

Committee: DISEC 1

Topic: The question of autonomous military vehicles

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Summary

Autonomous military vehicles are those which are completely unmanned and are able to carry out lethal missions without any human intervention. It is important to remember that these vehicles therefore raise other issues on top of those raised by the more conventional unmanned military vehicles, colloquially known as drones.

These vehicles come in many forms, including underwater vehicles, aerial vehicles and those that travel by land. Delegates will need to consider how these vehicles may be used in the future: they could be used simply for surveillance, to carry out missions too dangerous for humans or to carry out lethal missions. Delegates will need to consider how much automation we should be willing to allow, and work together to find a solution that works for all those affected by these vehicles.

Definition of Key Terms

Autonomous military vehicle: a vehicle which requires no human intervention to carry out missions

Unmanned Aerial Vehicle (UAV): these are vehicles that can be used for flight without any humans onboard. Note also that UAVs can be used for civilian, not just military, purposes

Background Information^[EJ1]

Autonomous military vehicles are not yet used in combat roles, however they have a long history along with their automated and unmanned counterparts. Unmanned military vehicles were first used during the first and second world war, such as the French "crocodile Schneider torpille terrestre" that boasted a 40 kg explosive. After the world wars development of drones continued, with drones being used for aerial reconnaissance during the Vietnam War. In recent times many nations have begun to invest in autonomous military systems, and UAVs such as the British Watchkeeper now dominate military reconnaissance and targeted airstrikes in warzones.

Today, there are some non-lethal applications for autonomous military vehicles and some in development for roles such as guard duties, bomb disposal and reconnaissance.

The use of autonomous military vehicles in warfare raises a wealth of issues that delegates should seek to debate and come to conclusions over during their debate.

One of these is that UAVs should be considered as their own category of weapons, given their unique characteristics that affect their use. The separation between operator and the vehicle has historically meant their use has had a much lower political implication than ordinary war or military intervention. This issue is one that is only likely to be exacerbated by the rise of autonomous military vehicles. This also

means that the geographical areas over which wars can take place is significantly larger, and countries may not feel that the same rules of conflict apply to intervention with autonomous military vehicles, given their actions are almost completely separated from humans.

Another is the issue of distinguishing between civilian military vehicles and military ones. As the UN express, the “absence of any internationally agreed system for classifying UAVs further complicates this task”.

Another is the use of these vehicles in space. The use of space is governed by the UN “Outer Space Treaty”, which does not forbid the use of military activities or military vehicles in space, with the exception of the placement of weapons of mass destruction in space

Major Countries and Organizations Involved

Human Rights Watch: This American NGO undergoes research and advocacy for human rights. They are involved in calling for the UN to ban what they call “lethal autonomous weapon systems” (LAWS). They have been involved in previous military efforts, earning a Nobel peace prize in 1997 as a founding member of the International Campaign to Ban Landmines.

Campaign to Stop Killer Robots: Launched in 2013, this NGO works with Human Rights Watch to urge the united nations to outlaw LAWS. Delegates should note that many countries including Israel, Russia, South Korea, the US and the UK have opposed these efforts, arguing that existing humanitarian law is sufficient.

The United Nations: The UN international Civil Aviation authority published circular 328, stating that UAV should demonstrate the same safety features as manned aircraft. However, in most cases nations themselves decide on the law in their own airspace. The UN has also published a study on unmanned aerial vehicles, outlining how international law applies to unmanned aerial vehicles.

Timeline of Events

Date	Description
1940	The first unmanned military vehicles are used in warfare during the Second World War (the Soviet TT-26 teletank)
1982	Operation Mole Cricket 19: The Israeli air force’s victory over the Syrian air force, destroying dozens of Syrian aircraft, changes world attitudes towards UAVs.
2000	The USA deploys the Predator drone in Afghanistan while searching for Osama Bin Laden
2015	The UN publishes its Study on Armed Unmanned Aerial Vehicles

Relevant UN Treaties and Events

The UN Study on Armed Unmanned Aerial Vehicles: this establishes how UAVs should be used in relation to the laws of the legality of the use of force against another state, as well as discussing the potential implications and difficulties with UAVs

The Geneva Conventions: These 4 conventions are important treaties limiting the barbarity of war, signed in 1949. Of particular relevance to autonomous military vehicles is the fourth convention, which affords protection to civilians, including in occupied territory.

The Convention on Certain Conventional Weapons: this 1980 treaty seeks to prohibit the use of certain conventional weapons which are considered especially harmful or whose effects are deemed indiscriminate (Note that conventional weapons exclude weapons of mass destruction).

Previous Attempts to solve the Issue

Other than efforts by NGOs such as Human Rights Watch, there has^[EJ2] been limited efforts to specifically resolve the issue of autonomous military vehicles, given they have not fully come into force and are not yet used in active combat. However, given the number of these vehicles in development, it is important that existing UN treaties can be modified in order to minimize any harm that these may bring.

Possible Solutions

Delegates should consider modifications to existing UN treaties on warfare. It is important for delegates to consider to what extent the use of autonomous military vehicles needs to be restricted. For example, some delegates may wish to add these weapons to the protocols of the Convention on Certain Conventional Weapons, banning them outright. However, this approach might not be one which would be able to gain support from all countries in the committee, given many countries are in favour of the use of these vehicles. For example, the United Kingdom and United States argue against NGOs such as the Campaign Against Killer Robots, saying that existing international humanitarian standards are adequate. Therefore, delegates should consider the attitudes of other nations to these vehicles.

When thinking of solutions, delegates should also consider those affected by these vehicles. The most obvious would be the combatants fighting against autonomous military vehicles, but these are not the only ones affected. These vehicles can carry out dangerous missions and reduce the loss of life for soldiers. As Lt. Gen. Richard Lynch of the United States Army said, "As I think about what's happening on the battlefield today ... I contend there are things we could do to improve the survivability of our service members. And you all know that's true"

Bibliography

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Useful websites:

UN study on UAVs: <https://www.un.org/disarmament/publications/more/drones-study/>

UN outer space treaties: <http://www.unoosa.org/pdf/publications/STSPACE11E.pdf>

Geneva conventions: <https://www.icrc.org/en/doc/war-and-law/treaties-customary-law/geneva-conventions/overview-geneva-conventions.htm>

For a brief history of autonomous military vehicles: <https://interestingengineering.com/a-brief-history-of-military-robots-including-autonomous-systems>