal reviews, SIPRI has developed a compendium of existing national Article 36 review procedures. The compendium describes how the review process is conducted in the following countries: Belgium, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States.

The country presentations are based on responses to a questionnaire that SIPRI submitted to relevant authorities. Each presentation summarizes the format and responsibilities of the reviewing authority, how states interpret the terms of reference and legal obligations of Article 36, and the methods employed to conduct the review.



2. To provide a factual basis for an international discussion on best practices in the area of Article 36 reviews.

3. To provide examples of how the process could take place to states willing to set up or reform their review procedures, and thereby create the necessary conditions for more widespread and effective compliance with the requirements of Article 36.

The compendium describes how the Article 36 review process is conducted in the following countries: Belgium, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States. The country presentations have been developed based on responses to a questionnaire that SIPRI submitted to relevant authorities. Each presentation summarizes the format and responsibilities of the reviewing authority, how states interpret the terms of reference and legal obligations of Article 36, and the methods employed to conduct the review.

II. Belgium

Format and responsibilities

The Belgian Commission for the Legal Review of New Weapons, New Means and New Methods of Warfare (LRC) was established in 2002 by General Order J/836, issued by the Chief of Defence. Its establishment was aimed at formalizing respect for the obligations of Article 36.

The LRC is a permanent advisory body that reports to the Chief of Defence. Its task is to advise the Chief of Defence about the legality of any new weapon, means or method of warfare that the armed forces are studying, developing or planning to acquire.

Any person responsible for a programme aimed at studying, developing or acquiring a new weapon, means or method of warfare has to notify the General Director of the Legal Department of the Ministry of Defence (MOD) as soon as possible, stating the programme's intention and providing all available information. The General Director then transmits the request to the LRC unless, based on an in-depth examination, it is considered that the new device does not fall under the definition of a weapon, means or method of warfare. Once the LRC has collected all the relevant information, the Secretary drafts legal advice that the LRC uses to make its decision (a decision that usually requires unanimity). The decision is then transferred to the General Director, who in turn transmits it to the Chief of Defence. If the LRC was not able to vote unanimously, the different opinions are clearly stated. The General Director also expresses his/her view(s) on the topic. The findings of the LRC are of an advisory nature and are not binding, but they are usually followed.

The LRC only considers the normal and foreseen use of a weapon, means or method of warfare. If it reaches the conclusion that using a weapon in a specific situation or in a specific way is prohibited, this is clearly reflected in the legal advice. The advice then recommends that military doctrine related to the training and use of the weapon be published—and that proper training takes place. This is the case particularly if the use of a weapon is



not prohibited in all circumstances but might be in some (e.g. prohibited in armed conflict but not in a law enforcement situation). New military doctrine generally requires screening and approval by the MOD's Legal Department.

Article 36 reviews are recorded within the archives of the Directorate-General for Legal Support and Mediation. These documents are not classified but their access is restricted on a need-to-know basis.

Scope of application

Definitions

For the purposes of the application of General Order J/836, the term 'weapon' covers any type of weapon (lethal and non-lethal), including any weapon system, projectile, ammunition, powder or explosive designed to put a person and/or material *hors de combat*. The term 'means of warfare' is also considered to fall under this definition. The term 'method of warfare' is not directly defined in the General Order and should be understood as referring to the tactics and techniques for fighting an enemy.

Legal criteria

The LRC takes into account any rule of international law to which Belgium is bound, including international human rights law (IHRL), and especially the right to life (Article 2 of the European Convention on Human Rights).

The LRC reviews the normal and foreseeable use of the weapon in question. It assesses whether the use of the weapon (means or method of warfare) could contravene international (and/or national) law in some or all circumstances. There may be some instances where the use of a weapon would not be deemed to be in conformity with international law, but in other circumstances the use of the same weapon would be deemed to be legal.

When the LRC identifies uses that might be problematic, it recommends that the doctrine be written and the training be conducted in such a way that allows for the weapon to be used properly and in conformity with the law (taking into consideration shooting range, confined places etc.).

The review also looks at any possible aftermath of the use of a weapon for the civilian population and the environment (e.g. dangerous substances, toxic waste, scattering of ammunition or unexploded devices).

The Martens Clause is one of the pillars of international humanitarian law (IHL), and although it is not considered separately, it is kept in mind during the review process, notably when assessing the normal use of a weapon.²

An Article 36 review does not anticipate future trends in the development of IHL, IHRL or any other rule of international law. Nevertheless, the General Order states that if any new information is made available after the legal advice is given, the LRC's advice is to be reviewed following the same procedure.

Any new weapon, means or method of warfare that has been reviewed can go through the process anew if relevant information is later made available

² The Martens Clause is a legal principle in Article 1(2) of 1977 Protocol I Additional to the Geneva Conventions, which states as follows: 'In cases not covered by this Protocol or by other international agreements, civilians and combatants remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of public conscience.'



Method

Time frame

Any person responsible for a programme aimed at studying, developing or acquiring a new weapon, means or method of warfare must notify the General Director of the MOD's Legal Department as soon as possible, stating the programme's intention and providing all available information. The General Director then transmits the request to the LRC unless, based on an in-depth examination, it is considered that the new device does not fall under the definition of a weapon, means or method of warfare.

In cases where a prompt answer is needed and the LRC cannot convene in time, legal advisers may assess whether any uses of the weapon might be legally forbidden. This kind of situation may occur when, for instance, for operational reasons the armed forces need to use ammunition or weapons that belong to another state in a theatre of operations.

Any new weapon, means or method of warfare that has been reviewed can go through the process anew if information that might have an impact on the legal advice is made available after the advice was given. The General Director may also decide to reopen a case and ask for actualization of the review.

Empirical evidence

Any information that would enable the LRC to make its decision must be provided by the person in charge of the acquisition programme. The technical description of a weapon provided by the manufacturer is always requested. The LRC may perform its own tests, if deemed necessary and possible. It may also rely, if available, on the results of testing that has already been carried out by other states.

Expertise

The LRC is made up of six permanent members from the MOD and is chaired by a Legal Adviser appointed by the General Director of the Legal Department. The other members are the Secretary (also from the Legal Department), the Law of Armed Conflict Adviser of the Assistant Chief of Staff Operations and Training, the Senior Political Military Adviser on Weapons Treaties of the Assistant Chief of Staff Strategy, the Senior Military Adviser on Research and Technology of the Defence Staff, and a Military Doctor appointed by the Chief of the Medical Component. In this way, the composition of the LRC allows for a multidisciplinary approach.

Aside from the permanent members, the expert or experts responsible for the development or acquisition programme of the new weapon in question are also involved. Further, the LRC may decide to consult other experts (e.g. academics) or other departments (e.g. the Weapon Systems and Ballistics Department of the Belgian Royal Military Academy) that conduct ammunition testing. The Weapon Systems and Ballistics Department has developed expertise in a number of technical areas. Regarding non-lethal weapons, in particular, it has developed mechanical tests—namely firing at surrogates and numerical models simulating impact on the human body. These tests assess the effect of kinetic energy non-lethal projectiles on the human body and are part of a greater effort at the international level to achieve standardization of the risk assessment of such weapons. Relying on



these studies, the LRC was able to suggest ways to use these weapons that would not contravene international law and recommend the adoption of guidelines for users, notably regarding security distances.

III. Germany

Format and responsibilities

In March 2015 Germany established a permanent Steering Group within the German Federal MOD, under the title ‘Review of New Weapons and Methods of Warfare’, to support its implementation of Article 36 obligations. The weapon reviews undertaken before 2015 used a different format. In June 2016 a Joint Service Regulation was enacted; the regulation describes the Steering Group and its procedures.³ The regulation does not have the same status as a formal law, but is comparable to a military order and is thus binding on all of the MOD’s personnel and organizational elements, the armed forces and the administration.

The Steering Group is a permanent structure under the responsibility of the International and Operational Law Branch of the Directorate-General for Legal Affairs. Representatives of all other competent Directorates-General of the MOD (e.g. the Directorates-General for Security and Defence Policy; Equipment; Planning; Forces Policy; and Strategy and Operations) are convened in the Steering Group in order to synergize the in-house knowledge of all experts, ranging from political to technical or operational expertise. The representatives are primarily points of contact for the Directorate-General for Legal Affairs through whom further subject matter expertise for a weapon review can be introduced. They may also bring in projects for review on behalf of their Directorates-General. The representatives of the competent Directorates-General may differ depending on the matter under review.

The Steering Group assesses whether the employment of the weapon, means or method of warfare under review would, in some or all circumstances, be prohibited by Additional Protocol I or by any other rule of international law applicable to Germany. The Steering Group’s findings only form a legal assessment and are not a final decision about the introduction of a new weapon, means or method of warfare. Nevertheless, the legal assessment is binding unless overruled. Solely based on legal aspects, an Article 36 review can only reach a conclusive decision in a small number of cases (e.g. the weapon falls under an absolute weapon ban). In most cases, such reviews provide criteria for procurement decisions, which must take into consideration political, military and financial factors. Alternatively, in the case that a weapon is procured, an Article 36 review provides a basis for the development of principles of employment and rules for the use of the weapon. A review’s results and recommendations are recorded. Questions of accessibility are decided on a case-by-case basis pursuant to applicable domestic law.

³ German Federal Ministry of Defence, Joint Service Regulation A-2146/1, Review of New Weapons, Means and Methods of Warfare, June 2016.



Scope of application

Definitions

The German Government is of the opinion that the regulations introduced by Additional Protocol I apply only to conventional weapons (an opinion shared by the governments of several other states). Accordingly, it made an interpretative declaration to that effect on ratification of Additional Protocol I. Thus, nuclear, chemical and biological weapons (which Germany does not possess or procure anyway) fall outside the scope of application of Article 36. Dual-use systems may be considered for review, if it can be established that their intended use clearly contributes to the conduct of warfare. The assessment of whether a system or device should be subject to a review is made on a case-by-case basis. The following definitions apply in this respect.

The German Government is of the opinion that the regulations introduced by Additional Protocol I apply only to conventional weapons

1. Weapon: an object that is designed or suitable to kill or injure human beings or to eliminate or reduce their attack or defence capabilities and/or to destroy or damage objects.
2. Means of warfare: an object that, without being a weapon, directly influences offensive or defensive capabilities.
3. Method of warfare: a plan, concept or doctrine for a military *modus operandi* that is intended to support certain military operations and capabilities or impair those of an adversary.

Legal criteria

The primary legal criterion used in the review process is IHL as applicable to Germany. The introduction of a new weapon, means or method of warfare is, in view of the relevant requirements, ultimately dependent on the existence of a sufficiently broad range of meaningful operational scenarios for its use in compliance with international law. Therefore, the legal assessment often not only considers the technical and medical facts, but also requires military and operational analyses.

Method

Time frame

Article 36 reviews should be initiated at the earliest possible stage of a weapon project that is newly developed, significantly modified or existing, but hitherto not adopted by the Bundeswehr. Depending on the complexity of the subject, the review process may be phased in accordance with the respective development steps. The Steering Group has the ability to intervene in the procurement process to make further considerations concerning the legal conformity or lawfulness of the procurement of a new weapon.

Empirical evidence

Following the request for an Article 36 review, the Steering Group must be provided with all the necessary specialist support required for the conduct of a review. As a rule, this includes the provision of the following documents.



1. A complete technical description of the review object (weapon/means of warfare), including a statement on its intended use, its actual effects and its reliability as well as, if applicable, a description of the remaining risks when it is used as intended.

2. If applicable, medical expert opinions of the impact of the review object (weapon/means of warfare) on the human body.

3. A description of the effects of the review object (weapon/means of warfare) on the natural environment.

4. A description of the purpose and effects in the case of a method of warfare.

The Steering Group does not only rely on information provided by industry experts. It may at any time ask for additional expertise from inside or outside the armed forces through a request for further information or an assessment.

Tests and evaluations are conducted throughout the procurement process, which is supervised by an Integrated Project Team that is created and maintained for the entire life cycle of the product.

Expertise

The review process regularly requires subject matter expertise from subordinate levels of command and from outside the MOD and the armed forces, for example, regarding medical and further impact analysis as well as operational knowledge.

The representation of all competent Directorates-General in the Steering Group aims to increase awareness within the MOD of the requirements and criteria of the legal review.

IV. The Netherlands

Format and responsibilities

The Advisory Commission on International Law and Conventional Weapons Use (AIRCW) was established in the Netherlands by the Minister of Defence in 1978 to implement the review requirements in Article 36. In 2004 a review of the AIRCW was initiated and it was formally re-established by the Ministerial Decision of 19 December 2007. Following internal reorganization within the MOD, the AIRCW was updated by the Ministerial Decision of 5 June 2014 to reflect the new structures and division of responsibilities within the MOD.

An Article 36 review is carried out by the MOD in a three-stage process: (a) investigation, (b) advice, and (c) decision making. The actual review (investigation) is carried out by a working group. The outcome of the review (advice) is submitted as a draft advisory opinion to the AIRCW by the Chair of the working group, who is concurrently the Secretary of the AIRCW. Once approved by the AIRCW, the advisory opinion is submitted to the Minister of Defence for final approval (decision making). The review mechanism makes decisions on the basis of consensus, both within the working group and within the AIRCW itself. The Minister of Defence's decision is then binding on the armed forces as a whole.

The Advisory Commission on International Law and Conventional Weapons Use was established in 1978



The review authority is free to make any comments it deems necessary. With respect to the recommendations, three different outcomes are possible: (a) approved, (b) approved but subject to conditions, and (c) rejected or prohibited. To date, only very few weapons or ammunition types have been approved without conditions or restrictions, and all other advisory opinions have included some conditions or restrictions. Such conditions or restrictions are implemented either in operating instructions or in directives issued by the Chief of Defence and are binding on the armed forces as a whole.

The procedure does not include the possibility of a formal appeal, but in practice negative decisions are communicated to the requesting party at an early stage in the procedure to allow it to either withdraw the review request or submit an alternative object for review (weapon, type of ammunition etc.). Advisory opinions can be reviewed on request or on the initiative of the working group or the AIRCW. (One advisory opinion was modified extensively in 2015 as a result of such a review.) Advisory opinions can also include, as a condition, a requirement for review after a certain period of time.

Reviews and their resulting advisory opinions are recorded and documented by the Secretary of the AIRCW. Access is granted to government employees on a need-to-know basis, taking into account the operational information contained in the advisory opinions and/or proprietary information provided by the manufacturers.

Scope of application

Definitions

The Netherlands, and therefore the AIRCW, does not apply strict definitions of the terms ‘weapon’, ‘means of warfare’ and ‘method of warfare’. The AIRCW reviews any instrument intended to cause harm or damage, regardless of the anticipated degree of harm. Whether the instrument is subsequently labelled as a weapon—if it is not already evidently in that category (e.g. firearms)—depends on the nature and degree of harm that can be caused by the instrument.

The AIRCW has only carried out one review on methods of warfare and such reviews are likely to remain infrequent. Methods can be broadly divided into two categories: (a) ad hoc command decisions, and (b) long-term or structural doctrine. Ad hoc command decisions regarding specific tactics or methods to be applied in a given operation would normally be subject to review by (or at least advice from) the military legal adviser deployed with the unit or force in question. It would be impractical (if not impossible) to subject such decisions to formal review by the AIRCW during an ongoing operation. When in doubt, the deployed military legal adviser can contact the Directorate of Legal Affairs, which is available at any time. Methods of warfare intended for more long-term or structural application are more likely to be reviewed as doctrine in the specific doctrine review process of the MOD. Legal advice is included in this doctrine review process through participation by the Directorate of Legal Affairs, but the process is not carried out by the AIRCW.

In addition to the actual legal review, the review process and final decision include more general policy considerations



Legal criteria

Given that Article 36 requires review in the context of the law in general, not only IHL, the review mechanism in the Netherlands considers all relevant and applicable treaties or rules of international law. This includes human rights law, to the extent that it can be considered to provide specific guidance on weapons and ammunition.

To a certain degree, considerations of humanity and ethics are included in the review process, albeit without necessarily identifying them as such. In addition to the actual legal review, the review process and final decision include more general policy considerations, potential publicity concerns, environmental impact concerns, and so on. If a weapon or ammunition in itself presents challenges or concerns regarding its targeting, such challenges or concerns are considered and addressed in the review process, and are most likely to lead to specific conditions or restrictions being included in the final decision.

Method

Time frame

The review process is triggered by a request from an armed forces service seeking to procure or introduce a new weapon or type of ammunition, either from the procurement or planning department in question or from the agency within the Defence Materiel Organization responsible for weapons and ammunition management and support. Requests are submitted to the Secretary of the AIRCW by email or internal memorandum. There is also a fast-track option for urgent operational requirements, if the request is sufficiently substantiated by the requesting party.

Empirical evidence

Where weapons are procured from private manufacturers, the technical specifications provided are taken into account. Whether the review can rely solely on the data provided by the manufacturer depends on the nature of the weapon or ammunition, prior experience with the manufacturer, and so on. Where necessary and possible, within the constraints of available time and resources, additional testing by the armed forces or by an independent agency is sought. The AIRCW may determine that it has insufficient capacity to conduct specialist tests itself. In such cases, it can request that (a) the receiving party conducts the necessary tests; (b) the producer conducts the tests, based on requirements set by the AIRCW; or (c) the tests are conducted by a scientific technical institute such as the Netherlands Organisation for Applied Scientific Research (TNO). At the very least, open-source research is carried out to corroborate the data presented by the manufacturer as far as possible.

As regards assessments or assurances of compliance with international law, such information is never sufficient when provided by private manufacturers, and the AIRCW makes its own assessment. However, assessments made by other (foreign) governments can be taken as an assurance based on (a) whether the foreign government is willing to provide substantiation of its assessment, or (b) prior experience with the state in question in matters



relating to international law and weapon review processes. Further, the review mechanism can take into consideration information derived from previous use of the same weapon by another state.

The kind of testing and the risk assessment depend entirely on the subject of the review. The reliability of a weapon is not usually considered to be an element of an Article 36 review in the Netherlands, although it can be taken into account if relevant data is provided. The reason for this is that reliability is a critical factor in the procurement process itself, as the safety of personnel is paramount. Additionally, extremely tight budget constraints require careful selection of products in any procurement process, with reliability being a key factor. National standards are also applicable in the tests.

Expertise

The AIRCW consists of the Chief of Defence (Chair), the Director of Legal Affairs (Deputy Chair), the Principal Director of Policy, the Director of the Defence Materiel Organization, the Director/Chief Medical Authority of the Defence Medical and Health Care Organization, and the Chair of the working group (Secretary).

The working group consists of the Deputy Director of Legal Affairs (Chair) and representatives of the Principal Directorate of Policy, the Directorate of Operational Readiness (Defence Staff), the Directorate of Plans (Defence Staff), the Defence Materiel Organization, the Defence Medical and Health Care Organization, the Royal Netherlands Navy, the Royal Netherlands Army, the Royal Netherlands Air Force and the Royal Netherlands Marechaussee (military police). Additionally, the working group may invite other parties, including external or non-governmental experts, to provide advice. In practice, the working group frequently consults internal (MOD) experts in specific technologies, sciences or medical specialties.

V. New Zealand

Format and responsibilities

In New Zealand the Article 36 review mechanism is derived from the 1958 Geneva Conventions Act and implemented through Defence Force Orders that are issued by the Chief of Defence Force (CDF) pursuant to section 27 of the 1990 Defence Act.⁴ The *Manual of Armed Forces Law* (Second Edition), Volume 4, 'Law of Armed Conflict' is such a Defence Force Order and chapter 7, section 4, prescribes the review mechanism. The review is considered a legal review under the authority of the Director of Defence Legal Services. The mandate is sourced through Defence Force Orders in the case that the CDF has determined that the Director of Defence Legal Services has the authority to conduct the review.

Those involved in the review process include military and civilian experts both from within and outside government and from within and outside New Zealand. The type of actors involved depends on the nature of the weapon system in question. The Director of Defence Legal Services is the key actor.

⁴ Geneva Conventions Act 1958, Public Act 1958 no. 19 of 18 Sep. 1958; and Defence Act 1990, Public Act 1990 no. 28 of 1 Apr. 1990.



The review considers relevant treaties and customary international law and considers the use of the weapon in all likely operational environments. The vetting of munitions is to include technical measures to minimize explosive remnants of war. Likely developments of the law of armed conflict are also to be considered. Use of the weapon or munition by other states and reviews of legality conducted by those states are to be taken into account. The review authority determines whether or not the weapon or munition intended for introduction is lawful. Conditions such as limitations on the use of the weapon may be attached. The decision is binding, and no weapon or munition is to be developed, acquired or brought into service if it does not pass the Director of Defence Legal Services' review. No review or appeal process has been built into the framework.

No appeal process has been built into the review framework in New Zealand

An internal record of reviews is maintained (although this has been instituted only within the past decade) in accordance with the obligations of the New Zealand Defence Force (NZDF) to maintain public records. Records are accessible through internal means, and official information may also be accessible to the public in accordance with the 1982 Official Information Act.

Scope of application

Definitions

The *Manual of Armed Forces Law* mentioned above defines 'weapons' and 'munitions' as every device defined or adapted to cause harm to the opposing force, including all arms, firearms, systems, explosive ordnance, bombs and missiles. The definition covers experimental weapons and munitions not yet in use.

Means or methods of warfare may also be considered for review. However, it is acknowledged that it may be difficult to define the parameters of what means or methods should be included for review. Nothing specific has been defined as being included or excluded.

Legal criteria

Article 36 reviews are primarily driven by IHL. However, consideration of other applicable treaties that New Zealand is bound by are also included (i.e. the 2008 Convention on Cluster Munitions).⁵ The Martens Clause is not specifically considered, although the intended use of the weapon is part of the review process.

There is no standard consideration of a gender perspective in the evaluation process. However, the possible gender-specific effects of a weapon system may be considered. For example, if the NZDF acquired a form of less lethal weapon system that might not affect adults but might have an impact on a foetus, such an effect would be part of the review process.

⁵ Convention on Cluster Munitions, opened for signature 3 Dec. 2008, entered into force 1 Aug. 2010.



Method

Time frame

The NZDF adopts a flexible approach to the methodology of the review mechanism, but a review is triggered as soon as a new weapon system is under consideration (and this would include e.g. the trial phase). There are also options to fast-track a review for operational reasons.

Empirical evidence

Information is gathered through a variety of means, both open source and classified, from experts from within government and external specialists. Published studies and test results are also examined. Where appropriate, independent research and testing is conducted. This depends on the nature of the weapon or munition and the capacity of the NZDF to undertake testing of a particular weapon type. Responsibility for testing or assessment is largely the task of the capability development or acquisition team. There do not seem to be national standards on the testing or validation of military weapon systems.

The possible gender-specific effects of a weapon system may be considered

Expertise

The key experts are specific weapon or munition specialists from within the military, civilian experts as appropriate, and legal experts from within the NZDF and possibly from other government departments such as the Crown Law Office. Support is also drawn from commercial weapon suppliers.

VI. Norway

Format and responsibilities

The first Norwegian committee responsible for the legal review of new weapons, means and methods of warfare was established in 1994. It was replaced by the Chief of Defence's committee for evaluating the legal aspects of new weapons, means and methods of war in 1998. However, during the reorganization of the Norwegian Armed Forces in 2003 the need for a new system for review became clear. This led to the implementation of the Directive on the Legal Review of Weapons, Methods and Means of Warfare (the Directive) by the Norwegian MOD on 18 June 2003.⁶ The objective of the Directive is to facilitate the purposeful implementation of the obligations of Article 36.

The overall responsibility for legal reviews lies with the government and, more specifically, the Minister of Defence. The Chief of Defence, who heads the Defence Military Organization (DMO), is responsible for providing advice and reporting on important issues related to the legal review of weapons, methods and means of warfare. This includes advice and reports on such issues (e.g. operational concepts) in the context of international operations that do not involve armed conflict.

The Directive also established the Chief of Defence International Law Committee (FFU), which is a permanent advisory committee that reports

⁶ Norwegian Ministry of Defence, Directive on the Legal Review of Weapons, Methods and Means of Warfare, 18 June 2013.



to, and is subordinate to, the Chief of Defence. The activities of the FFU do not replace the DMO's obligations. The FFU assists the DMO in matters of a particularly difficult character and provides advice on general or specific matters. The FFU can undertake assessments on its own initiative or on the basis of inquiries from units within the DMO.

The FFU is headed, on behalf of the Chief of Defence, by the Section for International and Operational Law and Intelligence of the MOD's Department of Security Forces, which also acts as a Secretariat. The other members are representatives of the Norwegian Joint Operative Headquarters, the Norwegian Defence Command and Staff College, the Norwegian Defence Logistics Organization (FLO) and the Norwegian Defence Research Institute (FFI).

The FFU meets as often as necessary, but must meet at least twice a year. It submits annual reports to the Chief of Defence. When acquisitions or development projects are forwarded to the MOD for approval, the case documents must clearly indicate that the matter has been assessed according to international law, unless it concerns issues that obviously fall outside the scope of Article 36. The FFU's findings are of an advisory nature and may, in principle, be set aside by the Minister of Defence (or the government) or the Chief of Defence. In practice, the findings carry significant weight.

The FFU is currently guided by the Norwegian manual on IHL from 2013. In addition, Implementing Directive 2017–2025 of the Long Term Defence Plan adopted in 2016 includes an obligation to establish databases on reviews and reporting procedures.⁷

Scope of application

Definitions

Weapons, methods and means of warfare are subject to legal reviews. The 2003 Directive defines the term 'weapon' as 'any means of warfare, weapons system/-project, substance etc. which is particularly suited for use in combat, including ammunition and similar functional parts of a weapon'.⁸

Methods and means of warfare will normally be established through guidelines on operative planning and through rules on the use of force (Rules of Engagement). Assessments of international law shall be incorporated into the planning processes, the descriptions of operative planning and the manuals for operational assessment. In addition, systems that support the operative planning processes shall be assessed according to international law.

Legal criteria

The reviews are based on existing international law (treaty law and customary international law) that is binding on Norway. Relevant rules of international law that may be expected to enter into force in Norway in the near future shall also be taken into consideration.

Reviews should be conducted as early in the cycle as possible, usually at the concept or study phase

⁷ Norwegian Ministry of Defence (MOD), *Capable and Sustainable: Long Term Defence Plan* (MOD: June 2016).

⁸ Norwegian Ministry of Defence (note 6).



Furthermore, particular emphasis shall be placed on the views on international law put forward by Norway at the international level.

A typical review covers the following assessments.

1. Whether there are specific prohibitions on the weapon, means or method of warfare in question (e.g. whether it falls under categories such as cluster munitions, expanding ammunition, anti-personnel mines, chemical weapons etc.).

2. Whether the use of the weapon, means or method of warfare in question would be restricted by the general prohibitions on the conduct of armed conflict (e.g. whether it would cause superfluous injury and unnecessary suffering; whether it would execute indiscriminate attacks; and whether the weapon is intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment).

3. Whether there are other conditions or restrictions on the use of the weapon, means or method of warfare in question.

4. Whether there are other relevant aspects of international law that need to be taken into account.

5. Whether there are any other relevant considerations, such as the national rules of relevance, international practice, the weapon manufacturer, ethical concerns, and soft law. Any potential interoperability problems that might arise due to the fact that military forces, which may be assumed to cooperate with the Norwegian Armed Forces in military operations, belong to a state that has different international legal obligations than those of Norway, or that interprets those obligations in a different manner, shall as far as possible be surveyed, and the consequences assessed.

Method

Time frame

The Chief of Defence assesses the relevant international legal aspects in connection with studies on, or the development, acquisition or approval of, new weapons, methods or means of warfare. To the extent necessary, legal reviews shall be carried out for existing weapons, methods and means of warfare in the appropriate circumstances, in particular when Norway commits to new international legal obligations.

Reviews should be conducted as early in the cycle as possible, usually at the concept or study phase, when the operational needs are identified, the military objectives are defined, and the technical, resource and financial conditions are settled. Should circumstances change significantly at a later stage, the international legal aspects shall be re-assessed. When conducting reviews of the methods of warfare, assessments of international law shall be incorporated into the planning process of military operations.

In addition, the FFI shall, on its own initiative, report to the MOD regarding any participation in international research and development programmes that might have international legal implications.



Expertise

Divisions subordinate to the MOD that are not subordinate to the Chief of Defence shall, when requested and as far as possible, render assistance in the form of information or other measures.

If necessary, the FFU may be reinforced with other specific expertise, for example through the use of experts on medical or technical weapon issues. Such experts or entities may be from outside the Norwegian Armed Forces, unless their participation is precluded by security concerns.

VII. Sweden

Format and responsibilities

Sweden established its formal weapon review mechanism, the Swedish Delegation for International Law Monitoring of Arms Projects, in 1974. It is currently regulated through the Swedish Ordinance on International Law Review of Arms Projects (*Förordning, 2007:936, om folkrättslig granskning av vapenprojekt*, Swedish Code of Statutes 2007:936), which requires the Swedish Armed Forces, the Swedish Defence Materiel Administration, the Swedish Defence Research Agency and other agencies to report all weapon projects to the delegation.

The Swedish Government elects the members of the delegation. The delegation is an independent body with a status equivalent to a government authority and is not part of the government. Currently, the delegation conducts around two or three weapon reviews annually.

The delegation has to present a report on its activities to the government once a year.

Sweden established its formal weapon review mechanism in 1974

The delegation issues approval or non-approval decisions.

If a weapon project assessed by the delegation does not meet international law requirements, the delegation shall encourage the authority that submitted the matter for examination to take appropriate measures to bring the weapon in line with the requirements of international law (e.g. modification of the design or limitation of use).

The delegation does not issue legally binding decisions. It can only advise the authority that submitted the matter for review or the government on how to proceed in accordance with international law. The authority that requested the review can appeal against the delegation's decision to the Swedish Government.

Under the Swedish principle of public access to official documents, it is possible to request access to the record of decisions and to official documents that are not classified.

Scope of application

Definitions

The delegation monitors planned purchases or modifications of all types of weapons (including non-lethal weapons) by all Swedish authorities (e.g. the Swedish Armed Forces, the Swedish Coast Guard and the Swedish Police Authority). It also reviews new military means and methods of warfare.

*Legal criteria*

The delegation monitors planned purchases or modifications of weapons under existing international law (primarily IHL, but also IHRL and disarmament law).

Method*Time frame*

The delegation encourages the early review of a weapon, but the review is triggered by request.

Empirical evidence

The delegation relies on documentation provided by the requesting authority, which has the responsibility to ensure that relevant tests and evaluations have been made. The delegation may request additional information if it believes that the test results do not meet scientific criteria or are difficult to interpret.

Expertise

The delegation consists of experts in international and national law as well as arms technology, medical and military experts. The experts in arms technology are from the Swedish Defence Materiel Administration and the Swedish Defence Research Agency.

VIII. Switzerland

Format and responsibilities

Legal reviews of weapons have been a formal requirement under Swiss law since 2007. They are based on an ordinance at Swiss MOD level, enshrining a requirement to legally review weapons before acquisition, and a directive at Chief of Defence level, regulating the process. The latter mandates the Law of Armed Conflict Section within the MOD with the reviews. Prior to 2007, legal reviews were not conducted on a systematic basis.

Scope of application*Definitions*

There are no formal definitions indicating the types of weapons that are eligible for review, apart from the general determination that reviews shall apply to all 'new' weapons. In addition, a review process shall be conducted if modifications of an existing weapon alter the weapon's performance or intended use. The legal review process also covers methods of warfare.

Legal criteria

The review considers treaties to which Switzerland is a party as well as customary international law. IHRL may be taken into consideration when a weapon might be used for law enforcement purposes.



Method

Time frame

Legal reviews are conducted throughout the procurement process and begin with the drafting of the system specifications during project planning. Weapons can be legally reviewed again after the decision to select a specific model or manufacturer has been made, and a final decision for procurement requires a positive confirmation of compliance with international law.

Legal reviews of weapons have been a formal requirement under Swiss law since 2007

Empirical evidence

Documentation shall be provided by the manufacturer. As part of the acquisition process, if necessary, Switzerland conducts its own tests and evaluations.

Expertise

As part of the review process, the Law of Armed Conflict Section has the possibility to consult with experts from various fields (e.g. chemistry, medicine or physics).

IX. The United Kingdom

Format and responsibilities

The UK ratified Additional Protocol I in 1998 and a formal review system was implemented at that time. The review process was previously carried out within the British MOD, but is now conducted by a satellite office, the Development, Concepts and Doctrine Centre (DCDC), where a team of military lawyers from the air force, the army and the navy conducts reviews for the MOD.

Generally, the legal review leads to formal written legal advice. The military lawyers sign the review, but the process has joint ownership: parties involved in the review process—in particular, the experts consulted during the process—have to confirm before it is signed that all the information reported in the written legal advice is correct. The written legal advice is then peer-reviewed by another lawyer within the DCDC.

Scope of application

Definitions

The UK conducts legal reviews of all new weapons, means and methods of warfare. The term ‘weapon’ is defined in its broadest sense. All new weapons are reviewed, as well as weapons that are modified for different use. Weapons are reviewed with regard to their design and intended use.

Nuclear weapons are a notable exception to the review process. On ratification of Additional Protocol I, the UK introduced a national reservation, indicating that, in the case of the UK, the rule of the protocol shall not apply to nuclear weapons. Nuclear weapons, therefore, fall outside the scope of Article 36 reviews.



Legal criteria

For the UK, IHL and the law of armed conflict are the applicable legal frameworks for the assessment and use of all weapon systems in armed conflict. Distinction, proportionality and military necessity and humanity are fundamental to compliance with IHL. However, IHL is just one component. Reviews consider any international conventions to which the UK is party and any related obligations. Reviews also consider any applicable human rights law.

Reviews in the UK can be fast-tracked when an expedited decision is needed

Method

Time frame

The time frame of the review is completely context dependent. Reviews can be fast-tracked when an expedited decision is needed (e.g. modification of weapons based on urgent operational needs), but a weapon review can last as long as the actual weapon development cycle.

Empirical evidence

The reviewers consider all pertinent documentation provided by the manufacturer and the armed forces. This documentation will vary from case to case and may include information gathered from multiple consultations with relevant experts (see below). The MOD may conduct additional (and independent) tests and evaluations to verify the information supplied by the manufacturer of the weapon.

Expertise

Reviews are conducted in consultation with, among others, equipment project and procurement teams, medical experts, government scientists, armed forces experts, environmental specialists, and commercial and engineering companies that design and build the relevant equipment. A review can call on any expert that may be required for that particular review. Each process is tailored to the specific weapon and the review requirements of that weapon.

X. The United States

Format and responsibilities

The USA is not a party to Additional Protocol I and, therefore, is not bound by the obligation of Article 36. Nevertheless, the US Department of Defense (DOD) has a long-standing policy that requires a legal review of the intended procurement or acquisition of DOD weapons and weapon systems. The policy aims to ensure that the development, acquisition and use of such weapons and weapon systems would be consistent with all applicable US domestic law and the international legal obligations of the USA, including



arms control obligations and the law of war.⁹ This policy, which dates from 1974, predates the general adoption of Additional Protocol I by other states.¹⁰

The USA does not have a single, formal ‘review mechanism’. Although DOD policy establishes a requirement for such reviews to be conducted by an authorized attorney, it does not prescribe a specific formal procedure through which all of the reviews must be conducted. Particular DOD Components, such as the Department of the Army, the Department of the Navy and the Department of the Air Force, have promulgated regulations, with varying degrees of specificity, to implement this requirement within each Component’s respective area of responsibility.¹¹

In general, the heads of DOD Components that acquire weapons or weapon systems (e.g. the Secretary of the Army, the Secretary of the Navy or the Secretary of the Air Force) must ensure that DOD policy is implemented, including the requirement related to the legal review of the intended acquisition of weapons or weapon systems. The heads of DOD Components may specify additional or more exacting requirements, consistent with DOD policy.

Attorneys that conduct reviews provide a legal opinion as to whether the procurement or acquisition of the particular weapon is consistent with international law. If it is determined during a legal review that the weapon is not prohibited, the attorney authorized to conduct the review should also consider whether there are legal restrictions on the weapon’s use that are specific to that type of weapon. If any specific restrictions apply, then the weapon’s intended concept of employment should be reviewed for consistency with those restrictions.

In general, the attorney authorized to review the legality of the procurement or acquisition of the weapon would not be in a position, himself or herself acting alone, to attach conditions or restrictions on the use of the weapon (e.g. by issuing rules of engagement, standard operating procedures, or instructions). However, as noted above, the attorney conducting the review may find it appropriate to advise on whether other measures should be employed that would assist in ensuring compliance with law of war obligations related to the type of weapon being acquired or procured; for example, it may be appropriate to advise on the need for training programmes

The USA is not a party to Additional Protocol I to the 1949 Geneva Conventions

⁹ USDOD, Directive 5000.01, The Defense Acquisition System, 12 May 2003, Enclosure 1, para. E1.1.15; and USDOD, Directive 3000.03E, DOD Executive Agent for Non-lethal Weapons (NLW), and NLW Policy, 25 Apr. 2013, para. 4.

¹⁰ USDOD, Office of the General Counsel, *Law of War Manual* (USDOD: Washington, DC, June 2015), para. 6.2; USDOD, Directive 5000.01 (note 9), Enclosure 1, para. E1.1.15; USDOD, Directive 2060.1, Implementation of, and Compliance with, Arms Control Agreements, 9 Jan. 2001; USDOD, Directive 5000.1, Defense Acquisition, 15 Mar. 1996, para. 4.2.10, administrative reissuance incorporating change 1, 21 May 1999, cancelled by USDOD, Directive 5000.1, 23 Oct. 2000; and USDOD, Instruction 5500.15, Review of Legality of Weapons under International Law, 16 Oct. 1974, para. II, cancelled by USDOD, Instruction 5000.2, 23 Feb. 1991.

¹¹ US Department of the Army, Army Regulation 27-53, Review of Legality of Weapons under International Law, 1 Jan. 1979; US Department of the Navy, Office of the Secretary, Instruction 5000.2E, Department of the Navy Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System, 1 Sep. 2011; and US Department of the Air Force, Secretary of the Air Force, Air Force Instruction 51-402, Legal Reviews of Weapons and Cyber Capabilities, 27 July 2011.

and other practical measures, such as the dissemination of doctrine or rules of engagement related to the type of weapon.¹²

All the reviews are documented but the records are classified as they contain proprietary data and classified information. Generally, records may be accessed by the office that generated those records. In practice, however, DOD attorneys often share legal reviews of weapons with attorneys in other DOD Components, who are also authorized to review weapons and who might have occasion to review similar types of weapons. DOD attorneys also often seek the concurrence of lawyers in other DOD legal offices with respect to their legal opinions. However, such official coordination and concurrence does not negate the DOD policy requirement for those other DOD Components to obtain an individualized legal review should that DOD Component decide to acquire the same weapon system. When the system is exported to another country some information from the review can be provided.

Scope of application

Definitions

Weapons. A variety of definitions of ‘weapons’ and ‘weapon systems’ are employed to determine whether a legal review is required; for example, the Department of the Army’s definition of weapons subject to review includes ‘all conventional arms, munitions, materiel, instruments, mechanisms, or devices which have an intended effect of injuring, destroying, or disabling enemy personnel, materiel, or property’. A ‘weapon system’ is defined as ‘The weapon itself and those components required for its operation, but is limited to those components having a direct injuring or damaging effect on individuals or property (including all munitions such as projectiles, small arms, mines, explosives, and all other devices that are physically destructive or injury producing)’.¹³

The Department of the Navy defines weapons and weapon systems subject to review as ‘all arms, munitions, materiel, instruments, mechanisms, devices, and those components required for their operation, that are intended to have an effect of injuring, damaging, destroying, or disabling personnel or property, to include non-lethal weapons’. However, ‘weapons do not include launch or delivery platforms, such as . . . ships and aircraft’.¹⁴

The Department of the Air Force’s definition of weapons subject to review includes ‘devices designed to kill, injure, disable or temporarily incapacitate people, or destroy, damage or temporarily incapacitate property or materiel’. Weapons, however, ‘do not include devices developed and used for training,

¹² Rules of engagement, standard operating procedures, and instructions are developed and issued through DOD procedures other than the procedures used to review the legality of weapons. Although such rules, standard operating procedures, and instructions can help to ensure compliance with the law of war, they are generally not developed because they are legally required and are typically developed for reasons other than legal considerations. In addition, although legal advice might be given to ensure such rules, procedures, and instructions would be consistent with the USA’s law of war obligations, such legal advice might be given by attorneys other than the attorney who reviewed the legality of the weapon.

¹³ US Department of the Army, Army Regulation 27-53 (note 11), para. 3.

¹⁴ US Department of the Navy, Office of the Secretary, Instruction 5000.2E (note 11), para. 1.6.1c.



or launch platforms to include aircraft and intercontinental ballistic missiles'.¹⁵

DOD policy also requires the review of non-lethal weapons. Under DOD policy, non-lethal weapons are defined as 'Weapons, devices, and munitions that are explicitly designed and primarily employed to incapacitate targeted personnel or materiel immediately, while minimizing fatalities, permanent injury to personnel, and undesired damage to property in the target area or environment'. Non-lethal weapons are intended to have reversible effects on personnel and materiel.¹⁶

Means and methods of warfare. Although it does not set out a definition of 'means and methods of warfare', the DOD *Law of War Manual* provides information that may be relevant to interpretations of the phrase 'means and methods of warfare'.¹⁷

DOD policy does not establish a specific requirement to review the lawfulness of new 'methods of warfare' that are studied, developed or acquired. In practice, legal advice regarding new methods of warfare is given where appropriate (e.g. an attorney reviewing the legality of the acquisition of a weapon might review the legality of any new method of warfare that might be suggested for the use of that weapon). DOD policy does not impose a specific requirement to review the legality of military doctrine. However, in practice, such reviews may be conducted as part of advice to the writers of military doctrine. Similarly, DOD policy establishes a responsibility for the heads of DOD Components to make qualified legal advisers at all levels of command available to provide advice about law of war compliance during the planning and execution of military exercises and operations.¹⁸

The USA does not have a single, formal 'review mechanism'

Legal criteria

DOD Directive 5000.01 requires that the acquisition of DOD weapons and weapon systems be consistent with all applicable domestic law and treaties and international agreements as well as with customary international law and the law of war.¹⁹ DOD Directive 2060.1 requires that all DOD activities be fully compliant with arms control agreements of the USA.²⁰

For the DOD, the initial focus of a legal review of the acquisition or procurement of a weapon is often on whether the weapon is illegal per se. A weapon may be illegal per se if a treaty to which the USA is a party or customary international law has prohibited its use in all circumstances.²¹

However, most weapons are not illegal per se—that is, their use may be lawful in some circumstances but unlawful in others, such as if the weapons are used to attack combatants placed *hors de combat*. Law of war issues related to targeting are generally not determinative of the lawfulness of a weapon. It might, for example, only be possible to determine whether use of a weapon would be consistent with the requirement that attacks may only be

¹⁵ US Department of the Air Force, Secretary of the Air Force, Air Force Instruction 51-402 (note 11), Attachment 1.

¹⁶ USDOD, Directive 3000.03E (note 9), para. 4.

¹⁷ USDOD, Office of the General Counsel (note 10), para. 5.1.1.

¹⁸ USDOD, Directive 2311.01E, DOD Law of War Program, 9 May 2006, para. 5.7.

¹⁹ USDOD, Directive 5000.01 (note 9), Enclosure 1, para. E1.1.15.

²⁰ USDOD, Directive 2060.1 (note 10), para. 3.

²¹ USDOD, Office of the General Counsel (note 10), para. 6.1.1.

directed against military objectives when the facts of a particular military operation are known. That said, weapons that are inherently indiscriminate are prohibited. In addition, certain weapons, such as mines, are subject to specific rules on their use to reduce the risk of harm to the civilian population.

In general, three questions are considered when reviewing the acquisition of a weapon for consistency with US law of war obligations: (a) whether the weapon's intended use is calculated to cause superfluous injury; (b) whether the weapon is inherently indiscriminate; and (c) whether the weapon falls within a class of weapons that has been specifically prohibited. If, after considering these three questions, the weapon is not prohibited, the review should also determine whether there are legal restrictions on the weapon's use that are specific to that weapon.²²

IHRL is not usually considered in the review process. However, in certain cases when a review assesses the legality of a weapon under customary international law, the reviewer may deem it relevant to consider the fact that the weapon is widely used by law enforcement agencies. This would support the conclusion that states generally consider that such a weapon can be used in a way that is consistent with their international human rights obligations, which, in turn, would also imply that the weapon would be consistent with the customary law of war.

Policies

The DOD has policies specific to different types of weapon systems. Where appropriate, attorneys have advised on US and DOD policies related to weapons. These weapon-specific policies are periodically adapted by policy-makers to changing circumstances. While the requirements reflected in these policies are often in line with international law, they are not imposed purely on that basis. Such policies include those relating to (a) non-lethal weapons, (b) autonomy in weapon systems, (c) cluster munitions, and (d) anti-personnel landmines.

Policies relating to non-lethal weapons. DOD Directive 3000.03E sets out DOD policy for non-lethal weapons as well as the responsibilities for management of the DOD's non-lethal weapon programme.²³ DOD Instruction 3200.19 establishes policy, assigns responsibilities and provides procedures for a human effects characterization process in support of the development of non-lethal weapons, non-lethal technologies and non-lethal weapon systems. It requires a characterization of the human effects of non-lethal weapons during the materiel development process to assess the likelihood of achieving the desired effects as well as to identify the risk of significant injury to humans from counter-personnel non-lethal weapon systems or (in the form of collateral damage) from counter-materiel non-lethal weapon systems.

Policies relating to autonomy in weapon systems. The acquisition of autonomous or semi-autonomous weapon systems is subject to a legal review pursuant to DOD Directive 5000.01. Certain autonomous and semi-autonomous weapon systems require an additional policy review under DOD Directive

²² USDOD, Office of the General Counsel (note 10), para 6.2.2.

²³ USDOD, Directive 3000.03E (note 9), para. 1; and USDOD, Instruction 3200.19, Non-Lethal Weapons (NLW) Human Effects Characterization, 17 May 2012, para. 1.



3000.09. Directive 3000.09 sets out DOD policy and assigns responsibilities for the development and use of autonomous and semi-autonomous functions in weapon systems, including manned and unmanned platforms.²⁴ DOD Directive 3000.09 establishes guidelines aimed at minimizing the probability of failures in autonomous and semi-autonomous weapon systems that could lead to unintended engagements. It is DOD policy that autonomous and semi-autonomous weapon systems should be designed to allow commanders and operators to exercise appropriate levels of human judgement over the use of force. Such autonomous or semi-autonomous weapon systems must be reviewed and approved by the Under Secretary of Defense for Policy, the Under Secretary of Defense for Acquisition, Technology and Logistics, and the Chairman of the Joint Chiefs of Staff before they are formally developed, and again before they are fielded.

Certain autonomous and semi-autonomous weapon systems require an additional policy review

Policies relating to cluster munitions. DOD policy acknowledges that cluster munitions are legitimate weapons that provide distinct advantages against a range of targets and can result in less collateral damage than unitary weapons.²⁵ DOD policy nonetheless recognizes the need to minimize the unintended harm to civilians and civilian infrastructure associated with unexploded ordnance from cluster munitions. Therefore, it is current DOD policy that, after 2018, DOD Components will only employ cluster munitions containing submunitions that, after arming, do not result in more than 1 per cent unexploded ordnance across the range of intended operational environments.²⁶ Until the end of 2018, the use of cluster munitions that exceed the 1 per cent unexploded ordnance rate must be approved by the appropriate senior operational commanders.

Policies relating to anti-personnel landmines. The USA's anti-personnel landmine policy, which dates from 2014, states that the USA shall (a) not use anti-personnel landmines outside the Korean Peninsula; (b) not assist, encourage, or induce anyone outside the Korean Peninsula to engage in activity prohibited by the 1997 Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction (APM Convention); and (c) undertake to destroy stockpiles of anti-personnel landmines not required for the defence of the Republic of Korea. The policy also states that the USA shall not produce or acquire any anti-personnel munitions that are not compliant with the APM Convention.²⁷

Method

Time frame

In general, DOD policy neither specifies at what stage in the process of acquiring weapons the legality of such weapons should be reviewed nor who

²⁴ USDOD, Directive 3000.09, *Autonomy in Weapon Systems*, 21 Nov. 2012, para. 1.

²⁵ USDOD, Office of the Secretary of Defense, 'DOD policy on cluster munitions and unintended harm to civilians', 19 June 2008, p. 1.

²⁶ USDOD (note 25), p. 2.

²⁷ White House, Office of the Press Secretary, 'Changes to US anti-personnel landmine policy', Fact sheet, 23 Sep. 2014.



should request such review. The weapon may not be acquired or procured, however, unless the relevant legal requirements have been met.

The heads of DOD Components that acquire weapons or weapon systems may specify at what stage in the process of acquiring weapons the review should take place.

In practice, legal advice on the intended acquisition of weapons may be provided at many different stages in the acquisition process. For example, persons responsible for weapon development or testing may consult with legal advisers before a formal review is conducted or a formal opinion is given by an attorney authorized to conduct such a review.

DOD policy does not provide for a fast-track legal review process. However, it does allow for streamlined acquisition procedures when there is a strong threat-based or operationally driven need to field a capability solution within a short time frame.²⁸ Such procedures do not obviate the need for a legal review that would otherwise be required.

The DOD recognizes that technology will evolve, which may lead to modifications to certain weapons or weapon systems. Depending on the extent of the modification a new review of a particular system for compliance with the law of armed conflict may be warranted.²⁹ For a variety of reasons, it has been DOD practice not to permit the modification of weapons without proper authorization. Furthermore, weapons must not be modified in the field for the purposes of aggravating the harm inflicted on incapacitated persons.³⁰

Expertise

Within the DOD, the legal review of weapons is one aspect of a much larger process of acquiring weapons. Rather than leading the acquisition process or directing other departments, sectors and experts involved in the acquisition process, lawyers support the larger acquisition process by helping to ensure that the acquisition is consistent with US and applicable international law. Many of the military services have safety centres or safety organizations within commands that provide expertise to subordinate commands and private industry under contract to the DOD. Because of the DOD's multidisciplinary approach to reviews, there is significant coordination between the lawyer conducting the legal review and the weapon providers, the procurement agency and the end user. Types of experts who might provide input to the legal review, as necessary, include safety officers, software developers and engineers.

In practice, legal advice on the intended acquisition of weapons may be provided at many different stages in the process

Empirical evidence

Types of information. In general, DOD policy does not specify the particular types of information that must be considered during the legal review of weapons or the sources from which that information should be obtained. The

²⁸ This streamlined acquisition process is for effectively fulfilling urgent operational needs and other quick-reaction capabilities that can be fielded in under 2 years and that are below a certain cost threshold. USDOD, Instruction 5000.02, Operation of the Defense Acquisition System, 7 Jan. 2015, para. 5a(2)(b); and Enclosure 13, para. 1.

²⁹ See e.g. US Department of the Air Force, Secretary of the Air Force, Air Force Instruction 51-402 (note 11), para. 1.3.

³⁰ USDOD, Office of the General Counsel (note 10), para. 6.3.2.



type of information to be considered will depend on the nature of the specific legal requirement being considered. In the case of non-lethal weapons, DOD policy provides that DOD Components must ensure that human effects assessment data is provided to support the legal review.³¹ Each DOD Component head may specify additional or more exacting requirements applicable to that Component, consistent with DOD policy. This could include specifying what kind of information attorneys authorized to conduct legal reviews should consider and from what sources.

Testing and evaluation. In general, DOD acquisition policies provide for testing and evaluation of proposed weapons and weapon systems as part of assessments related to a weapon programme's readiness to proceed to the next acquisition phase and the soundness of committing resources towards the weapon's acquisition.³² For the DOD, testing new weapons and validating their performance are part of prudent military practice, and testing and validation are not generally undertaken based on a sense that they are required by international law.

The Director of Operational Test and Evaluation is responsible for (a) promulgating DOD policies related to operational test and evaluation; (b) co-approving test and evaluation plans, strategies, and other documents for major and other designated defence acquisition programmes; and (c) approving test and evaluation plans, strategies, and other documents related to the acquisition of other weapon systems that are under his or her oversight.³³ In addition, each Military Department is required to establish an independent operational test agency to plan and conduct operational tests.³⁴ Operational tests are conducted by appropriate operational test organizations, depending on weapon type, in a realistic threat environment. DOD Components manage and operate major range and test facility base capabilities and resources to provide test and evaluation capabilities in support of the DOD acquisition system.³⁵ Such ranges and bases may be used by other DOD users (including DOD training users), and by users outside of the DOD, such as other US Government departments and agencies, state and local government bodies, allied foreign governments, and commercial entities.³⁶

³¹ USDOD, Instruction 3200.19 (note 23), para. 6.

³² USDOD, Directive 5000.01 (note 9), Enclosure 1, para. E1.1.11.

³³ USDOD, Directive 5141.02, Director of Operational Test and Evaluation, 2 Feb. 2009, para. 6.

³⁴ USDOD, Directive 5141.02 (note 33), para. 6.

³⁵ USDOD, Directive 3200.11, Major Range and Test Facility Base, 27 Dec. 2007, Enclosure 2.

³⁶ USDOD, Directive 3200.11 (note 35), para. 4.5.



Abbreviations

AIRCW	Advisory Commission on International Law and Conventional Weapons Use
APM Convention	1997 Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction
CDF	Chief of Defence Force
DCDC	Development, Concepts and Doctrine Centre
DMO	Defence Military Organization
DOD	Department of Defense
FFI	Norwegian Defence Research Institute
FFU	Chief of Defence International Law Committee
IHL	International humanitarian law
IHRL	International human rights law
LRC	Belgian Commission for the Legal Review of New Weapons, New Means and New Methods of Warfare
MOD	Ministry of Defence
NZDF	New Zealand Defence Force



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SIPRI BACKGROUND PAPER

SIPRI COMPENDIUM ON ARTICLE 36 REVIEWS

VINCENT BOULANIN AND MAAIKE VERBRUGGEN

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