

**Report of the 2<sup>nd</sup> ‘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 center of Bruges. The aim of the conference was to bring together legal practitioners and academics of various countries active in the field of security and defense. 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 defense. The great variety of expert speakers ensured the quality of these discussions and proved to be very stimulating. This report summarizes the main discussions held in the 5 panels.

II. Conference overview

1. Wednesday 20 September 2018

***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 subsequently 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 defense, 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 defense topics such as strategic autonomy and capabilities to the level of EU Heads of States and Governments. These topics have become increasingly important. She 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 defense, in particular in the field of capability development. Mrs. Arnould stated that the results could for instance 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. But there is still a long way to go. During the strikes in Libya, European nations again had to rely heavily on U.S. support. But many

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projects are moving in the right direction. Mrs. Arnould noted that President Macron is genuinely supportive of the efforts to strengthen European defense and that France's offer to Belgium to partner up in this domain should be seen in this context, 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. With the opening of the debate regarding this article, Mrs. Arnould aims at creating 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 the 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. Therefore, a partnership against the use of these weapons must be created which will be complementary to 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.

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

The first panel of the 2<sup>nd</sup> '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 CSDP missions and highlighted the importance of interoperability between the different Troop Contributing Countries to ensuring a high standard of medical care. Dr. Marta Hirsch-Ziembinska presented the role of ombudsmen in the protection of military personnel. Finally, Brigadier General (ret.) Jan Peter Spijk outlined the difficulties linked to the coordination and harmonization of military personnel regulations.

The Chairman, Mr. Emmanuel Jacob, started by saying a few words about the mission of EUROMIL and its many challenges. 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 intricate, 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 a right.

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, LtCol 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: the fact that medical support to deployed forces remains a 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 and for military medical services).

LtCol 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 Doctrine AJP 4.10; the definition of health according to the WHO 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 has 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. Some other features which characterize the work of ombudsmen when handling complaints are flexible procedure and timely outcome, easy and free access, the fact that decisions are not binding 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 more than 20 years ago.

The third and last speaker was BrigGen (ret.) Jan Peter Spijk, Honorary President of the ISMILLW. 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 labor conditions pursuant to national regulations. This point was illustrated by two examples (wages and maternity leave) found in the EUROMIL database.

BrigGen Spijk explained the three different sets of labor conditions currently in force: primary labor conditions which have a direct monetary value or effect (i.e. wages and pensions), secondary labor conditions (i.e. travel costs and overtime leave), and tertiary labor conditions (certain material benefits such as a leased car).

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

The complexity described above also makes evident that harmonization is 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 piece of their national sovereignty for harmonization purposes in that field.

According to BrigGen Spijk however, a fully harmonized and coordinated labor 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 HQs as well as the role of the European Court of Human Rights in this area.

### ***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 equally included a presentation by Mr. Sven Devroe, Senior Chemical Demilitarization Officer at the 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 initially after its adoption and entry into force. Prof. Dr. Heintschel von Heinegg mentioned, however, that this hope would soon belong to the past as not only the Syrian government, but also the Iraqi government have proven the contrary. 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 equally be used for purposes other than hostilities, such as the Novichok agent in the UK, where two civilians died. In reaction to the use of chemical weapons in Syria, it has been clear that at least some States, such as the UK, France and the US, were willing to resort to a limited use of force against another State, even without legal justification. The fact that this intervention did not result in a clear outcry

from other States underscored this willingness according to Prof. Dr. Heintschel von Heinegg. He stated that we must be aware that not only directly involved States, but also reactions by other governments must be taken into account. He asked himself 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. He gave the audience an overview of the use of chemical weapons while simultaneously providing 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 it is not solely a bomb filled with chemical agents, but equally, and according to the Chemical Weapons Convention, 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 elements of the use of chemical weapons: Riot Control Agents, G group nerve agents, unexploded ordnance, the development of binary agents and the principle of universality. Regarding Chemical Warfare Agents, the Geneva Protocol did prohibit their use though not the stockpiling of these chemical weapons. According to Mr. Devroe, this resulted in the fact that many countries made reservations and argued that retaliation would be possible. Hence, their development continued. Aside from these agents, G group nerve agents were also discovered at the beginning of WWII and this meant a serious breakthrough regarding lethality in relation to quantity as they were more lethal, more toxic and were to be used in smaller amounts (e.g. Tabun, Sarin, Soman). Mr. Devroe noted that after WWI and WWII 20-30% of all used munition were duds are still to be found today. Our soils remain saturated with unexploded ordnance, including chemical munition. Besides the issue of unexploded chemical ordnance, what to do with the unusable stockpile of chemical munitions of WWI and WWII? According to Mr. Devroe, a large quantity of them were dumped in the sea, which was an accepted and approved method of disposal. Chemical weapons dumped in sea prior 1985, don't need to be declared according to the Chemical Weapons Convention. Moving to the Cold War, Mr. Devroe explained that large stockpiles of all types of chemical weapons existed in the US and the USSR, new delivery methods (missile warheads which could go much further) were developed and new binary agents came into existence. Elaborating on the development of binary agents, Mr. Devroe clarified that unitary munitions with one single nerve agent are difficult to store, use and transport, whereas binary munitions use two chemical products which are not lethal in themselves, only when mixed. Therefore, storage, shipment and transfer were 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 these chemical weapons. Over the last years, we have seen the emergence of non-state actors in the field of chemical weapons such as the use of chlorine and sulfur mustard in Iraq and Syria by Daesh. In order to be able 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 amounts 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) and also 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. It remains furthermore a national responsibility to criminalize and prosecute them. Finally, he 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 as well as a lively discussion regarding this topic. The questions raised concerned the responsibility for older and also 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, all 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 Office of the Legal Advisor of Applied Command Operations (ACO) and Supreme Headquarters Allied Powers Europe (SHAPE). Mr. Miguel explained that this is a SharePoint portal with 650 users only available to NATO countries and 7 PFP countries. In LAWFAS one can find documents, workspaces, libraries, lists and calendar events. Mr. Miguel showed the participants how to make use of the system, showed them how to create an account and how a search could be conducted in the system of LAWFAS.

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

2. Thursday 21 September 2018

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

The third session dealt with the use of weapons as well, more specifically with 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 given 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 discussed highly automated weapon systems. Then 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 discussing the same topic as Col. Meier.

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

The first speaker, Dr. William H. Boothby talked 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, ordinarily drone technology or a unit 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. Mr. 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 onboard sensors to direct the movement and the action of the aircraft.

Mr. Boothby then talked about highly automated weapon systems, which are an algorithm-based technology. This kind of weapon, 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. In this situation, the machines are automated, which entails 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.

Mr. 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. From these three applications, Mr. Boothby concluded that it is necessary to recognize this technology's relevance to different areas, how these different uses interact with one another, and as a result that awareness of how it works must be created in order to establish the technology's acceptability. In the military context, the potential uses of autonomy include information gathering, offensive influence and attack operations, location and platform defense operations, cyber applications and more.

There are many perceived advantages of autonomous systems. Some of the advantages Dr. Boothby mentioned 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. All these benefits, however, lead to the main controversies surrounding this technology. He mentioned on one hand 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. On the other hand, he posed the question



whether the speed of modern battle renders the use of autonomous weapons inevitable and if pervasive autonomous technology in other aspects of life makes autonomous weapons more acceptable. The main question is whether autonomous weaponization is simply the next stage in the development of remote warfare or if it is going a stage too far and necessitates 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 talked about the absence of a standard definition for 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 the 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 Additional Protocol I (1977), 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, for which the context plays a central role. For example, it will probably 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. It is a case by case assessment.

Moreover, Article 57 of the same Protocol requires that an attacker exercises « *constant care (...)* to spare the civilian population, civilians and civilian objects ». It further requires an attacker to take feasible precautions to spare the civilian population. Furthermore, 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.

To mitigate the risks, the speaker is of the opinion that 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 reveal 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 with 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.

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 to take a look 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 the 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 have to be applied, particularly the distinction and the discrimination ones, 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 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 investigated the ability to explain a decision, an attribute that differentiates humans and LAWS. Dr. Boothby's opinion 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. Thus they realize the need to program several steps and to create an audit trail but unfortunately this didn't seem like a big issue for them.

The second point underlined during this panel discussion addressed whether the military necessity to use this technology was justified, and if so, under what circumstances. In other words, should we ban the development of these systems? Dr. Boothby illustrated its purpose by a spoken example of how human decision making may cause more casualties than mechanical decision-making. He insisted that research on human error has to be conducted, particularly for errors caused by fear or terror. He believes there are arguments against shutting the door on new possibilities when the direction emerging technologies will take is still unknown. On the other hand, he clarified ethical risks have to be taken into account. Indeed, we are all prepared to accept human error more so than machine error.

Afterwards, the panel asked if the technology reduces the threshold for war. Dr. Boothby answered by saying that although more time is needed to properly answer the question, according to him, the use of this 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.

The issue of the commander's responsibility was debated next. Indeed, the commander is in charge of decision making but is this not debatable as the algorithms take all the steps? 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.

### ***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 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 next participation of Belgium in the UN Security Council (UNSC) in 2019-2020, as it is one of the priorities for Belgium. Subsequently, he 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, presented some important insights of chapter 14 of the Leuven Manual, which specifically addresses the topic of 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 for 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 that might arise from peace operations on civilians and protect them from conflict related physical violence. Many recent documents confirm that this is of paramount concern (e.g. HIPPO report 2015). From a legal point of view, international human rights law and international humanitarian law give a legal basis for this general rule. Mr. Vanheusden continued by naming the most relevant ones: the right to life, the principle of distinction and the prohibition of ill treatment and torture.

Subsequently, the speaker confirmed that the Host State has the primary obligation to protect civilians under its jurisdiction. However, peace operations play an important role in support of the government. Moreover, 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 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 also recommends that Troop Contributing Countries – if necessary – adopt national legislation enabling protection of civilians, because also 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 thinks 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 translates this 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 hamper the performance of the protection task in circumstances requiring the Peace Operation to carry out such a task.

The protection of civilians should nonetheless 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, the speaker highlighted a few vulnerable groups of civilians that need protection, such as children, persons vulnerable to sexual abuse and refugees. Mr. Vanheusden provided an overview of the rules and regulations for these specific groups, with an emphasis on the recently signed Safe School 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 (protection of refugee camps, logistical help for humanitarian agencies/convoys, the return of refugees). These groups have specific needs (gender, 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 ahead is a people centered approach, away from bureaucratic rationale and political interest. A commitment to have a tailored and people centered 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 the meaning of 'all necessary means' to protect civilians in the context of Resolutions adopted by the UNSC, which is part of her ongoing research for her PhD. 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. Yet, 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 causes 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 concerning the scope of the mandate and the legal constraints to the use of force. This has given rise to different interpretations and applications of protection of civilians mandates (hereafter PoC mandates) in the field. Therefore, the question that the speaker wanted to address, was how to understand an authorization to use 'all necessary means' in the context PoC mandates. Should it simply be read as a synonym of the use of force and/or is there an upper limit or a lower limit to what UN peace forces can or should do to protect civilians?

To formulate an answer to these questions, the speaker first examined the rules of interpretation applicable to UNSC Resolutions. Hereto, she argued that arts. 31 and 32 of the Vienna Convention on the Law of Treaties may provide guidance on how to interpret UNSC Resolution, taking into account the specificities of these instruments. She also held that UNSC resolutions that authorize the use of force need to be interpreted and implemented in accordance with the *ius ad bellum* principles of necessity and proportionality. When applying these rules of interpretation to the terms 'all necessary means', she concluded that this language can 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 with means are needed to ensure the protection of civilians.

After this was established, Ms. Bourgeois made three remarks with respect to this discretion:

Firstly, she 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, Ms. Bourgeois 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 therefore 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 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 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 *ius 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, it regulates 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, the speaker claimed that one has 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, yet without discussing them in detail.

Lastly, Ms. Bourgeois claimed that the authorization to use force is not unlimited. In this regard, she held that the *ius ad bellum* principles of necessity and proportionality for example impose a constrain to the use of force. According to her, the *ius ad bellum* principles of necessity and proportionality are general principles of international law that govern all uses of force, thus also the use of force authorized in the framework of the UN Charter system. She then proceeded to explain in which phases of the UNSC decision-making process these principles apply. To summarize, Ms. Bourgeois considers the principles to be applicable to the choice of measures of the UNSC to maintain or restore international peace and security, to the implementation of the 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, 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 to taste some typical Belgian specialties by visiting a chocolatier, 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

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

The panel of Friday morning dealt with a particular branch of international law applicable to peace operations, the international law related to the protection of the environment. 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 the environmental and natural resources should be an important element in the transition from an armed conflict to peace and security. However, usually, the focus is on the protection of civilians and children, on sexual violence, etc. Environmental protection is generally not a part of the immediate action. Mr De Vidts recalled 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 of those elements – the fact that the protection of the environment is not an immediate action taken during a peace operation as well as the possibility of leaving an important environmental footprint behind – a transformation inside UN peace operations is highly needed. The chairman thinks that policy about the environment should be established by States in order to avoid a huge impact on it.

Mr De Vidts continued by underlining the progress made by the international community in the field of environmental protection. He mentioned the Paris Agreement and the UNGA Resolution from 10 May 2018 towards 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 relation to armed conflict. She has written three reports about this topic and she has noted that there was no internationally accepted definition of the term 'environment'. For her, a working definition should have a broad scope and cannot be limited to natural resources such as petrol, fauna or flora, but instead should also embrace environmental values such as the aesthetic aspect of landscapes or the enjoyment of nature.

Concerning 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, this Protocol fails to protect the environment because of the high and uncertain threshold contained in those articles. Indeed, the Protocol prohibits warfare that may cost widespread, long-term and severe damage to the natural environment. The problem is that the triple standards is a cumulative one.

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.

#### *NATO and the protection of the environment*

In her presentation, Mrs. Kjelgaard explained that there is a difference inside NATO between environmental security and environmental protection. On the one hand, environmental security is used during peacetime and consists in 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.

The panelist pointed out that there is no 'NATO law'. States are bound by their own national legislations and also use STANAG (standardization agreement) and policies from NATO. Regarding the environment, there is an environmental policy inside NATO that is binding for States. A NATO policy is binding for States because the decisions are taken by consensus. However, even if this policy is binding, the language used is not very strong and States endeavor to 'do their best'. There are also very detailed STANAG on environmental security and environmental protection but those 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 Center 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 in order to communicate with political leaders about this topic.



## Environmental protection

When we are no longer in peacetime, there should be a balance between operational or training requirements and environmental impact. Mrs. Kjelgaard separated her presentation in four points.

First, an environmental planning is conducted in order to be aware 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 this potential impact, it can plan the control and management of the activities in order to reduce it. Secondly, there is environmental risk management. NATO does an assessment and corrects some actions if this assessment is not satisfying. 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.

### *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 (Common Security and Defence Policy) 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 is related to the 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. On the contrary, indirect protection reflects the fact that 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 not be applied frequently for 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.). Contrary to NATO, the EU has many legal texts with provisions concerning the environment (e.g. art. 3 and 21 of the Treaty on European Union; art. 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 is considered as including 'all the surroundings', such as air, water, land, natural resources, fauna, flora, etc.

Inside 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 the local environmental standards. Moreover, Col. De Cock underlined that the protection of the environment is a task for everybody and at all

levels. Firstly, at the military strategic level, the commander is responsible for taking the environment into consideration in his commander's intent and for issuing an environmental policy for the operation. At the military operational level, the environmental considerations have to be integrated during the training and the planning of a mission and during the conduct of this mission. Finally, at the tactical level, Col. De Cock thinks that the commanders have 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 is also taken into account.

Moreover, the consideration about environmental protection is not only the responsibility of the legal advisor 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 in the frame of environmental protection as well as the responsibility to draft an annex on environmental protection to every operation plan and the assignment of environmental protection advisors to missions. Mr Baldwin De Vidts finalized this panel by underscoring the importance of the drafting of guiding principles and the need to create an unambiguous and direct doctrine and philosophy regarding environmental protection.

### ***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 discussions. In addition, he announced that the Belgian Group of the ISMLLW will be hosting a third conference around the same date next year.