

## Report of the Second ‘Silent Leges Inter Arma?’ International Conference held in Bruges from 19 to 21 September 2018

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### **I. Introduction**

From 19 to 21 September 2018, the Belgian Group of the International Society for Military Law and the Law of War (ISMLLW) organized the second edition of the ‘*Silent leges inter arma?*’ international conference after a successful first edition in September 2017. In line with the first edition, this conference was hosted at the Grand Hotel Casselbergh in the historic centre of Bruges. The aim of the conference was

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to bring together legal practitioners and academics of various countries active in the field of security and defence. The conference gathered over 80 delegates and created a platform to exchange ideas and discuss current legal developments and challenges within the domain of security and defence. The great variety of expert speakers meant the discussions were of high quality and they proved to be very stimulating. This report summarizes the main discussions held by the five panels.

## **II. Conference Overview**

### **1. Wednesday 20 September 2018**

#### **A. Opening of the Conference**

On 19 September 2018, Mr. Ludwig Van Der Veken, President of the Belgian Group and Secretary-General of the ISMLLW, kindly welcomed the participants of the ‘Silent leges inter arma?’ international conference to Bruges and then introduced Mrs. Claude-France Arnould, Ambassador of France to Belgium and former Chief Executive of the European Defence Agency.

Mrs. Arnould started her opening speech with a special tribute to Mr. Herman Van Rompuy, who *inter alia* made the link between the use of chemical weapons (a topic on the agenda of this international conference) and European defence, by inviting Heads of States and Governments of the EU Member States to the city of Ypres. Moreover, as the first President of the European Council, he also brought security and defence topics such as strategic autonomy and capabilities to the level of EU Heads of States and Governments. These topics have become increasingly important. Mrs. Arnould referred to the interventions in the Yugoslavia War, which required U.S. involvement. France and the UK started arguing for more cooperation in the area of defence, in particular in the field of capability development. Mrs. Arnould stated that the results could be seen in past EU operations in the DRC as well as in Palestine, and she believes these were clear examples of the fact that the EU not only brings together capabilities but also is able to find alternative resources through development support. There is still a long way to go. During the strikes in Libya, European nations again had to rely heavily on U.S. support. Nevertheless many projects are moving in a positive direction. Mrs. Arnould noted that President Macron is genuinely supportive of the efforts to strengthen European defence and that France’s offer to Belgium to partner up in this domain should be seen in this context of defence rather than in the context of trade.

Mrs. Arnould defined the importance of the partnership with the United States as the second reason why European defence is high on the agenda. She underscored that the strengthening of the EU is, contrary to specific earlier discourse in the U.S., not threatening NATO but instead reinforcing it. The new generation of equipment and systems will ensure a high level of connectivity. Mrs. Arnould emphasized that working together with partners who share vital interests is crucial, and in a partnership States should be able to count on each other’s efficiency.

Thirdly, Mrs. Arnould advocated stronger links between civilian and military capabilities and the need to rely on European technical and industrial capabilities. In this context, she cited various French proposals, such as the ‘initiative européenne d’intervention’ evolving around the idea of sharing a strategic culture and advanced planning to reinforce EU structures, as well as the use of Article 42.7 of the Treaty on the European Union which states that if a Member State is the victim of armed aggression on its territory, the other Member States have an obligation of aid and assistance by all means in their power. By opening debate regarding this Article, Mrs. Arnould aims to create more synergies between armies without harming the concept of national sovereignty.

Fourthly, Mrs. Arnould talked about the development of capabilities and an autonomy strategy for European equipment, meaning the creation of full interoperability between European capabilities. A vital element is the financial aspect, in which the European Defence Fund may be a good incentive. Furthermore, Mrs. Arnould believes that the European Defence Agency (EDA) is a well-designed structure for supporting and ensuring the good use of this Fund.

Finally, Mrs. Arnould touched upon the issue of chemical weapons and French involvement in fighting the use and development of these weapons. She argued for a reinforced mechanism to hold actors responsible for the use of chemical weapons, which must be protected from interference from States. To this end, a partnership against the use of these weapons must be created which would complement the international texts against proliferation of chemical weapons. Mrs. Arnould concluded her opening speech by underscoring the link between European defence and chemical weapons. She believes that European defence is crucial to the protection of vital interests in the unpredictable and dangerous world of today and tomorrow. Europe needs to have the influence to deter aggression and non-compliance and to be a real and effective actor for peace and respect for human rights.

## **B. Rights of Military Personnel in the EU Security and Defence Context**

The first panel of the second ‘*Silent leges inter arma?*’ international conference, chaired by Mr. Emmanuel Jacob, President of EUROMIL, explored the exercise of military personnel’s rights across the European Union. Three speakers gave presentations. Lieutenant Colonel Martina Hojka focused on medical support to military Common Security and Defence Policy (CSDP) missions and highlighted the importance of interoperability between the different Troop Contributing Countries in ensuring a high standard of medical care. Dr. Marta Hirsch-Ziembinska presented on the role of ombudsmen in the protection of military personnel. Finally, Brigadier General (ret.) Jan Peter Spijk outlined the difficulties involved with the coordination and harmonization of military personnel regulations.

The Chairman, Mr. Emmanuel Jacob, commenced by saying a few words about the mission of EUROMIL and the many challenges it faces. EUROMIL is the European Organisation of Military Associations (the name of the organization will, however, soon be modified to include trade unions). EUROMIL’s core mission as a non-governmental organization is to promote, at a European level, the professional and social interests as well as the fundamental rights and freedoms of European military personnel. This mission is complicated to say the least, due to the great variety of processes, protected rights and tools at the disposal of military associations. In an attempt to map the different levels of protection, EUROMIL categorized European countries according to the associative rights they confer to their military personnel: the right to have trade unions, the right to join a professional association or the absence of such rights.

Mr. Emmanuel Jacob then shared some background information on the Common Security and Defence Policy with the audience. Recent developments suggest that discussions and initiatives in this field have intensified over the past two years. The Global Strategy for the European Union’s Foreign and Security Policy (2016) promotes the creation of an ever-stronger European Union, ‘an even more united and influential actor on the world stage that keeps citizens safe, preserves our interests, and upholds our values’. The launch of the European Defence Fund (EDF) and of the Permanent Structured Cooperation (PESCO) are but some of the initiatives tending to that aim. While current discussions take the integration of military personnel one level up by suggesting the establishment of a ‘European Army’ or a ‘European Defence Union’, the urgent need to harmonize the rights of military personnel across the European Union already exists, as European soldiers are working together in CSDP missions and should therefore enjoy equal conditions and treatment.

The first speaker, Lt Col Martina Hojka, focused on medical support provided to military CSDP missions. She explored the main principle when it comes to medical support to EU-led Crisis Management Missions and Operations: that medical support to deployed forces remains the national responsibility of the Sending State.

Within the medical support chain, anything hampering interoperability will automatically hinder the protection of lives. To give a concrete example, every time a patient has to be disconnected and reconnected to a device providing for some of his or her vital functions, the patient’s life might be threatened if, due to a lack of interoperability, the reconnection does not work immediately. Interoperability in that field is therefore crucial, but difficult given the variety of actors and regulations involved.

Since medical support is a national responsibility, national regulations will be applied and while some national regulations might contain similarities, others are more complex to reconcile or even outright contradictory. To add to the complexity, medical standards might even differ within a Member State (different standards and procedures for the civilian sector compared to military medical services).

Lt Col Hojka then highlighted the fact that a unique European medical standard is lacking. Other documents are however used as guidelines in the context of CSDP operations (examples include NATO Allied Joint Publication 4.10, Doctrine for Medical Support; the definition of health according to the World Health Organisation and the Geneva Conventions; and the European Charter of Medical Ethics).

Recently, both NATO and the European Union launched programs aimed at remedying the capability gaps still existing within the national forces: The NATO Framework Nation Concept (2014) and the European Medical Command Project developed within the PESCO (2017). Here again, interoperability needs to be considered. In conformity with the Joint Declaration on EU-NATO Cooperation (Warsaw Summit 2016), both international organizations should promote synergies and avoid duplications.

The speaker concluded her presentation by saying that the legal aspects of medical support in CSDP operations constitute the biggest challenge and that there is a critical need for legal experts in the medical military field.

The second speaker, Dr. Marta Hirsch-Ziembinska, talked about the importance of ombudsmen's proceedings in the protection of military personnel. Dr. Hirsch-Ziembinska is the Head of the Complaints and Inquiries Unit, Head of ICT and the Principal Legal Adviser of the European Ombudsman. She also acts as a coordinator for the European Network of Ombudsmen (ENO). She defined the European Ombudsman as an independent and impartial body that holds the EU administration accountable and promotes good administration. The body strives to fulfil and promote the right to good administration, enshrined in Article 41 of the European Charter of Fundamental Rights.

The European Ombudsman is particularly needed when the law is silent or when a judicial decision is not able or not sufficient to provide an acceptable answer. In such cases, the ombudsmen can provide a remedy. The most prominent feature of ombudsmen is that they abide by the principles of good administration, such as the principle of fairness. Other features which characterize the work of ombudsmen in handling complaints include flexible procedure, timely outcomes, easy and free access, non-binding decisions and an atmosphere of trust.

The European Ombudsman receives complaints from military personnel in CSDP missions and operations. Dr. Hirsch-Ziembinska however noticed a change over time in the nature of the complaints brought before the European Ombudsman. While the first generation of complaints had to do with the lack of remedies in cases of maladministration occurring in the context of CSDP missions, the second generation of complaints pertains to reported violations of fundamental rights (notably the right to a fair hearing in relation to internal administrative proceedings).

The close cooperation between the European Ombudsman on the one hand and national and regional ombudsmen on the other is also to be noted. This cooperation takes place within the European Network of Ombudsmen, established over 20 years ago.

The third and last speaker was Brig Gen (ret.) Jan Peter Spijk, Honorary President of the ISMLLW. He gave a presentation outlining the difficulties linked to the coordination and harmonization of military personnel regulations.

Nowadays, with more work being done jointly in multinational operations, military personnel are subject to different labour conditions pursuant to national regulations. This point was illustrated by two examples (wages and maternity leave) found in the EUROMIL database.

Brig Gen Spijk explained the three different sets of labour conditions currently in force: primary labour conditions which have a direct monetary value or effect (i.e. wages and pensions); secondary labour

conditions (e.g. travel costs and overtime leave); and tertiary labour conditions (certain material benefits such as a leased car).

Many factors influence the labour conditions in force in a State: national politics (as the government must decide on the share of national budget that will be attributed to the Ministry of Defence); balance within the Defence budget (personnel costs are but one of the budget items); choices within the personnel budget (e.g. do we increase wages or pension rights?); and relations with civilian personnel. With each State and each Ministry of Defence prioritizing different factors, the enormous diversity of labour conditions among States is readily apparent.

The complexity described above makes harmonization a particularly difficult undertaking in this field. Despite various efforts (notably within the Eurocorps and within the Headquarters 1 (German/Dutch) Corps), the results achieved thus far as well as the wide discretionary margin granted to States by European Union regulations on Defence-related matters show that States are not yet willing to give up a portion of their national sovereignty for harmonization purposes in that field.

According to Brig Gen Spijk however, a fully harmonized and coordinated labour conditions landscape is possible and should be modelled on the civilian personnel regulations in force within NATO as well as within the European Union, ideally achieved through the establishment of European forces.

Following the three presentations, there was a brief discussion regarding the combined legal expertise from all nations in the multinational Headquarters as well as the role of the European Court of Human Rights in this area.

### **C. Use of Chemical Weapons: from Ypres to Idlib**

The second panel on Wednesday dealt with the use of chemical weapons. This panel was chaired by Professor Dr. Wolff Heintschel von Heinegg, President of the ISMLLW. This part of the day also included a presentation by Mr. Sven Devroe, Senior Chemical Demilitarization Officer at the Organisation for the Prohibition of Chemical Weapons (OPCW).

Prof. Dr. Wolff Heintschel von Heinegg warmly welcomed the speakers and gave an introduction to the topic of the use of chemical weapons. He started off by saying that the Chemical Weapons Convention (1993) was believed by many to be a significant step forward with respect to arms control. The use of chemical weapons was not seriously considered by States in the period directly following the Convention's adoption and entry into force. Prof. Dr. Heintschel von Heinegg mentioned, however, that this optimism may now be misplaced, in light of chemical weapon use by the Syrian and Iraqi governments. Aside from the use of these weapons in the course of an armed conflict, Prof. Dr. Heintschel von Heinegg reminded the audience that these chemical agents can be used for purposes other than hostilities, such as Novichok agent which was used in the UK, resulting in the death of two civilians. Following the use of chemical weapons in Syria, it became clear that some States, such as the UK, France and the US, were willing to intervene via a limited use of force against another State, even without legal justification for use of force. The fact that such intervention did not cause a major outcry by other States reinforced the willingness. Prof. Dr. Heintschel von Heinegg stated that we must take into account not only those States directly involved in a conflict, but also the reactions of other governments. He asked the question of whether we should hope for international criminal law to deal with these kinds of situations.

This introduction was followed by a presentation by Mr. Sven Devroe, Senior Chemical Demilitarization Officer at the OPCW. Mr. Devroe gave the audience an overview of the use of chemical weapons while simultaneously posing open questions regarding past and recent events. He started off his presentation by elaborating on what exactly constitutes a chemical weapon. Mr. Devroe explained that according to the Chemical Weapons Convention, the definition of 'chemical weapon' is not limited to bombs filled with chemical agents, but also includes all toxic chemicals and their precursors (if used as a weapon during warfare), all munitions and devices (designed and used as a chemical weapon), and any equipment specifically designed for the deployment of these munitions. Mr. Devroe mentioned that the first

international convention prohibiting the use of poisons and poisonous gas was the Geneva Protocol after the first large-scale use of a chemical weapon, chlorine gas, in Ypres during WWI. This chemical agent was used on multiple occasions and continued to be developed. This very same agent was also used in the Syrian conflict. When speaking of chemical agents, we usually refer to gas, but Mr. Devroe pointed out that the majority of these agents are actually initially in a liquid state. The vapour state or “gas cloud” are only created once dispersed. During World War I and II, tear gases, choking agents and mustard gas continued to be used.

Mr. Devroe touched upon several topics under the umbrella of chemical weapons and their use: Riot Control Agents, G group nerve agents, unexploded ordnance, the development of binary agents and the principle of universality. In respect of Chemical Warfare Agents, the Geneva Protocol prohibited their use though not the stockpiling of these chemical weapons. According to Mr. Devroe, this led many countries to make reservations, arguing that retaliation would be possible. As a result the development of Chemical Warfare Agents continued. G group nerve agents (e.g. Tabun, Sarin and Soman) were discovered at the beginning of WWII and were more toxic and lethal in smaller amounts than previous agents. Mr. Devroe noted that 20-30% of all ‘used’ munitions from the two World Wars were defective and still to be found today. Our soils remain saturated with unexploded ordnance, including chemical munitions. Besides the issue of unexploded chemical ordnance, the question of what to do with the unusable stockpile of chemical munitions from WWI and WWII arises. According to Mr. Devroe, a large quantity of these munitions were dumped in the sea, which was an accepted and approved method of disposal. Under the Chemical Weapons Convention, chemical weapons dumped at sea prior to 1985 don’t need to be declared. Mr. Devroe explained that by the time of the Cold War large stockpiles of all types of chemical weapons existed in the US and the USSR, and new delivery methods (missile warheads which could go much further) and new binary agents were being developed. As distinct from unitary munitions which have one single nerve agent and are difficult to store, use and transport, binary agents use two chemical products which are lethal when mixed, but not by themselves. Thus storage, shipment and transfer of binary agents is much safer and easier. Concluding the first part of his presentation, Mr. Devroe noted that more than 90% of all declared chemical weapons have been destroyed. The Chemical Weapons Convention has 193 States Parties. Notwithstanding the absence of Israel (signed, but not ratified), North Korea, South Soudan and Egypt, the treaty has almost reached universality.

In the second part of his presentation, Mr. Devroe discussed the actors using chemical weapons. In recent years, we have seen the emergence of non-state actors using chemical weapons, such as chlorine and sulfur mustard use in Iraq and Syria by Daesh. In order to produce Weapons of Mass Destruction (WMDs), one needs highly technological programs which only state actors have the capabilities to develop. Mr. Devroe argued that non-state actors, however, can easily produce suboptimal low-quality chemical agents for targeted and smaller numbers of casualties. As Mr. Devroe pointed out with a chart, nerve and blood agents remain the hardest agents to produce, while a blister agent like mustard gas (HD) or chlorine (Cl<sub>2</sub>) may continue to be deployed by non-state actors. He stated that non-state actors pose a well known threat which needs to be dealt with and it remains a national responsibility to criminalize and prosecute such actors. Finally, Mr. Devroe pointed out that the difference between state actors, non-state actors and state-sponsored actors remains quite interesting.

This presentation was followed by a number of interesting questions and lively discussion regarding this topic. The questions raised concerned the responsibility for older and abandoned chemical weapons, the work of the OPCW regarding Syria, the lethality of degraded old munition, fact-finding missions after the use of chemical weapons in Syria, the crystallization of the concept of humanitarian intervention as the world did not respond in large numbers to the US and UK strikes in Syria after its use of chemical weapons, and the use of pepper spray.

After a coffee break, participants gathered for the presentation of the Legal Advisors Worktop Functional Area System (LAWFAS) by Mr. José Maria Da Silva Miguel, who works for the NATO Allied Command Operations (ACO) Office of Legal Affairs. Mr. Da Silva Miguel explained that LAWFAS is a SharePoint

portal with 850 users only available to NATO countries and 7 Partnership for Peace countries. In LAWFAS one can find documents, workspaces, libraries, lists and calendar events. Mr. Da Silva Miguel showed participants how to make use of the system, how to create an account and how a search could be conducted in the LAWFAS system.

The day concluded with a reception hosted at the palace of the Governor of the Province of West Flanders.

## 2. Thursday 21 September 2018

### **A. Use of Weapons: Autonomous Weapons and Artificial Intelligence**

The third session dealt with the use of weapons and more specifically the use of autonomous weapons and artificial intelligence. This session was chaired by Professor Dr. Terry Gill, professor of military law at the University of Amsterdam and the Netherlands Defence Academy. This session included three presentations. The first presentation was by Dr. William H. Boothby, Associate Fellow at the Geneva Centre for Security Policy and co-writer of the HPCR Manual on the International Law Applicable to Air and Missile Warfare, and addressed the topic of highly automated weapon systems. Next Colonel (ret.) Michael Meier, Special Assistant for Law of War Matters at the Office of the U.S. Army Judge Advocate General talked about Lethal Autonomous Weapon Systems (LAWS). Mr. Nicolas Lange, Legal Advisor and Head of the International Law Section, DG Legal Support of the Belgian Ministry of Defence closed off the session by continuing the discussion commenced by Col Meier.

Prof. Dr. Terry Gill warmly welcomed and introduced the three speakers. He gave a brief introduction to autonomous weapons and artificial intelligence, emphasising that these new technologies exist in a context much broader than military affairs alone.

The first speaker, Dr. William H. Boothby spoke about the characteristics of autonomous weapons and how they differ from other weapon systems. He started his presentation by explaining the use of remotely controlled weapons. Remotely controlled weapons are unmanned systems, such as drones or units controlled from afar by a human operator. They differ from autonomous weapons because people still direct the movements of the machine, deciding whether to use its force or not, for instance in launching missiles. Dr. Boothby illustrated his point by bringing up remotely piloted aircraft, which are controlled by a pilot and a sensor operator in a ground station. The remotely piloted aircraft crew receives data from on-board sensors to direct the movement and the action of the aircraft.

Dr. Boothby then spoke about highly automated weapon systems, which use algorithm-based technology. These kinds of weapons, once activated, can identify and engage a target without further human input. The algorithms determine the response of the weapon when a particular stimulus occurs. The algorithm enables compliance with the rules of engagement and the commander's intent, but also limits the weapon's ability to act independently. Use of such automated machines enables a predictable outcome, because if you know the stimulus and the algorithms, you will know the weapon's response.

The next subject was autonomous weapon systems, which are programmed to apply human-like reasoning to determine whether an object is a target or not, whether it should be attacked, and if so, when and how. This technology attempts to simulate human reasoning by emulating the sort of decisions a human operator would make in a similar context. Thus, such an autonomous machine would need to be able to decide not to act when the circumstances make it inappropriate. This type of human-like reasoning involves assessing disparate facts to reach evaluative decisions.

Dr. Boothby believes we do not have to think of autonomous technology in isolation. Indeed, the phenomenon of autonomy permeates many aspects of our daily lives. He identified three particular civilian applications that are interesting to observe. The first one is surgery. Machines can undertake internal surgery and achieve very high levels of precision, but this application also raises concerns. The main issue is how to determine that the machine appropriately performed routine surgery if the human expert is no longer in control. Thus, the presence of surgeons during autonomous surgery is necessary for making critical

judgments for surgical tasks. The second civilian application of autonomous technology is the driverless car, for which human acceptance is also necessary. The third application is biometrics, which are needed to distinguish people from one another. Having considered these three examples, Dr. Boothby concluded that it is necessary to recognize the technology's relevance to different areas of life and how these various uses interact with one another. He contended that awareness of how autonomous technologies work must be raised in order to establish the technology's acceptability. In a military context, the potential uses of autonomy/artificial intelligence include information gathering, offensive influence and attack operations, location and platform defence operations, cyber applications and more.

There are many perceived advantages of autonomous systems. Some of the advantages Dr. Boothby identified are that autonomous systems experience no fear, panic, anger or fatigue, they do not seek revenge, they behave as programmed providing no opportunity for enemy interference and they can operate at digital speed. These factors however are also the source of the many controversies surrounding this technology. Dr. Boothby mentioned problems distinguishing lawful targets from unlawful ones, the application of the proportionality rule, autonomous weapons learning the wrong rules and not respecting legal constraints, and the ethical acceptability of machines deciding what to destroy and whom to kill. He then posed the question of whether, despite the issues, the speed of modern battle rendered the use of autonomous weapons inevitable, and whether pervasive autonomous technology in other areas of life makes autonomous weapons more acceptable. The main question for consideration is whether autonomous weaponization is simply the next stage in the development of remote warfare or if it is going a step too far, thereby necessitating a ban. These open questions concluded Dr. Boothby's speech.

The second speaker, Col. Michael Meier, talked about LAWS. He started off his presentation with a discussion on whether or not there should be a ban on them, then addressed the absence of a standard definition for the term 'autonomy'. On one hand, there is a simple definition: the ability of a machine to perform tasks without human input. On the other hand, the Department of Defense has multiple definitions for it, which are much more complex and discuss different levels of independence, such as one in the 2016 Joint Chiefs of Staff Concept for Robotic and Autonomous Systems Report.

Col Meier also presented the laws applicable to autonomous weapons. As a matter of fact, the law of armed conflict does not prohibit or restrict the use of autonomy. It is beyond dispute that all the law of armed conflict principles with respect to targeting and use of autonomy will apply to autonomous weapon systems. Col Meier insisted on the fact that the responsibility to comply with international humanitarian law will remain upon the person who uses the machine because it cannot be required of the weapons to make legal decisions. Regardless, autonomous weapon systems cannot interfere with the following two principles.

The first principle to take into account is the principle of distinction. Following Article 48 of the 1977 Additional Protocol I, the Parties to a conflict must "at all times distinguish between the civilian population and combatants, and between civilian objects and military objectives". Article 51 of the same text provides that civilians must not be the object of an attack and prohibits "indiscriminate attacks". It is important to emphasize that Human Rights Watch argues that the principle of distinction poses one of the greatest obstacles to fully autonomous weapons complying with International Humanitarian Law. The solution is to have the ability and sufficient knowledge to make sure that these machines are able to make the distinction. Capacity to make distinctions is influenced strongly by environment. For example, it would be easier to identify targets under water than in a dense urban environment.

The second principle to examine is the principle of proportionality. Articles 51(b)(5) and 57(5)(a)(iii) of the Additional Protocol I state that the principle of distinction prohibits "an attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct anticipated military advantage".

The parties to a conflict must "at all times make the distinction between the civilian population and combatants, and between civilian objects and military objectives". Knowing if autonomous weapon



systems can perform proportionality calculations or gauge military advantage is not simply a question of sensors or computations. Rather it is a case by case assessment.

Article 57 of the same Protocol mandates that an attacker exercise “constant care...to spare the civilian population, civilians and civilian objects”, further requiring an attacker to take feasible precautions to spare the civilian population. The commander’s obligation is grounded in reasonableness and good faith, based on the information available to him or her at that time (rather than on hindsight). The necessary feasible precautions are addressed while planning for an attack and must be considered by the commander as they plan to deploy the system. Thus situational awareness will be a key aspect of the decision-making process because of the difficulty in figuring out if an autonomous weapon system will be able to interrupt an attack the way a human pilot would.

Col Meier was of the view that to mitigate the risks, we need to ensure that there is a holistic and proactive review process guided by the fundamental principles of international humanitarian law and this must be done during the development phase and before fielding. These assertions raise multiple questions. Is the necessity for the military to develop or use this new technology justified? Will the use of this technology reduce unnecessary suffering under the principle of humanity? Can this technology enhance the ability to distinguish combatants from civilians? Have sufficient precautions been taken to avoid creating unreasonable or excessive incidental harm in accordance with the principle of proportionality? Col. Meier ended his presentation by addressing these questions.

The third speaker, Mr. Nicolas Lange, gave a presentation about the LAWS and targeting. The first point he discussed was the targeting process, which led to three central questions: who and what may be attacked?; what attacks are prohibited?; and how must the attacks be conducted?. To answer the first question, Mr. Lange brought up the lawful targeting of people under international humanitarian law. According to the principle of distinction, civilians directly participating in hostilities and organized fighting forces that belong to the parties involved in the conflict must be distinguished from the people protected against direct attacks such as civilians, medical and religious personnel and personnel *hors de combat*. Lawful targets include military objectives which are objects that make an effective contribution to military action through their nature, location, purpose or use and objects whose total or partial destruction, capture or neutralization offers a definite military advantage.

Mr. Lange referenced the principle of Article 57 of the Additional Protocol I based on which the attacker must take all feasible precautions to verify the object’s status as lawful target. If doubt remains, the individuals are to be presumed civilians and the objects ordinarily dedicated to civilian purposes are presumed to be civilian objects. Moreover, the targeting board analysis is composed of several steps. The first step is to confirm that the object is a lawful target, for instance whether it is linked to a military objective or if it is a misused protected place. The second step is to verify if there are any special protections for the target. The three following steps are determining the appropriate weapon to use, the minimization of collateral damage and incidental injury, and whether the attack will cause excessive collateral damage or incidental injury.

In the context of LAWS, the question to answer is whether the machine can act with good faith and human sense *in casu* or not. The consequences of using LAWS can be voluntary, affecting direct participants in the hostilities, or involuntary, causing collateral damage. For the collateral damage estimation, Mr. Lange proposed looking at Article 3160.01A of the Chairman of the Joint Chiefs of Staff Manual (U.S.), which establishes standards and methods for estimating collateral damage. This article assists the commander in weighing collateral risk against military necessity and assesses proportionality during the planning and execution phases of combat operations. According to this article, there is a five-step process for estimating collateral damage. Each level is based on a progressively refined analysis of the available intelligence, the weapon types and effects, the physical environment, the target characteristics and the delivery scenarios.

Mr. Lange emphasized that automation must be distinguished from autonomy. Automation, even when pushed to the extreme, is differentiated by the predictability of weapon system responses, which are

programmed and supposed to react the way they were predetermined, with no uncertainty about the final outcome. Autonomy, on the other hand, inherently contains uncertainty. The main distinction is thus predictability. Furthermore, a distinction must be made between the following weapon systems: “man in the loop” for which the robot selects the target, “man on the loop”: for which the human can interrupt the action and “man out of the loop” for which there is no human intervention.

Mr. Lange insisted that nowadays, the risks with “man in the loop” systems are very hard to mitigate. In addition, the principles of the law of armed conflict must be applied, particularly the principles of distinction and discrimination, although the risk of violation of these principles can be minimized by using these weapon systems in missions within a limited time frame. One of the advantages of using autonomous weapon systems is the absence of human emotions such as fear, anger or the desire for revenge. The main idea here is that LAWS are objects not subject to the targeting process. The assessment for which the detachment commander is responsible, is made from the targeting board. Other sources of law are also applicable to the subject such as the human rights law and, to a certain extent, local law.

Mr. Lange concluded that a ban on the development and use of LAWS as such is not necessary because only a human can decide to deploy LAWS and the assessment of the validity of an attack has to be made *a priori*. The main question about LAWS is whether to adapt the legal framework or whether the international humanitarian law system currently in place is sufficient. Furthermore, in regards to responsibility, the machine does not operate in a vacuum, which means that the human will remain responsible.

These three presentations led to a panel discussion with all the participants. The first question called for a discussion on the ability to explain a decision, an attribute that differentiates humans from LAWS. Dr. Boothby’s view was that it would be possible to incorporate an audit trail of the decision making process into the computerized weapon systems. According to his argument, the sequencing alone would explain the information the machine took into account in order to make a decision. Col Meier, meanwhile, clarified that programmers know computers need an audit trail of decision-making and realized the need to program several steps to create such an audit trail, but that unfortunately doing so didn’t appear to be a priority.

The second question discussed by the panel was whether the military necessity to use this technology was justified, and if so, under what circumstances it would be justified. In other words, should we ban the development of these systems? Dr. Boothby illustrated LAWS’ purpose by providing an example of how human decision making may cause more casualties than mechanical decision-making. He insisted that research on human error needs to be conducted, particularly in regard to errors caused by fear or terror. He believes there to be good reasons for not shutting the door on new possibilities when the direction that emerging technologies will take is still unknown, although the ethical risks must be taken into account. Dr. Boothby also mentioned that humans appear prepared to accept human error more so than machine errors.

Next, the panel was asked if autonomous technology reduces the threshold for war. Dr. Boothby answered by saying that although more time is needed to properly answer the question, in his view, the use of such technology *will* reduce the threshold for war. His guess is that if armed conflicts are depersonalized and become “machine versus machine” conflicts, there might be a temptation to lower the threshold.

Debated next was the issue of the commander’s responsibility, that is how realistic the idea of the commander being in charge of decision making is when algorithms take all the steps in the decision making process. The three speakers answered the question by saying that the commander will be knowledgeable about the weapon system and have the advice of the legal review commissions on specific issues. It will be his responsibility to deploy the system in a specific context or not. Thus, the people who are responsible now will maintain their responsibility even with the introduction of new technologies.

## **B. The International Law Applicable to Peace Operations: Protection of Civilians**

The Chair, Mr. William Roelants de Stappers, Deputy Director General for legal affairs from the Federal Public Service for Foreign Affairs, introduced the fourth panel by linking this panel to the Leuven Manual.

He explained that the Leuven Manual<sup>1</sup> is a remarkable work commissioned by the ISMILLW that gives a comprehensive overview of the legal framework regarding peacekeeping operations. The Chair highlighted the importance and relevance of the topic of the fourth panel, ‘Protection of civilians in peace operations’ in the context of the participation of Belgium in the UN Security Council (UNSC) in 2019-2020, as this topic is a priority for Belgium. Mr. Roelants de Stappers introduced the two speakers: Mr. Alfons Vanheusden, head of the Legal Advisory Division in the Belgian Ministry of Defence and Ms. Hanna Bourgeois, PhD Candidate at the Research Foundation – Flanders (FWO) and KU Leuven.

The first speaker, Mr. Vanheusden, gave some important insight on chapter 14 of the Leuven Manual, which addresses the protection of civilians in peace operations. The Leuven Manual does not provide a final answer on all legal questions, but offers interesting policy recommendations where the law is unclear or silent.

It is clear to Mr. Vanheusden that as a general rule, civilians are entitled to protection and therefore all efforts should be taken to avoid, minimize and mitigate negative effects on civilians that might arise from peace operations and to protect civilians from conflict related physical violence. Many recent documents confirm that this is of paramount concern (e.g. the HIPPO Report, 2015),<sup>2</sup> and international human rights law and international humanitarian law give a legal basis for this general rule. Mr. Vanheusden continued by identifying the legal rules and rights most relevant to civilians: the right to life, the principle of distinction and the prohibition of ill treatment and torture.

Mr. Vanheusden confirmed that the Host State has the primary obligation to protect civilians under its jurisdiction. However, peace operations play an important role in supporting governments, and the responsibility of the Host State does not weaken the duty of a peace operation to act within its capabilities when the host government is not able or willing to protect its citizens. An important policy recommendation of the Leuven Manual is that ‘when the protection of civilians is prejudiced, a Peace Operation should use all means available to it to protect civilians who are under imminent threat’. In line with the HIPPO Report, the Leuven Manual explains that the three core principles of UN peacekeeping are to be applied progressively and with sufficient flexibility so as to meet new challenges, and that they should never serve as justification for failing to protect civilians.

Mandates of contemporary peace operations carry the evidence of what the Security Council describes as its ‘progressive consideration of the protection of civilians in armed conflict as a thematic issue’. This materialized as an almost systematic inclusion of protection of civilians in mandates of peace operations. In such case the Leuven Manual recommends that the Rules of Engagement (ROE) reflect the protection task. As for UN operations it is therefore interesting to note Rule 1.8 of the UN Master List of Numbered Rules of Engagement (a catalogue of possible ROEs), which authorizes the use of force up to deadly force to defend any civilian who is in need of protection against a hostile act or hostile intent when competent authorities are not in a position to render immediate assistance. The Leuven Manual recommends that Troop

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<sup>1</sup> T. Gill, D. Fleck, W.H. Boothby and A. Vanheusden, *Leuven Manual on the International Law Applicable to Peace Operations* (Cambridge, Cambridge University Press, 2017).

<sup>2</sup> United Nations, *Uniting our Strengths for Peace - Politics, Partnership and People*, Report of the High-Level Independent Panel on Peace Operations, 16 June 2015.

Contributing Countries – if necessary – adopt national legislation enabling protection of civilians, because national law should never serve as justification for failing to protect civilians.

The Leuven Manual also asserts that the absence of a formal mandate does not relieve a Peace Force of the task to render assistance to persons in need. Mr. Vanheusden explained his view that a second edition of the Leuven Manual should develop the reasoning behind this assertion, which finds support in policy documents pertaining to peace operations, and which is also related to the duty to rescue as a concept in national law systems. The Leuven Manual accommodates for the protection of civilians in the absence of a formal mandate by recommending that whenever a peace operation is not expressly mandated to protect civilians, the operation's Rules of Engagement allow for the possibility of carrying out tasks related to the protection of civilians. In other words, the Rules of Engagement should not hinder the performance of the civilian protection task in circumstances where the peace operation may be required to carry out such a task.

The protection of civilians should also form part of a broader political strategy, resources and equipment should be attributed as needed, and planning is necessary. Adequate training, which includes scenario-based training is essential according to Mr. Vanheusden.

Lastly, Mr. Vanheusden highlighted a few vulnerable groups of civilians that need protection, such as children, persons vulnerable to sexual abuse and refugees. He provided an overview of the rules and regulations pertaining to these specific groups, with an emphasis on the recently signed Safe Schools Declaration for children, the Comprehensive Strategy against sexual misuse by UN peacekeepers and the possibilities for peacekeepers to support the Host Nation with regard to refugees (such as providing protection of refugee camps, logistical help for humanitarian agencies/convoys and the return of refugees). These groups have specific needs (e.g. gender and age), which are context and region specific. Advice regarding the protection of these groups should be incorporated in peace operations. The Leuven Manual provides recommendations to strengthen the protection of these vulnerable groups.

Mr. Vanheusden concluded that the way forward is to adopt a people-centric approach, and move away from bureaucratic rationale and political interest. A commitment to a tailored and people centred approach was launched with the Action for Peacekeeping (A4P) initiative in March 2018 by the UN Secretary-General, but there is still a long way to go.

The second speaker, Ms. Hanna Bourgeois, presented on the meaning of 'all necessary means' to protect civilians in the context of Resolutions adopted by the UNSC, which forms part of her ongoing PhD research. After the failures of UN peacekeeping in Rwanda and Srebrenica in the 1990s, the UNSC started to provide for more robust mandates to protect civilians during UN peace operations. However despite having the explicit mandate to take 'all necessary means' to protect civilians, UN peace operations are still criticized for failing to protect civilians against physical violence.

One of the reasons for this that Ms. Bourgeois identified was that although UNSC Resolutions provide a legal basis to use force to protect civilians, the wording is often vague and leaves ample discretion regarding the scope of the mandate and the legal constraints on the use of force. This has given rise to different interpretations and applications of protection of civilians mandates (PoC mandates) in the field. Thus the question Ms. Bourgeois sought to address was how to understand an authorization to use 'all necessary means' in the context of PoC mandates. Should it simply be interpreted as synonymous to authorizing the use of force, and/or is there an upper or a lower limit to what UN peace forces can or should do to protect civilians?

To formulate an answer to these questions, Ms. Bourgeois first examined the rules of interpretation applicable to UNSC Resolutions. She contended that Articles 31 and 32 of the Vienna Convention on the Law of Treaties may provide guidance as to how to interpret UNSC Resolutions, taking into account the specificities of these instruments. She also submitted that UNSC Resolutions authorizing the use of force need to be interpreted and implemented in accordance with the *jus ad bellum* principles of necessity and

proportionality. Applying these rules of interpretation, Ms. Bourgeois concluded that the phrase ‘all necessary means’ should be understood as referring to all means that are *needed* or *required* to prevent, deter, pre-empt, or respond to threats of physical violence against civilians. Which means are needed or required is highly contextual. Hence, she argued, the actors responsible for the implementation of the PoC mandates retain the discretion to decide which means are needed to ensure the protection of civilians. Ms. Bourgeois proceeded to make three remarks with respect to this discretion.

Firstly, Ms. Bourgeois argued that the discretion to decide which measures are ‘necessary’ implies that PoC mandates only provide for an *authorization* to use force as opposed to an *obligation* to use force to protect civilians. Nevertheless, she contended that a number of recent PoC mandates do seem to impose an obligation to ensure the effective protection of civilians. In other words, there seems to be a ‘best-effort’ obligation to take all efforts needed to effectively pre-empt, prevent, deter, or respond to attacks or imminent threats of physical violence against civilians. She concluded that, at least in a number of situations, there is a lower limit, and thus a legal obligation, to what UN peace forces should do to protect civilians.

Secondly, the discretion might also reflect the fact that UNSC mandates only determine the *why* of the use of force and not the *how* of the use of force. In this respect, Ms. Bourgeois raised the question of whether a UNSC resolution may serve as a legal basis to use lethal force beyond the limits of international human rights law and, if applicable, international humanitarian law. Her conclusion was that a distinction needs to be made between *jus ad bellum* and international human rights law/international humanitarian law. UNSC Resolutions determine *why* force can be used, which in this case would be to protect civilians in order to maintain or restore international peace and security. In other words, they regulate the resort to armed force and the overall use of force. In contrast, international human rights law and international humanitarian law govern the circumstances under which and the manner in which force may be used by forces in the field. To assess, for example, whether an attack can be carried out against a specific objective, Ms. Bourgeois explained that one needs to observe in the first place the rules and principles of international human rights law, and, if applicable, international humanitarian law. The PoC mandate (e.g. through the rules of engagement) may impose *stricter* limits to the use of force on the ground. Yet, at least in principle, the PoC mandate cannot serve as a legal basis to use force *beyond* the limits of international human rights law and international humanitarian law. She did make the caveat that there might be some exceptions to this rule, but did not discuss these in detail.

Lastly, Ms. Bourgeois asserted that the authorization to use force is not unlimited. Rather, the use of force is constrained by the *jus ad bellum* principles of necessity and proportionality. These principles are, in Ms. Bourgeois’s view, general principles of international law that govern all uses of force, including the use of force authorized in the framework of the UN Charter system. Ms. Bourgeois then proceeded to explain the phases of the UNSC decision-making process in which these principles apply. In short, Ms. Bourgeois considers the principles to be applicable to the UNSC’s choice of measures to maintain or restore international peace and security, to the implementation of the relevant UNSC Resolution at the strategic level and to the evaluation of the UN peace operation and its overall use of force.

After a lively discussion in the Q&A segment, the second day of the ‘*Silent Leges Inter Arma?*’ conference was concluded. For the volunteers, there was an opportunity to explore the beautiful city of Bruges by boat. Afterwards, the group could choose between visiting a chocolatier to sample the Belgian specialties, or visiting the ‘Halve Maan’ brewery. The social event ended with a ‘Brugse Zot’ on the terrace of the brewery.

### 3. Friday 22 September 2018

#### **A. The International Law Applicable to Peace Operations – Protection of the Environment**

Friday morning’s panel considered a particular branch of international law applicable to peace operations - the international law on environmental protection. The panel was chaired by Mr Baldwin De Vidts, Vice-President of the International Institute of Humanitarian Law, who announced Mrs. Lone Kjelgaard, Senior

Assistant Legal Advisor at NATO, and Colonel Christian De Cock, Legal Advisor to the Director of the Military Planning and Conduct Capability of the European External Action Service.

Mr. De Vidts started by emphasizing the importance of the environment before as well as during and after a conflict. According to Mr. De Vidts, sustainable peace and security cannot be achieved without taking the environment into account. The protection of environmental and natural resources should be an important element in the transition from armed conflict to peace and security. However, usually the focus is on the protection of civilians and children, on sexual violence and other such issues. Environmental protection is generally not a part of the immediate action taken. Mr. De Vidts observed that an operation abroad can leave behind an important environmental footprint. He gave the example of the cholera epidemic in Haiti, which was brought by the Nepali helpers. Because environmental protection is not currently a priority in peace operations and due to the possibility of operations leaving a significant environmental footprint, transformation of UN peace operations is urgently needed. The chairman was of the view that policies regarding the environment should be established by States in order to avoid having a large and negative impact on the environment.

Mr. De Vidts continued the discussion by underlining the progress made by the international community in the field of environmental protection. He mentioned the Paris Agreement and the UNGA Resolution of 10 May 2018 regarding a global pact for the environment. There is also a UN special rapporteur for the UN International Law Commission, Mrs. Marie Jacobsson, who is dealing with the protection of the environment in the context of armed conflict. Mrs. Jacobsson has written three reports about the topic and has noted that there is no internationally accepted definition of the term 'environment'. Mrs. Jacobsson's view is that a working definition should have a broad scope and not be limited to natural resources such as petrol, fauna or flora, but should also embrace aspects of the environment such as the aesthetic value of landscapes and the enjoyment of nature.

In relation to the protection of the environment during peace operations, the most important legal provisions are Articles 35 and 55 of the First Additional Protocol to the Geneva Conventions. Sadly, the Protocol fails to adequately protect the environment because of the high and uncertain threshold contained in those Articles. The Protocol prohibits warfare that may cost widespread, long-term and severe damage to the natural environment. The problem is that the triple standards are cumulative, setting up a very high threshold.

For Mr. De Vidts, the environment is discussed on a case-by-case basis and he is pleased that the editors of the Leuven Manual intend to include this topic in a second edition of the Leuven Manual.

#### *i. NATO and the Protection of the Environment*

In her presentation, Mrs. Kjelgaard explained that inside NATO there is a difference between environmental security and environmental protection. On the one hand, environmental security is used during peacetime and consists of addressing security challenges emanating from the physical and natural environment. On the other hand, environmental protection is a concept used during trainings and operations in order to protect the physical and natural environment from the harmful and detrimental impact of military activities.

Mrs. Kjelgaard pointed out that there is no 'NATO law'. States are bound by their own national legislation and may also apply standardization agreement (STANAGs) and policies from NATO. Within NATO there is an environmental policy that is binding on States. A NATO policy is binding on States because the decisions are made by consensus. However, despite the binding nature of the policy, the language used is not particularly strong and merely calls on States to endeavour to 'do their best' in regard to the environment. There are also very detailed STANAGs on environmental security and environmental protection but these are not binding.

Environmental security

First, NATO promotes science for peace and security, which prepares States to better face potential disasters and which helps them to have clean water. Secondly, there is the Euro-Atlantic Disaster Response Coordination Centre to which States can submit requests for assistance. Thirdly, the Partnership for Peace Trust Fund project is acting for disarmament in the post-Soviet countries. Finally, there are environment and security initiatives for communicating with political leaders about this topic.

#### Environmental protection

When we are not in peacetime, there should be a balance between operational or training requirements and environmental impact. Mrs. Kjelgaard outlined four steps that need to be taken in this context for protection of the environment.

First, environmental planning is to be conducted to develop awareness of the potential impact of the military activities on each part of the environment (climate, water, air, natural or cultural heritage, etc.). Once NATO knows the potential impact, it can plan the control and management of its activities in order to reduce the impact. Secondly, there must be environmental risk management. NATO does an assessment and corrects some actions if this assessment does not render a positive result. There is also the NATO camp environmental file. When NATO is invited by a nation, it wants to cooperate with it concerning the environment. Finally, there is environmental training and education inside NATO. Mrs. Kjelgaard thinks that if the officers are not educated to respect the environment at home, they will not be careful about the environment during operations. We need to train people in order to put concern about the environment in their military routine.

#### *ii. Environmental Protection in EU-led Military Operations and Missions*

During his presentation, Col Christian De Cock recalled that the EU is doing non-executive military missions and operations (e.g. the training mission in Mali) and CSDP operations. Consequently, the EU-led missions are often outside the scope of an ‘armed conflict’ and therefore the law of armed conflict does not apply.

Within the law of armed conflict, there is direct and indirect protection of the environment. Direct protection stems from general rules about distinction, precaution and proportionality. If there are natural environmental issues, one immediately moves the Collateral Damage Estimation (CDE) to the highest level in order to avoid potential damage. In contrast, indirect protection occurs because the EU protects the civilian population via the natural environment. Col De Cock underlined the fact that in the law of armed conflict framework, there is no comprehensive document dealing with environmental protection, rather the approach is fragmented.

Given that the law of armed conflict will often not be applicable in EU-led operations, Col De Cock recalled that there are about forty instruments relating to the protection of the environment (e.g. treaties about air pollution, chemical protection, climate change, soil, water etc.). In contrast to NATO, the EU has many legal texts with provisions concerning the environment, for example Articles 3 and 21 of the Treaty on European Union; and Articles 191-193 of the Treaty on the Functioning of the European Union.

Col De Cock explained that for the purpose of EU policy, the environment is defined in a broad sense. It encompasses both the human and the natural environment and includes ‘all the surroundings’, such as air, water, land, natural resources, fauna and flora.

Within the EU, the environment is taken into account even prior to a mission. The EU identifies the aspects of the environment within the operation area that will be affected by the military action. During the mission, particular attention is given to local environmental standards. Col De Cock emphasised that the protection of the environment is a task for everybody at all levels. Firstly, at the military strategic level, the commander is responsible for taking the environment into consideration and for issuing an environmental policy for the operation. At the military operational level, the environmental considerations need to be integrated during the training and the planning of a mission and during the conduct of the mission. Finally at the tactical level,

the commanders need to be familiar with the environmental policy, guidance and orders. The Troop Contributing Countries are also responsible for environmental protection and the responsibility of the EU as an international organization cannot be ignored either.

Moreover, consideration of environmental protection is not only the responsibility of the legal advisors but is every actor's responsibility. Currently, there is no 'environmental protection advisor' like there is a cultural or a gender advisor. Environmental protection is included in different staff sections like J4 (logistic) or JMed (medical).

This last and very interesting panel of the 2018 conference concluded with a discussion regarding the inclusion of cultural heritage protection within the scope of environmental protection; the responsibility to draft an annexure on environmental protection for every operation plan; and the assignment of environmental protection advisors to missions. Mr. Baldwin De Vidts concluded the panel by reminding participants of the importance of the drafting of guiding principles and the need to create an unambiguous and direct doctrine and philosophy regarding environmental protection.

### **III. Concluding Remarks**

Mr. Ludwig Van Der Veken, President of the Belgian Group and Secretary-General of the ISMLLW, officially closed the conference and thanked all the speakers and participants for the interesting and lively discussion throughout. He announced that the Belgian Group of the ISMLLW will be hosting a third conference around the same date next year.