HWA CHONG CONFLICT RESOLUTION & INQUIRY 2017

DISARMAMENT AND INTERNATIONAL SECURITY COMMITTEE
Dais introductions

Joshua Ooi

Head Chair
Joshua is a Year 6 Science stream student at Hwa Chong Institution. He started out back in Secondary 2 with RMUN 2013, and has had the privilege of taking part in various local conferences such as SCMUN and MES ever since. Joshua cites the intensity and collegial atmosphere at MUNs as crucial factors that have sustained his interest.

Over the years, Joshua has also occupied himself with various extra-curriculars such as debate, the school newspaper and the Chinese Orchestra (which attest to his unfortunate ineptness at sports). As a firm believer in exposing new delegates and challenging experienced ones, he hopes to make HCCRI 2017 an enjoyable, stimulating and memorable MUN for all delegates!

Toh Wei Chuan

Vice-Chair
Wei Chuan is a year 5 Humanities student in Hwa Chong Institution, taking up Knowledge & Inquiry as one of his A-level subjects. As a reserved and quiet person, he blindly got himself involved in his first MUN conference in 2015 but has since then been attracted to the academic rigour and intensity of MUNs. Wei Chuan is a member of Hwa Chong’s concert band. Every once in a while, he will discover a new-found passion for things which may or may not last, and for now it is to pick up playing the piano again.

As this will be his first time chairing a committee, Wei Chuan looks forward to meeting each and every delegate in his council and hopes that HCCRI will be an enriching and memorable experience for all.
Dong Jiaxi

Vice-Chair
Dong Jiaxi is a Year 5 Science student in Hwa Chong Institution. His first foray into the MUN scene was as a delegate in THIMUN Singapore 2014. Though he was intimidated by the more well-versed delegates during the conferences, it spurred him and ignited his passion for MUNs.

Since then, Jiaxi has been continuously involved in over 10 MUNs in various capacities, having chaired UNASMUN 2016 as well as serving as the Deputy Executive Administrative Officer for twice for THIMUN Singapore 2015 and 2016.

Beyond MUNs, Jiaxi is an aviation enthusiast who spends much of his time studying the latest developments in commercial aviation. He is also an avid collector of airline airsickness bags, so don’t be surprised if he asks you of this favour during the holidays!

Contact the chairs
You may contact the Chairs of DISEC at hccri2017+DISEC@gmail.com.
The Disarmament and International Security Committee

The First Committee of the General Assembly (GA) in the United Nations (UN), the Disarmament and International Security Committee (DISEC) was established in 1945 along with the rest of the GA committees with the aim of dealing with matters pertaining to disarmament, global challenges and threats to international peace and security. Pursuant to Article 11 of Chapter IV of the UN Charter, the committee “consider[s] the general principles of co-operation in the maintenance of international peace and security, including the principles governing disarmament and the regulation of armament” as well as the promotion of cooperative arrangements and measures targeted at increasing international and regional stability through lower levels of armaments.

DISEC works closely with the United Nations Disarmament Commission and the Conference on Disarmament and is the only GA committee entitled to verbatim records coverage following Rule 58 (a) of the rules of procedure of the General Assembly. Similar to all other General Assembly committees, the First Committee’s resolutions are non-binding in nature and thus is unable to impose economic sanctions or initiate armed interventions. Instead, recommendations are made to the Security Council. In the case whereby the security council is unable to uphold its primary responsibilities, the “Uniting for Peace” resolution passed in 1950 allows for the General Assembly to take over the matter and recommend collective actions to be taken, ensuring that the United Nations is still able to provide a response to threats to international peace and security without being hindered by the permanent members of

---


the Security Council. The very first GA resolution passed in 1946 dealt with the issue of the disarmament of nuclear weapons and the First Committee has subsequently debated on topics such as disarmament of chemical and biological weapons, regional security and disarmament, development of military technology et cetera. However, from events such as the 2005 Non-Proliferation Treaty Review Conference and World Summit, there remains many weaknesses that are still apparent within the First Committee. Among which include the erosion of old consensus reached and repetitive discussion caused by a lack of engagement during discussion, both of which hinder the committee from making any substantial progress.

DISEC is currently in its 71st session, chaired by Sabri Boukadoum from Algeria.

---


Regulation of the Development of Military Technology

History of topic

For much of human history, states have devoted vast amounts of resources to the development of more capable, lethal and effective weapons of war. Whilst various ancient civilisations developed weapons to varied degrees of complexity, modern military technology first took root in the mid 18th Century as the industrial revolution transformed warfare. Railways meant armies could be transported much faster than before, the telegraph meant that messages could also be transmitted much faster and modern machine guns fired shots at rates far greater than that of comparable weapons.

Since then, weapons have morphed into industrial killing machines, capable of inflicting ever-increasing amounts of damage on an enemy; even during the First World War, it was impossible for infantry to advance without terrible losses because firearms were now so powerful. The result was a deadlock.

Soon, the appearance of chemical weapons on the battlefield threatened to forever alter the course of military history. In 1915, the Germans used Chlorine gas on the western front. Next, in 1917 the Germans began to use Mustard gas. Before the end of the war, the first flamethrowers were being employed by both sides.

The next major step involved the weaponization of aircraft. At the beginning of the First World War aircraft were used to observe the enemy. During the First and Second World War, aircraft slowly began realizing their full potential. Dive bombers were used to support the army while other planes were used to bomb cities and destroy the enemy’s industries. Aircraft carriers played a significant part in naval warfare in the
Second World War, particularly in the Pacific, which bore witness to some of the fiercest carrier battles seen since.

Towards the end of the war, the Germans grew increasingly desperate and began experimenting with radical new weapons. On 13 June 1944 they launched the first V-1 flying bomb. Next came the V-2 rocket, which traveled at over 2,000 mph and became the first man-made object to reach space. By 1954, the Soviet Union has launched the first ICBM (intercontinental ballistic missile), sparking off an arms race with its Cold War adversary, the United States.

Most frighteningly, however, was the introduction of the atomic bomb. On 6 August 1945, *Enola Gay*, the world’s first every nuclear weapon used in combat, exploded over Hiroshima. killing tens of thousands. A second followed over Nagasaki on the 9th, vapourising a similar number of people in second. Nuclear weapons have since not been used, but the Pandora’s Box had been opened; within two decades, the world’s great powers had enough nuclear weapons to wipe humanity off the face of the earth many times over.

Nuclear weapons were the defining arms of the Cold War; at every twist and turn, scientists endeavoured to outdo their contemporaries hired by the enemy. In 1952 American scientists invented the much more powerful hydrogen bomb, followed by the USSR in 1954.

In the meantime, deadlier varieties of pre-existing weapons of mass destruction began to emerge. The US used Napalm, a defoliant with deleterious impacts on civilians during the Vietnam War; even recently, Syria’s Bashar al-Assad has been accused of firing mustard gas varieties at areas controlled by rebels seeking to topple his regime.

Surprisingly, in an era characterized by relative peace, research and development into the next generation of military weapons has taken off at a frenzied pace. Billions of dollars worldwide are spent annually on developing state-of-the-art weapons systems. The next generation of weapons includes military robots, such as the LS3 Robotic Pack Mule, which is currently being trialed by the US army. The use of Stuxnet by Israeli
military hackers to knock Iran's nuclear centrifuges out of action has opened up a fourth theatre of war. In the air, aircraft such as the USAF’s F-35 A, B and VSTOL variants are being named as the “fifth-generation” of fighter aircraft. These armed flying machines carry a complement of deadly weapons, whilst being equipped with the latest stealth military technology. It would be unwise to assume that the US is alone in developing such capabilities; the Chinese are rumoured to be developing a similar fighter too in the mould of the Chengdu J-20. Battles might now be fought over cyberspace, in addition to others over air, sea and land.

**Timeline of relevant events**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1836</td>
<td>American inventor Samuel Colt patents a “revolving gun”, which improves on several previous designs. The firearm is soon renamed as the “revolver”, and remains popular amongst firearms enthusiasts today.</td>
</tr>
<tr>
<td>1851 to 1861</td>
<td>The first machine guns appear. The Belgian army's multiple-barrelled mitrailleuse is soon followed by the Gatling gun – the first gun that can be continuously fired.</td>
</tr>
<tr>
<td>1884</td>
<td>Hiram Stevens Maxim produces the first fully automatic machine gun: the Maxim gun.</td>
</tr>
<tr>
<td>1916</td>
<td>During the first world war, the British army introduces the first tanks at the Battle of the Somme. The first British tanks, the Mark Is, were incredibly unreliable and were prone to frequent mechanical failure.</td>
</tr>
<tr>
<td>1942</td>
<td>The Manhattan Project, the United States’ attempt to build the first nuclear bomb, begins under the direction of J. Robert Oppenheimer. It proceeds for the next three years, outlasting similar efforts by the Germans, Soviets and Japanese. Found deep in the New Mexico desert, the project sees some of science’s greatest minds, including Albert Einstein, working on a “superweapon” which might help win the war.</td>
</tr>
<tr>
<td>Year</td>
<td>Event</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>1945</td>
<td>The first successful test of a nuclear bomb is carried out in New Mexico, on 16 July. On 6 and 9 August, bombs are dropped on the Japanese cities of Hiroshima and Nagasaki, effectively ending the second world war and ushering in a new age of nuclear weaponry. The human cost, however, is terrifying—nearly 150,000 lose their lives from just two nuclear weapons.</td>
</tr>
<tr>
<td>1952</td>
<td>The first fusion, or hydrogen, bomb is tested by the US in the Marshall Islands. They use X-rays from a nuclear fission explosion to trigger nuclear fusion reactions between atoms of the hydrogen isotope tritium, like those that take place inside the sun. A single warhead can be thousands of times more powerful than the Hiroshima bomb; Mankind’s most powerful fusion bomb was soon tested by the Soviets in 1961. Tsar Bomba yielded 51 Mt, which was more than 10 times the energy from all conventional weapons detonated in World War 2.</td>
</tr>
<tr>
<td>1960</td>
<td>The laser (Light Amplification by Stimulated Emission of Radiation) is demonstrated for the first time. It produces a beam of red light. Lasers find a myriad of uses in society, and in warfare are used for targeting of missiles and other weapons, and as an alternative to radar. Various prototype laser weapons are under development.</td>
</tr>
<tr>
<td>Year</td>
<td>Event</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>1960 to 2000</td>
<td>The Soviet Union begins developing a supercavitating torpedo in the 1960s. By exploiting the way water forms bubbles around fast-moving objects the Shkval can travel at 500 kilometres an hour. It is only completed in the early 1990s. The US develop their own in 1997 and 10 years later start working on carrying humans in a supercavitation craft.</td>
</tr>
<tr>
<td>1974</td>
<td>The first Taser is built after five years of work by NASA researcher Jack Cover. Billed as a non-lethal weapon, the electric stun gun is now used by police forces around the world. However, claims have been made that it is frequently abused and may cause lasting harm.</td>
</tr>
<tr>
<td>2001</td>
<td>US president George W Bush proposes a national missile defence shield. The scheme meets with stinging criticism and the technology repeatedly fails to deliver in tests. The Active Denial System, a directed-energy weapon intended to harmlessly drive people away, is tested by the US government. The device uses a microwave beam to produce a sensation of intense heat, forcing people to move away. Despite concerns about safety, portable versions have been mooted for police.</td>
</tr>
<tr>
<td>2002</td>
<td>For the first time, a high-energy laser is used to shoot down artillery fire. The Pulsed Energy Projectile (PEP), a laser that can knock you off your feet, is developed.</td>
</tr>
</tbody>
</table>
Scope of discussion

By discussing about the development of military technology, the committee should attempt to reach a consensus on (i) a ‘safe’ and agreeable standard for such development and (ii) an international mechanism to govern the transparency of such development, amongst others. The scope should focus on the latest technologies of the day, such as robotic and cyber-technology as well as pre-existing weapons of mass destruction.

Key Issues

The impact on international relations

Arms Races

An arms race refers to a competition between two or more states to achieve a stronger set of armed forces than one’s adversary. Both endeavour to produce greater quantities of weapons, stronger outfield armies and deploy more advanced military technology.
International conflict specialist Theresa Clair Smith, defines the term as "the participation of two or more nation-states in apparently competitive or interactive increases in quantity or quality of war material and/or persons under arms."

Perhaps the most infamous ‘arms race’ was the Anglo-German arms race. It came into focus with the German Navy Bill of 1908 and the British “Navy Scare” of 1909, which resulted in a massive construction program under anti-German auspices. An atmosphere of mutual suspicion now ruled the day. German fear of an imminent British military strike was matched by British suspicion about a secret acceleration of the construction of German capital ships. With broad national support, the British political and military leadership forcefully responded to the German program and displayed a relentless determination to protect British naval mastery. After 1908, massive British naval construction ensured the perpetuation of a favorable force ratio.

More recently, the Cold War saw a similarly dangerous arms race taking place—this time between the two new superpowers, the United States and Soviet Union. Both developed stockpiles of nuclear weapons which were large enough to destroy life on earth many times over; fortunately, these were never used in combat. Advanced weapons systems to deliver these nukes and a cocktail of other deadly explosives were developed; most notably, the Intercontinental Ballistic Missile (ICBM) was pioneered in the late 1950s. The Cold War arms race began to "cool" in the late 1970s, with the signing of the SALT I and II treaties between the Soviets and Americans to reduce nuclear stockpiles. Ultimately, this arms race had a much greater technological impact on humanity; the obsession over national pride and military satellites led to the space race, which culminated in Neil Armstrong landing on the moon in 1969.

**Mutually Assured Destruction**

Mutually Assured Destruction (MAD) refers to a form of deterrence, where the threat posed by the full-scale use of nuclear weapons by both sides on one (and consequently the possible annihilation of both) greatly disincentivises both from doing so. The policy can be derived from the Nash Equilibrium’s classic prisoner dilemma outcomes, where once armed, neither rational side would wish to use or lay down its arms completely.
During the Cold War, when the Soviets achieved nuclear parity with the Americans, it became clear that neither side would come out alive in a nuclear conflict. This fact was officially accepted in a military doctrine known as Mutual Assured Destruction (MAD). Mutual Assured Destruction began to emerge at the end of the Kennedy administration. MAD reflects the idea that one’s population could best be protected by leaving it vulnerable so long as the other side faced comparable vulnerabilities, and lead to ‘Détente’, or the thawing of US-Soviet relations. This culminated in the signing of the SALT I and II treaties in the 1970s to reduce both sides’ nuclear weapons stockpiles.

The ‘Rules of War’

Rules of engagement (ROE) are rules or directives to military forces including individuals) that define the circumstances, conditions, degree, and manner in which the use of force or actions which might be construed as provocative, may be applied. They provide authorization for and/or limits on, among other things, the use of force and the employment of certain specific capabilities. ROEs tend to draw “red lines” in the sand when it comes to the deployment of military technology; that is, they serve to inform commanders of what technology can be used. ROE for the most destructive of weapons tend to up decided by the Head of State; in the United States, the President is always accompanied by a “nuclear football” from which he can order a nuclear strike on any location across the world.

These are the result of states recognizing the inherent danger of using weapons of mass destruction on the battlefield. ROE have been shaped by agreements such as the Nuclear Non-Proliferation Treaty, signed by governments to reduce dangerous nuclear weapons stockpiles, and the Chemical Weapons Convention, which aims to eliminate the use of chemical weapons. The latter has been largely successful; as of October 2016, about 93% of the world’s declared stockpile of chemical weapons had been destroyed.
Weapons of Cyber Warfare

While the issue of Cyber Warfare and Cyber Weaponry may not be as well addressed as other areas of discussion, this regard of military operations has become increasingly prevalent and hence there is great urgency for its discussion. This is compounded by the nature of cyber warfare itself, which allows nations to conduct such attacks with anonymity and deniability while granting great convenience for the transplantation of necessary codes with great ease for future attacks. Amidst growing aversion towards physical warfare in an increasingly liberal and socially-conscious globosphere, countries will predictably look towards cyber warfare as a new mode of offense. Considering that there exists little to no international agreement nor regulation of cyber weaponry and cyber warfare, this trend is remarkably worrying.

There have been multiple occurrences of minor cyberattacks (such as the 2009 North Korean cyber attacks on government, news and finance websites of America and South Korea\(^5\) and the 2013 hacking of local news and government sites in Singapore\(^6\)), though none of them have thrust the issue of cyber warfare, cyber weaponry and cyber security in the spotlight as much as the case of Stuxnet. Stuxnet -- widely recognised to be the first true cyber weapon\(^7\) -- is a malicious 500-kilobyte computer worm first discovered in 2010 used to attack and cripple the operations of Iranian industrial sites (including nuclear reactors) by specifically targeting such facilities’ programmable logic controllers operated on the Microsoft Windows platform, collecting these systems’ information and even causing fast-spinning centrifuge equipment to tear themselves apart as a secondary impact. The worm then infects USB drives connected to infected Windows terminals, which will then transmit the worm onto other computers. While no


official source of the worm has been identified\(^8\), the sophistication of the weapon has led many experts to believe that there must have been a State-entity behind the attack. Leaks to the media have since pointed blame towards the United States and Israel\(^9\).

**Figure 1: How Stuxnet Worked\(^10\)**

### Development/Acquisition of Cyber Weapons

There are currently the following methods through which cyber weapons can be acquired by countries:

---


\(^10\) ibid \(^4\)
I. Buying of off-the-shelf 3rd party software
II. Domestic development

In addition, control over such cyber weapons often falls into either one of these groups:

I. Government
II. Non-State actors, who may or may not be State-aligned/supported

Definition of Cyber Weapons

As alluded to in the previous section, the usage and nature of cyber weapons varies greatly with that of conventional weapons, whereby cyber weapons either do not cause any material damage to or losses of property or lives or do not cause such as a direct implication of its usage. In conjunction with the relative youth of the subject matter, there remains a lack of a common definition\textsuperscript{11} of ‘cyber weapons’.

The Tallinn Manual on International Law Applicable to Cyber Warfare -- one of the earliest studies of international law’s’ applicability to cyber warfare -- defines cyber weapons as “cyber means of warfare that are capable, by design or intent, of causing injury to persons or objects\textsuperscript{12}”, thereby positing that any cyber tool developed to cause material damage whether directly or indirectly should be considered a cyber weapon. However, this raises questions of whether cyber weapons formulated only for the purposes of espionage or data wiping constitute cyber weaponry, given that such actions do not cause any form of tangible damage.

On the contrary, Dr Stefano Mele, renowned expert in cyber-security, cyber-intelligence, cyber-warfare and cyber-terrorism and of Counsel to Carnelutti Law Firm in Italy, believes otherwise. He defines cyber weapons as “a part of equipment, a device or any set of computer instructions used in a conflict among actors, both national and


\textsuperscript{12} Ibid \textsuperscript{\textsuperscript{7}}
non-national, with the purpose of causing, even indirectly, a physical damage to equipment or people, or rather of sabotaging or damaging in a direct way the information systems of a sensitive target of the attacked subject”, stating that the following elements must be adhered to in the consideration of cyber weaponry\(^\text{13}\):

I. they must be deployed within the context of a cyber-warfare act  
II. the purpose of attack must be a physical damage caused directly or indirectly by the attack  
III. the means to achieve these purposes has to involve the use of technological information systems

**Nature of Cyber Weapons**

As a result of contention surrounding the definition of cyber warfare, there is much disagreement over the forms that cyber weapons can take on. For instance, should Dr Mele’s definition be adhered to, forms of attacks such as Denial of Service (DoS) -- an “attack on a network that is designed to bring the network to its knees by flooding it with useless traffic\(^\text{14}\)” -- and espionage would not fall within the category of cyber weapons for its non-physical nature of its attack impact. It can also by sponsored by non-State actors independent of State involvement. These very factors are both the boon and bane of this frontier of warfare, and with consideration of growing aversion of conventional battlefield warfare, it is inevitable and only natural for the development of cyber warfare to take place. This is especially so for countries which have looked increasingly towards the digital frontier for to better tackle threats to national soil, such as the USA’s push towards heightened engagement of cyber warfare in its fight against ISIS. As such, the contention within the sub-issue of the regulation of cyber weapons is not quite so whether to fully eradicate its usage and development, but more so about regulations ensuring the responsible use of such technologies.


**Current Situation**

It is estimated that over 60 countries now have or are developing cyber forces and cyber weaponry, of which 31 countries are capable of domestic development of such cyber tools, while 29 countries have dedicated government or military cyber resource team. Surveillance -- both domestic and overseas -- is the most prevalent use of offensive cyber tools, while 5 countries (Iran, Israel, North Korea, Russia and the United States of America) have allegedly used cyber tools in the conducting of blatant cyber warfare, for purposes ranging from data deletion to physical damage of equipment.

**Regulation of Autonomous Robotics Weapons Systems**

Autonomy is increasingly one of the major characteristic that that today’s development of weapons systems is focusing on, given the promising strategic advantage and cost benefits that it has. For instance, the prospect of being able to reduce human involvement in actual combat, thus removing death of combatants has prompted America’s defence department to heavily pursue the development of autonomous weapons such as drones in the past twenty years. However, such a direction in weapons development raises many complicated issues, from ethical questions that will arise as a result to the inadequacy or even possible legal challenges made to international laws. As a result, close examination and a comprehensive response to regulate the development of these related military technology is necessary to ensure the continued upholding of international law together with fundamental human rights and freedom.

The most common and significant application of autonomous technology is as Unmanned Aerial Vehicles (UAV), also more commonly known as drones. The usage of UAVs has increased dramatically in the last decade, ever since the introduction of its

---

first armed version in Yemen back in 2002\textsuperscript{16}. UAVs have then been used for combat support and even drone assassinations in Pakistan, Iraq, Yemen and Somalia, notably by the United States. Drone strikes have begged the question of accountability, since there is currently no transparency on decision making when it comes to extraterritorial drone strikes. In fact, the policy and legal justifications to UAV usage is lacking even though their employment usually involves extrajudicial killings. International rules governing the use of force is often not taken into account when states employ drones as well. Other questions that should be considered include the anxiety and psychological trauma caused by routine drone strikes and also the proliferation of drones to non-state armed groups\textsuperscript{17}.

Nevertheless, UAVs remain an extremely useful and integral military technology and most likely will continue as such in decades to come given its wide range of applications. Drones can be used for reconnaissance purposes and also have the potential to assist in the detection of chemical, biological, radiological, as well as nuclear weapons and ordinary explosives. Weaponized drones can be used to provide close air support to soldiers engaged in combat, especially in counter-insurgency operations. The United Nations Department of Peacekeeping Operations actually announced that it intended to actually begin using UAVs in peacekeeping missions towards the end of 2012 as well\textsuperscript{18}. Hence, it is the duty of the committee to not only clarify legal policies surrounding UAVs, but also the human perspectives concerned in this issue.

A notable milestone that the United Nations have achieved in regulating drone technology is in discussing the possible banning or restriction of Lethal Autonomous Weapons Systems (LAWS) under the Convention on Certain Conventional Weapons


which focuses on specific types of weapons that are considered to cause unnecessary or unjustifiable suffering to combatants or to affect civilians indiscriminately. The Campaign to Stop Killer Robots in the UNODA was first brought into light by Human Rights Watch in its report titled “Losing Humanity: The Case Against Killer Robots” and has continued to hold annual Meeting of Expert on LAWS. In his report on the Protection of Civilians in Armed Conflict issued in November 2013, Secretary-General Ban Ki-moon mentioned: “Although autonomous weapons systems have not yet been deployed and the extent of their development as a military technology remains unclear, discussion of such questions must begin immediately and not once the technology has been developed and proliferated.”19 It is important to note that there are still robotic systems with various degrees of autonomy and attack capability are currently in use, such as the Samsung Techwin surveillance and security guard robots, deployed in the demilitarized zone between the two Korean States or the United States’ Navy’s Phalanx gun system.20 There has been calls for an international pause to the development of LAWS as these weapons possess the ability to decide whether or not to attack a target which poses a direct threat to rights of life. The same problem of legal accountability comes into the picture and such a direction in weapons development might also make countries more willing to go to war. Currently, 117 States are parties to the convention aforementioned but no actual action has been taken with regards to LAWS as of yet.

Besides killer robots, the First Committee of the UN General Assembly also saw its first side event on UAV on October 201521. The event combined legal, ethical and political perspectives on the use and proliferation of armed drones. A wide spectrum of issues pertaining to UAVs were discussed. Most notably on proliferation of drones, it has been mentioned that non-state actors such as Hamas, Islamic State, and Hezbollah have used drones which is worrying seeing how dangerous UAVs can be when armed. Export control, however, is difficult because the distinction between UAV technologies

---


developed for commercial versus military purposes is far from sharp since many UAV technological developments have both military and non-military applications. There are several export regimes controlling drones, like the Arms Trade Treaty (ATT), the United Nations Register of Conventional Arms, the Missile Technology Control Regime (MTCR), the EU Common Position on Arms Export Controls, and the Wassenaar Arrangement but they are insufficient to address the entirety of the problem on UAV’s export control.

A study on UAV\textsuperscript{22} was also prepared which included several recommendations on increasing transparency, oversight and accountability in the use of armed UAVs outside active hostilities. Examples of proposed measures include publishing the results of investigations of alleged unlawful deaths as well as disclosure of information on each strike, including the applicable legal framework, the targeting criteria and measures to protect civilians.

**Key Stakeholders**

**Major Arms Exporters**

In the case of the world’s top arms exporters, the arms industry is often a major contributor to these countries’ economies. According to the Stockholm International Peace Research Institute, the combined arms sales of the top 100 largest arms-producing companies amounted to an estimated $395 billion in 2012 alone, while the top 10 defense industry corporations employ a combined 1.1 million people in the USA and the EU alone\textsuperscript{23}. It is as such obvious that the major arms exporting countries may see this matter beyond just the military and security lens, but also in terms of its economic impact. Countries belonging in this bloc will expectedly push great emphasis


\textsuperscript{23} “Archived copy” (PDF). Archived from the original (PDF)on 2014-12-26. Retrieved 2014-12-16.
towards greater research and development of military technologies instead of broad limitations of military weapons development.

USA

While the Trump administration has not maintained the most consistent military policy, Donald Trump has, on repeated occasions since the start of the election, shown great interest and enthusiasm towards heavier armaments and greater military development efforts, albeit worryingly to the rest of the world. With the transition from the Obama administration to the Trump administration now complete, President Trump has been calling for a broad ‘America First’ policy, a component of which is his ‘Making Our Military Strong Again’ strategy. As detailed in the official White House policy statement, the administration will, inter alia, “develop a state-of-the-art missile defense system to protect against missile-based attacks from states like Iran and North Korea”, and “make it a priority to develop defensive and offensive cyber capabilities at our U.S. Cyber Command”.

Amidst growing skepticism and perceived isolationism, the Trump administration has been notably suspicious of international developments, even at times signalling intentions to start a nuclear arms race. In the face of such considerations, the USA is unlikely to accept any recommendations to regulate and or limit any aspect of their military ambitions, possibly pushing for greater deregulation instead.

China

While considerably more covert in its military ambitions, China has been developing its military capabilities at a breakneck speed as part of its efforts to become a true


regional and global force with a sizable military prowess in addition to its economic might so as to attain greater clout within the region. Traditionally, China has been seen as a laggard in the military fields for its outdated military technologies as well as its reliance on Soviet technology, though this is set to change as China charts its course towards domestic development of military capabilities. Already, China has commissioned its first aircraft carrier, the Liaoning, which has quickly become symbolic of China’s military progress and ambitions. On the cyber side of its military operations, China has already allegedly been at the forefront of a vast cyber warfare offensive. As part of this shift in its military model, China is expected to become more vocal with its military ambitions while also trying to establish itself as the global moral compass following the Trump administration’s unpredictable and arguably unsound policy pursuits.

Russia

The recent Russian actions in Ukraine, especially in the regions of Donbass and Crimea, have been very revealing of the Russian Federation’s ‘strongman’ military stance. Its aggressive expansionist policy, cited as a plausible motivation for Russian actions in Transnistria, Georgia and Ukraine, coupled with an ailing economy exacerbated by increasingly harsh economic sanctions imposed by many western nations on Russia, has prompted the Federation to become increasingly determined to develop its own military capabilities. This is so as to bring Russian military to parity or beyond that of its Western counterparts, as well as to stimulate growth in a sector which is dangerously slowing. As for the international community, Russia’s growing military might as well as its disposition to the use of force in conflict resolution offers a somber reminder of the need for responsible weapons development and therefore greater regulation on the development of military technologies.

Questions to Ponder

1. How should delegates weigh the importance of fundamental human rights against the deployment of UAVs?
2. How can the international community regulate the usage and development of autonomous robotics weapons systems in a way that remains relevant?
3. How can the proliferation of such weapons systems be monitored and restricted?
4. How can countries be incentivised to cooperate with the international community in regulating their development of autonomous robotics weapons?
5. How can an arms race and unhealthy technological competition between countries be prevented?
6. What are some possible reasons why countries might support the development of even more lethal weapons technology despite the risks?
7. Is the lack of a common definition of cyber weaponry and cyber warfare hindering the development of its regulatory framework? If so, how?

References


