

*Forum:**Sustainable Development Commission*

*Issue: The question of the implementation of Artificial Intelligence alongside weaponry on the battlefield
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*Position: President*

1. **Introduction**

*The modern definition for artificial intelligence is “the simulation of human intelligence in machines that are programmed to think like humans”, to many, especially to residents of war prone countries, these machines existing is a terrifying thought. As artificial intelligence seeps into our lives more and more, many have been concerned about how it is going to change the world. However, many have also been concerned about how it is going to change warfare. The question of if lethal autonomous weapons will take control of a battlefield has been asked many times, but now, it seems like an inevitability. Lethal autonomous weapons select targets and engage them independently, and they pose a huge threat on the battlefield, these systems might think faster than a human, might be more ruthless, more accurate and less forgiving than a human, which has made militaries around the world invest majorly in these autonomous weapons, starting an autonomous weapons arm race.*

*Global military spending on autonomous weapons and artificial intelligence is projected to reach around $16 billion and $18 billon respectively by 2025. However, there are many countries that just cannot keep up with this sudden change. Due to some countries having more resources that are used in investing into these lethal autonomous weapons and advanced robotics, this technology is concentrated in a few powerful, wealthy countries. This has made smaller, poorer nations that cannot keep up with this sudden rise try to stop it in any way possible to ensure that no other countries will have an advantage over them in the battlefield. Many countries like* *Pakistan, Egypt, Cuba, Panama, Peru, Argentina, Iraq, Austria and Colombia have been calling for a prohibition on fully autonomous weapons, which has been opposed by countries like Russia, United States, United Kingdom, France, Sweden and Turkey. This has caused a huge debate in the world that may alter the battlefield forever and may or not cause the deaths of many.*

1. **Definition of Key Terms**

Artificial Intelligence

AI is the simulation of human intellect processes by computer systems and other machines

Lethal Autonomous Weapons (LAWs)

 A type of autonomous military robot that can independently search for and engage targets based on programmed constraints and descriptions

Prohibition

The act of forbidding something, especially by law.

Semi-Autonomous Weapons

Semi-Autonomous Weapons are weapon systems that only engage individual targets or specific target groups that have been selected by a human operator

1. **General Overview – Background information**

**The Threat that Lethal Autonomous Weapons (LAWs) pose**

As countries, big and small, begin investing more and more money, time and effort into Lethal Autonomous Weapons (LAWs) one thing is becoming clearer, if no action is taken right now autonomous warfare is an inevitability and that is a fact that terrifying many experts around the globe. There are many concerns surrounding these autonomous weapons which have been brought up by many NGO’s, activists and countries attempting to ban these weapons.

An ethical concern that is being brought up regarding these Lethal Autonomous Weapons is that machine should never be allowed to make the decision over life and death of a human. Many people factor this in as a reason to steer away from these Lethal Autonomous Weapons.

Various security concerns have been raised regarding these autonomous weapons, including the fact that these weapons are highly unpredictable which could cause various problems including but not limited to, self-learning and breaking protocol. Also, this new technology may start a global arms race, to avoid this, many have campaigned for an early ban of these weapons.

Another valid security concern that has been brought up regarding these Lethal Autonomous Weapons is that these weapons could lead to accidental and rapid escalation of conflict which will, in turn, increase causalities and make lasting peace even harder to achieve. It is also possible that LAWs will cause a higher amount of damage than human soldiers, obliterating anything in their paths. This security concern has caused many to want to ban these robots in fear of the demolition and death they might cause. Furthermore, it is feared that any malfunction might have catastrophic effects on civilians and human soldiers alike. Since these robots select and engage their own targets without any human intervention, one mistake in there programming may lead to hundreds of innocent lives lost.

Some legal troubles will also occur when Lethal Autonomous Weapons begin to be used regularly in the battlefield, mainly accountability issues. It will be extremely hard to hold any party responsible or accountable for an unlawful act committed by a Lethal Autonomous Weapon, since the robot cannot be held responsible, will the manufacturer be held responsible? Or will the military be? These questions have also been brought up during debates regarding the banning of LAWs.

All in all, there are many concerns and troubles that are brought up if Lethal Autonomous Weapons will be allowed to be used in the battlefield ranging from ethical concerns, to security concerns and legal concerns. Parties defending the use of these weapons must tackle all of these issues to prove their point.

**The Benefits of Lethal Autonomous Weapons**

While most people see Lethal Autonomous Weapons as a danger to society and world peace, the defenders of the use of Lethal Autonomous Weapons usually mention some potential benefits that the implementation of these LAWs can bring to the battlefield.

One of the first and most talked about benefits that Lethal Autonomous Weapons bring if implemented into warfare is that the amount of human soldiers that are deployed to dangerous missions will be reduced significantly due to the fact that these soldiers will be replaced by the lethal autonomous weapon systems. This can reduce human casualties by a huge amount and help cut government spending. Also, the implementation of Lethal Autonomous Weapons will lead to less and less fighters being deployed and fighting for their country, saving many lives from dying in war.

There are moral justifications to using Lethal Autonomous Weapons too, mainly that these robots are not programmed with a self-preservation instinct like humans, meaning that they will be ethically preferable to be deployed into the battlefield than humans as they will act more humanely and abandon the “shoot first, ask questions later” attitude that many human soldiers adopt in order to preserve themselves on the battlefield. Also, according to roboticist Robert C. Arkin, the systems will be able to process much more incoming sensory information than humans without discarding or distorting it to fit preconceived notions which will make them even more morally preferable to deploy than humans.

1. **Major Parties Involved and Their Views**

United States, Russia, United Kingdom, France, Sweden and Turkey

During talks about these Lethal Autonomous Weapons, these parties supported legitimizing and legalizing these weapons and making them a part of warfare. They strongly opposed the countries calling for the banning and prohibition of these weapons. Also, many of these countries have a history of investing into these Lethal Autonomous Weapons which further shows their support for these weapons.

Pakistan, Egypt, Cuba, Panama, Peru, Argentina, Iraq, Austria and Colombia

On the other end, these countries have opposed the use of Lethal Autonomous Weapons in talks surrounding them, they have called for the banning and prohibition of these weapons, or at the very least they have called for these weapons to be strictly controlled and monitored through rules and laws. Most of these countries have not invested resources into the Lethal Autonomous Weapons as they might lack the resources or just are not interested in using valuable resources on these weapons. All in all, these countries are opposed to these weapons and are for banning them.

1. **Timeline of Events**

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| **Date** | **Description of event** |
| 1950 | English computer scientist Alan Turing suggests the creation of the Turing Test, which is a measurement of a machines intelligence. |
| 1951 | The first working AI program was written in 1951, the AI program was a checkers-playing program that was written by Christopher Strachey. Also, a chess-playing program written by Dietrich Prinz.  |
| 1952 | The first working game playing AI program was written by Arthur Samuel in 1952, which learned enough to challenge an amateur chess player.  |
| 1990s | Major advances in all areas of AI happened during this decade, with significant demonstrations in machine learning, intelligent tutoring, case-based reasoning, multi-agent planning, scheduling, uncertain reasoning, data mining, natural language understanding and translation, vision, virtual reality, games, and other topics. |
| 2000s | Artificial Intelligence and robotics developments have happened during this decade and Lethal Autonomous Weapons began becoming a serious discussion and many countries began to invest into these LAWs |

1. UN Involvement, Relevant Resolutions, Treaties and Events:

There has been a surprisingly low amount of involvement by the United Nations regarding the subject of Lethal Autonomous Weapons, with the exception of:

* The First Committee (Disarmament and International Security) meeting to exchange views on how to control Lethal Autonomous Weapons on September 29th, 2018
* A November 2019 meeting of member countries of the Convention on Conventional Weapons (CCW) at the United Nations in Geneva which led to no progress because UN diplomats could not agree on a binding approach towards these issues. The diplomats also decided to continue talks regulating lethal autonomous weapons systems for the next two years.
1. Evaluation of Previous Attempts to Resolve the Issue

Previous attempts to address these issues relating to Lethal Autonomous Weapons have proven to be somewhat lackluster, due to all parties not committing to signing any binding agreement to address these issues. These talks need to become more serious and more decisive action needs to be taken regarding whether Lethal Autonomous Weapons should be prohibited, as a future with LAWs controlling the battlefield seems much closer than expected.

1. Possible Solutions

During this debate, delegates will take sides depending on the views of the nation that they are representing. If the delegate is representing a wealthy nation that is extremely advanced technologically and have already researched and invested a lot of resources into Lethal Autonomous Weapons, then the solution that they will be presenting to the forum to ensure sustainable development in their point of view is to abolish any restrictions on any type of Lethal Autonomous Weapon and allow their full use in the battlefield without any type of restriction, since this will give these countries the best advantage and is the end goal that they are seeking.

However, if the delegates are representing a poorer country which is opposed to Lethal Autonomous Weapons and wants to prohibit their use in warfare around the globe, then the solution that they will be presenting to the forum is to outright prohibit the use of these Lethal Autonomous Weapons in warfare, or to slowly place more and more restrictions to the point where the use of these Lethal Autonomous Weapons will be extremely safe and not advised.

Also, some of these countries may try to reach a middle ground and meet halfway, by only allowing the use of Semi- Autonomous weapons in warfare and outlawing certain Lethal Autonomous Weapon systems. The solution that each country will choose will most fit their goals and agenda and will be the solution that they believe will get them closer to achieving the 17 sustainable development goals without sacrificing any advantages that their country might gain/

1. Guiding Questions
* *What’s your nation’s history with Artificial Intelligence?*
* *How prepared is your nation for the rise of Lethal Autonomous Weapons that is set to take place in the next decade?*
* *What does your countries foreign policy tell you about their views regarding LAWs?*
* *Is your nation’s military capable of catching up to the rise of LAWs?*
* *Will your country gain more from banning LAWs or removing all restrictions on these weapons?*

1. Appendices and useful links
2. <https://www.un.org/press/en/2018/gadis3611.doc.htm>
3. <https://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/May-June-2017/Pros-and-Cons-of-Autonomous-Weapons-Systems/>
4. <https://news.un.org/en/story/2019/03/1035381>
5. <https://onlinelibrary.wiley.com/doi/full/10.1111/1758-5899.12713>
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Notes:

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