



# *Research Report*

*Forum: Human Rights Council*

*Issue: Developing a Protocol for Autonomous Weapons*

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## *Personal Introduction*

Kobby Afari Yeboah is a 21-year old student, pursuing a degree in Bachelor of Laws(LLB) at the University of Ghana, School of Law. He is a national of Ghana, home to Dr. Kwame Nkrumah, the revolutionist on Pan-Africanism, and Kofi Annan, UN Secretary-General from 1997-2006.

Kobby aspires being a United Nations Diplomat alongside legal consultancy in International Trade and Investment.

Kobby loves to take on versatile roles, especially, those which go beyond his comfort zone, in order to discover his true potential.

His first model un conference was in 2009, when he represented Greece at the Life-Link Junior High School Model United Nations Conference. After this, he developed an insatiable thirst for anything model un. Kobby's greatest feat in Model UN was leading the Ghanaian delegation to the Harvard National Model United Nations Conference in February 2017, and bagging 4 Resolution Project Awards.

Life-Link Model United Nations, the local chapter of Model UN in Ghana, is responsible for grooming him in the art of public speaking, diplomacy and effective lobbying.

He is super-excited to finally have his first chairing experience at the prestigious CalsMUN in Netherlands.

Kobby is a supporter of Manchester United Football Club in England, and a legal drama enthusiast.



## *Human Rights Council introduction*

In light of its mandate to promote and protect the cause of human rights effectively, the United Nations General Assembly brought into being **Human Rights Council**.

The Human Rights Council comprises of 47 states and was created by the adoption of resolution A/RES/60/251 on 15 March, 2006.

Principally, the council is responsible for addressing situations of human rights violations and making recommendations for them.

The Council, has 4 main mechanisms for enforcing its human rights directive. They are: the Universal Review Working Group, Advisory Committee, the Complaint Procedure,

The **Universal Periodic Review Work** (UPR) provides the opportunity for each state to declare what actions they have taken to improve the human rights situations in their countries and to fulfil its human rights commitments. According to **Ban Ki Moon**, the immediate-past UN Secretary General, the Universal Periodic Review has great potential to promote and protect human rights in the darkest corners in the world.

The **Advisory Committee** is the second mechanism. It is composed of 18 experts that serve as the think-tank for the Council. Its purpose is to provide expert advice for the Council on the promotion and protection of human rights and to make proposals within the scope of its work, that the Council may consider. Currently the Committee is working on advisory reports on leprosy-related discrimination and unaccompanied migrant children and adolescent.

The **complaint procedure**. Its directive is to address consistent patterns of gross and reliably attested human rights violations submitted by individuals, groups or NGOs all over the world. The Working Group on Communications and the Working Group on Situations make up the complaint procedure. The former is responsible for examining written communications and undertaking initial screening of the communication and the latter is tasked with bringing consistent patterns of gross and reliably attested violations of human rights to the attention of the Council.

The **Special Procedures**: this is the 4<sup>th</sup> Mechanism of the Council. It consists of independent experts with mandates to report and advise on human rights from the thematic (a body of topics for discussion) or country-specific perspective. These experts are referred to as Special Rapporteurs. Rapporteur is a French-derived word for an investigator who reports to a deliberative body. In sync with their mandate, the special rapporteurs send communications to states who are alleged to have committed human rights violations by undertaking country visits with the help of the Office of the



UN High Commissioner for Human Rights. They also engage in advocacy and public awareness.

With all these mechanisms in place, has the Human Rights Council seen any progress as far as its human rights mandate is concerned?

The Council took an assertive action to highlight Iran's deteriorating human rights situations by establishing a Special Rapporteur on the Human Rights Situations in Iran. In 2010 following the Ivory Coast Election Declaration banter, the Council at its special session sent a clear message that the world is watching what he does and that the atrocities and human rights violations. A commission of enquiry was established by the Council, therefore to investigate into these abuses.

Finally, by the influence of the Council, 85 countries signed a statement entitled **"Ending Acts of Violence and Related Human Rights Violations Based on Sexual Orientation and Gender Identity"**. This represents a landmark movement in the UN efforts to highlight human rights abuses faced by lesbian, gay, bisexual and transgender people all around the world.

The Council like other intergovernmental bodies has its shortcomings which prevent it from exercising its human rights mandate with efficacy.

It has been accused of focusing disproportionately on the Israeli-Palestinian conflict by **Kofi Annan** and **Ban Ki Moon**, the European Union, Canada and the United States. Not only this, but the Council is prone to politicization, as evidenced by decisions that favour political interests over human rights protection.

Despite these challenges, the Secretary General of the UN, Ban Ki Moon, during the opening of the 4<sup>th</sup> Human Rights Council Session stated: All victims of Human Rights Abuses should be able to look at the Human Rights Council as a forum and a springboard for action.



## *Issue: Developing a Protocol for Autonomous Weapons*

It is common knowledge, that the idea “weaponry” in any civilized society is attended with mixed feelings of terror, blended with the comfort of assured protection.

From its inception in the era of the cave man, till present day, weapons have taken centre stage in matters of public security and of course, modern warfare. Further, its evolution has been tremendous. Undoubtedly, with its evolution from physical weaponry of weapons of mass destruction, to chemical and nuclear weaponry, and eventually the intellectual discourse on autonomous weaponry, it has become evident that, weapon modification has been facilitated to suit the pressing needs of mankind for security purposes.

**Autonomous weaponry** seeks to merge the supposed efficiency of artificial intelligence(robots) in controlling the use of lethal weapons. This seems a formidable innovation, taking into consideration the resolve of the United Nations to fight against the spate of terrorism activities by way of counter-terrorism measures; faced with the risk and threat of death and grievous injury caused to military personnel in combating terrorism, “killer robots” would indeed be instrumental in furthering the security agenda of the world.

However, the concerns that these “killer robots” would someday take over the world, cannot be swept under the rug. The issue becomes: which is the greater of the two evils? Redefining the objective to safeguard global security by developing autonomous weaponry and suffer the consequences of it going berserk, or bear the brunt of living in a society manned by an individual or individuals whose conducts consistently threaten world peace and security.

At the moment, there is a rapidly growing movement of a collaboration of international organizations, including human rights civil societies such as Human Rights Watch and Amnesty International, calling for the ban on “killer robots”. As part of their sustained efforts against the proliferation of autonomous weapons, **the Campaign to Stop Killer Robots** have reached out to private citizens all of over the world, and advised them to encourage their countries leaders to support an international treaty limiting lethal autonomous weapons, on the grounds that, many of the world's leading Artificial Intelligence researchers and humanitarian organizations are concerned about the potentially catastrophic consequences of allowing lethal autonomous weapons to be developed.

If these fears are even slightly justifiable, the scope, range and potential of autonomous weapons must be properly examined.



**Stanford University Research** believes autonomous weapons as those weapons which have the capability of functioning at some level without human input or supervision. Furthermore, such weapons must be able to:

Identify (possible) threats/targets

Determine what course of action to take when the target is identified (fire or not)

Aim, fire, and reload all on its own

According to **Computer Professionals for Social Responsibility(CSPR)**, a non-profit organisation, autonomous weapons are computerized weaponry on a continuum of autonomy.

There exist four main categories of this:

To begin with, there is **Direct Operator Control (DOC)**. DOC Weapons are controlled by human operators who are in some physical contact with the machine.

**A director** which is an electronic computer that continuously calculates trigonometric firing solutions, and transmits targeting data to direct the weapon firing crew, applies the Director Operator System.

Warships possess such a system. It passes information to the computer that calculates the range and elevation for the guns. Instantaneous measurements are used to calculate rate of change values, and the computer then predicts the correct firing solution. In World War II, a widely used computer in the US Navy was the electro-mechanical Mark I Fire Control Computer.

Next, there is **Teleoperator Control** (RPVs: Remotely Piloted Vehicles). Here, the unit is an unmanned vehicle capable of being controlled from a distant location through a communication link. It is normally designed to be recoverable. An example of is drone aircraft which is simply a fighter aircraft drone without a human pilot directed by a remote control.

Compared to manned aircraft, drones were originally used for missions too "dull, dirty or dangerous" for humans. While they originated mostly in military applications, their use is rapidly expanding to the commercial domain.

However, in **January 2012**, former President of the United States, **Barack Obama** confirmed the US was using unmanned aircraft to target suspected militants in tribal areas of Pakistan. He defended the drone attacks, saying they made precision strikes and were kept on a "tight leash".

The third level of computerized weaponry are those under **Preprogrammed Operation**. These weapons are programmed to perform a specified task, and simply



follow a predetermined set of orders on their own on the battlefield. This type of weaponry comes under the broader ambit of **partially autonomous weapons**.

Approaching truly autonomous technology is **Structured Control**. Units in this category work in conjunction with **artificial vision** or **sensor systems** to respond in a rudimentary way to environmental stimuli. This is the category of weaponry, fiercely debated against by humanitarian activists.

is **Lethal autonomous weapons (LAWS)** are typically fully autonomous military robots designed to select and attack military targets without intervention by a human operator. These killer robots operate in the air, on land, on water, under water, or in space. Nevertheless, it is not certain its true extent of autonomy, by reason that, the autonomy of current systems as of **2016** was restricted in the sense that a human gives the final command to attack.

### Legal Ramifications of Autonomous Weapons

The Human Rights Watch has questioned whether fully autonomous weapons would be capable of meeting **international humanitarian law standards (IHL)**, including the rules of distinction, proportionality, protection of civilians and military necessity

Under IHL, any new weapon must be capable of being used in compliance with IHL's rules governing the conduct of hostilities

**Article 36 of the Additional Protocol 1 to the Geneva Conventions** seeks to prevent, or to restrict, the development and deployment of **new technologies of warfare** that may be prohibited in some or all circumstances by requiring each State to assess the legality of the new weapons they wish to develop or acquire.

The effect of this law is that, provided sophisticated weaponry can meet up the requirements of humanitarian law, then they gain legality.

Hence, autonomous weapons must satisfy the following criteria generally:

It must distinguish between civilians taking a direct part in hostilities and armed civilians such as law enforcement personnel or hunters, who remain protected against direct attack

An autonomous weapon system ought to be capable of applying the IHL rule of proportionality. In other words, it must gauge the commensurateness of the attack.

Thirdly, an autonomous weapon should be capable of assessing required precautions in attack to minimize civilian casualties? This represents a practical aspect in battlefield, and it may require uniquely human judgement.

Furthermore, LAWS must be used in accordance with existing rules of international law on the **use of force**. **Article 2(4) of the UN Charter** prohibits Member States



from threatening or using force against the territorial integrity and political independence of other states, in their international relations. The exception to this rule is limited to use of force with authorization by the **UN Security Council to maintain** or restore international peace and security (under Chapter VII of the UN Charter); or for collective self-defense (under article 51 of the Charter).

The issue becomes, Can LAWs or killer robots legally ponder and comprehend these rules in case of a malfunction?

Obviously, retaining human control over use of force is a moral imperative and essential to promote compliance with international law, and ensure accountability

### Human Rights & Moral Ramifications

A 2015 study by **Human Rights Watch** and **the Harvard Law School International Human Rights Clinic** (IHRC) noted that human commanders could not generally be assigned direct responsibility for the wrongful actions of a fully autonomous weapons, save situations where there was a specific intent.

The consequence is: in case of gross human rights violations perpetuated by an autonomous weapon, there is no individual to bear responsibility for the human right violation. How then does the Human Rights Council properly monitor the human rights minimum protection status of countries if no person can be made directly culpable for the actions of robots? This lacuna fails to account for the cardinal principle of the protection of human life through accountability.

The **UN Special Rapporteur on extrajudicial, summary or arbitrary executions for the Office of the High Commissioner for Human Rights**, Professor Christof Heyns, released a report on killer robots presented to the Human Rights Council. According to Professor Heyns, “war without reflection is mechanical slaughter...there is an urgent need of discussion and a “collective pause” before we allow LARs to be deployed to kill human beings worldwide.”

### International Action

The **Campaign to Stop Killer Robots** is a group of non-governmental organizations whose object is to ban lethal autonomous weapons.

It was established in 2013 by member organizations who have **urged governments** and the **United Nations** to outlaw the development of "lethal autonomous weapons systems".

In **July 2015**, experts in **artificial intelligence** signed a letter warning of the threat of an arms race in military artificial intelligence and calling for a ban on autonomous weapons.



On a different tangent, nations have been discussing the issue for three years under the mantle of the **Convention on Conventional Weapons**. A breakthrough came at the end of 2016, when countries taking part in the treaty's five-year Review Conference agreed to formalize their deliberations on lethal autonomous weapons systems. The result of this meeting was the formation of the **Group of Governmental Experts**, which is expected to drill further down into substantive concerns of meaningful or appropriate or adequate human control of autonomous weapons.

As noted early on, a handful of human rights organisations have been resolute in putting an end to development of autonomous weapons, rather than seeking guided rules on its use. For one, the **Human Rights Watch** has called for a preemptive ban on the development, production, and use of fully autonomous weapons.

**Human Rights Watch** released a memorandum to the delegates in 2016, following the meeting in Geneva calling for countries to “adopt an international, legally binding instrument that prohibits the development, production, and use of fully autonomous weapons.”

#### Possible Solutions

##### Intense Scrutiny and Testing of Autonomous Weapons

Having watched the disturbing video developed by the collaboration between University of California-Berkeley, professor **Stuart Russell** and the Future of Life Institutes on autonomous weapons slaughtering humans, with no possibility of control, the best resolve for the world is to limit the control of killer robots to intervention by humans. Even more, scientists and engineers developing killer remote-controlled drones must undergo several series of testing, to ensure that this machinery are actually fit for their purpose and do not wipe off the human race, instead of protecting it.

##### Accountability

Autonomous weapons must not render the Geneva Conventions, redundant. Civilian lives must be assured and well-protected during wars and civil strife. Thus, military personnel ought to be made responsible for even malfunctioning of these weapons. This measure will go a long way to impose a duty not to be negligent in handling such lethal weaponry.

##### Humanitarian Standards

Before the release of these weapons into circulation, their ability to act proportionally and necessarily when commands are issued, must be painstakingly examined by the Group on Governmental Experts. These



weapons must satisfy every humanitarian and human rights law these is enshrined in international instruments.

### Strict International Control

The United Nations Security Council should initiate discussions on this subject area and act under its use of force mandate under Article 24 of the UN Charter to restrain countries and private persons from manufacturing completely autonomous weapons without licence from the Group on Governmental Weapons on Lethal Weapons after they have met a rigid criteria established by the Group.

## *Major organizations/countries involved*

### **Organisations**

- Campaign to Stop Killer Robots
- Human Rights Watch
- Group of Governmental Experts
- International Committee of the Red Cross
- Women's International League for peace and freedom
- Amnesty International
- International Human Rights Clinic at Harvard Law School

### **Countries**

- **China** said in Geneva that it sees a need for a new international instrument on lethal autonomous weapons systems.
- At the Group of Governmental Experts Meeting in 2017, **Russia** announced that it would adhere to no international ban, moratorium or regulation on such weapons.
- **Israel** announced that it is developing many types of military robots including some as small as flies in order to assassinate leaders of Hezbollah and Hamas
- The **US Department of Defense** issued a directive on November 21, 2012, that, for now, autonomous weapons require a human being to be "in-the-loop" when decisions are made about using lethal force. This was the department's **first public policy** on autonomy in weapons systems and the first policy announcement by any country on fully autonomous weapons.
- The United Kingdom
- Iran
- North Korea
- South Korea



## *Timeline of related events*

The history of autonomous weapons dates back to at least the late periods of the 14<sup>th</sup> Century.

**1495-** Leonardo da Vinci designs a “mechanical knight” capable of mimicking a range of human motions.

**1898-** Nikola Tesla unveils the first wireless remote-controlled vehicle, a small iron-hulled boat, before a skeptical crowd in New York’s Madison Square Garden.

**1914-**At the beginning of World War I, there were major advances in **robotic warfare**. It was at the brink of the first World War, that the seeds of having an unmanned aircraft, were sown. Some of these inventions were the **U.S.-made Kettering “Bug”** (a gyroscope-guided winged bomb) and the **German FL-7 wire-guided motorboat**, loaded with hundreds of pounds of explosives.

**1945-**The interest to develop unmanned aerial vehicles was heightened during the 2<sup>nd</sup> World War when various parties suffered big losses occasioned by the reconnaissance aircraft.

**1973-** This marked the first-time drones were used for observation during the Vietnam War. The U.S. Air Force also used laser-guided weapons to destroy the strategic Thanh Hoa Bridge in North Vietnam.

**2006-South Korea** announces plans to install sentry robots along the **Demilitarized Zone** with North Korea. Armed with machine guns, they are capable of fully autonomous tracking and targeting, though human approval is reportedly required before they fire.

**2013-Christof Heyns**, the U.N. special rapporteur on extrajudicial, summary, or arbitrary executions, calls for a moratorium on the development and deployment of autonomous robots.

**2013-**Campaign to Stop Killer Robots birthed.

**2013-** 117 governments party to the **U.N. Convention on Certain Conventional Weapons** agree to take up the issue of lethal autonomy in 2014.

**2016-** Breakthrough to formalize deliberations on lethal autonomous weapons in Geneva, and the creation of the Group of Governmental Experts.



## *Key terms*

**Autonomous Weapons-** Weapon system that, once activated, can select and engage targets **without further intervention** by a human operator.

**Fully Autonomous Weapons (Killer Robots/Lethal Autonomous Weapons)-** Artificially Intelligent weapon robots that function based on their own mechanism without human control.

**Military Drones-** These are remote controlled or human-supervised autonomous weapon systems that are designed to allow human operators to input commands. However, the robots can select and engage targets without further human input after activation. These are precursors to killer robots.

**Artificial Intelligence-** Artificial intelligence is created by arithmetic calculations and programming of the robot. It lacks every feature of human intelligence and human judgment that make humans subject and accountable to rules and norms.

**International Humanitarian Law-** That branch of international law which seeks to limit the effects of armed conflict by protecting persons who are not participating in hostilities, namely, civilians.

**Geneva Conventions-** Comprise four treaties, and three additional protocols, that establish the standards of international law for humanitarian treatment in war.

**Convention on Certain Conventional Weapons-** The United Nations Convention on Certain Conventional Weapons, seeks to prohibit or restrict the use of certain conventional weapons which are considered excessively injurious or whose effects are indiscriminate.

**Use of Force-** Under International Law, it refers to any action whether military or non-military, taken against a UN Member State without its consent and which violates the territorial integrity of that state.

**Group of Governmental Experts on Lethal Autonomous Weapons-** The group was established following a decision taken in 2016 by the High Contracting Parties to the Convention on Certain Conventional Weapons – CCW, and is mandated to examine issues related to emerging technologies in the area of **lethal autonomous weapons systems (LAWS)** in the context of the objectives and purposes of the CCW.



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