

*Tackling the dispute of
robotic combat systems*

Committee Guide

Economic and Social Council



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Personal Introduction

Dear Delegates,

Our names are Marieke Reichelt and Áron Kormosi, and we will have the pleasure of chairing you during this year's session of the Economic and Social Council at OLMUN.

1. Marieke

My name is Marieke Reichelt and I will have the pleasure to be one of the chairs of this year's ECOSOC.

I am 17 years old and currently attending the eleventh grade of Graf-Anton - Günther Schule in Oldenburg. I was an exchange student last year and got to spend my time in Houston (USA). I was given a new culture, met new people, and was able to improve my English skills.

My MUN experience started in 2013 as a staff of the WIPO. The years after I participated in two more OLMUNs, the MUN-SH in Kiel and a school intern MUN. In addition to that I joined the Inner Circle to be part of the OLMUNs organization team.

OLMUN 2016 will be my fifth MUN that I have attended but my first one as a chair.

Apart from MUNs I love to play tennis, hang out, eat and cook with my friends and to travel. I am looking forward to be part of this years OLMUN chair team, great debates, funny punishments, and of course to meet everyone come June!

Best regards,
Marieke

2. Áron

My name is Áron Kormosi, and during this year's OLMUN session, I will be one of the chairs directing the Economic and Social Council, or ECOSOC. I am 16 years old, and a student of Eötvös József Secondary School of Budapest, Hungary. This is the first OLMUN I'll attend, and in total, the ninth conference for me, and the second one where I'm chairing.

About myself – It will come as little surprise to you that I am rather much interested in current world affairs, and politics, both domestic and international. Apart from that, I am an aviation enthusiast and a keen football fan, and I always enjoy a good movie with some quality coffee.

I hope that you'll have a great time preparing for the conference, and that you'll enjoy our committee sessions.

Best regards,
Áron

1. What is the Economic and Social Council?

The Economic and Social Council of the United Nations, or ECOSOC, is one of the six main organs of the UN established by the UN Charter in 1946. It is the principal body of the UN for coordination, dialogue and solutions for issues concerning economic, social and environmental issues, and for implementation of globally agreed development goals. It also supervises the subsidiary and expert bodies in the fields mentioned above.

The ECOSOC features fifty-four voting member states, including 14 African states, 11 Asian states, 6 Eastern European states, 10 Latin American and Caribbean states and 13 states of Western Europe and other parts of the world.

The ECOSOC is the parent organ for eight functional commissions, five regional commissions, three standing committees, nine expert bodies and five other bodies.

1.1 What does the ECOSOC usually deal with?

The ECOSOC serves as the central forum for discussing international economic and social issues. Its specialized agencies work with a wide range of issues – for example, health issues (*World Health Organization*), food and agriculture (*Food and Agricultural Organization*) or telecommunication (*International Telecommunication Union*). It also has functional commissions, for example, the *Commission on Narcotic Drugs* or the *Commission on Science and Technology for Development*. Many various stakeholders involved with the Economic and Social Council are furthermore engaged in a productive dialogue on sustainable development through a programmatic cycle of meetings. An annual theme accompanies each of these cycles to ensure that discussion can be sustained and can remain focused.

This year's topic is most closely related to the *Commission on Science and Technology for Development*, a topic that might not be the most pressing right now, but one that will definitely gain interest in the coming years, as it will become a more actual issue. So, with that – let's see what we'll be dealing with.

2. Our issue for 2016 – Tackling the dispute of robotic combat systems



Military robots are either fully autonomous or remotely controlled, and are designed for a variety of military uses, from transportation to attack. In our days, remotely controlled robots are the lion's share in such platforms, however, the mounting

http://ichef-1.bbci.co.uk/news/660/media/images/51689000/gif/_51689018_48451394_drone_464.gif

pressure of the increasing tempo of the battlefield is forcing developers to turn more towards completely autonomous robots, and such developments can be expected in the near future. Many believe that these platforms are, indeed, the future of waging warfare, and heavy investments are being made into research and development of such systems – the most prominent of them being unmanned combat aerial vehicles, or UCAVs. However, there also exists another type of these systems, the unmanned ground vehicles, or UGVs. The least developed – as of our days – yet most dangerous vehicles are LAWs, or lethal autonomous weapons which can function without any sort of intervention by a human operator. This, of course, has its positives, negatives and its share of controversy as well.

2.1 UCAVs



UCAV stands for Unmanned Combat Aerial Vehicle. UCAVs are unmanned aerial vehicles equipped with armaments (most commonly missiles) that have no human pilot on board, but are most times under full-time remote human control. UCAVs are usually relatively small and light, as they

https://en.wikipedia.org/wiki/Unmanned_combat_aerial_vehicle#/media/File:Boeing_X-45A_UCAV.jpg

require no space for a human operator or for life support systems, flight controls and the alike.

As of December 2015, thirty countries are known to be in possession of UCAVs, and five states are confirmed to have produced working UCAVs: the People's Republic of China, Israel, Turkey, Pakistan and the United States of America.

2.2 UGVs

UGV stands for Unmanned Ground Vehicle. It is a vehicle that operates on the ground without onboard human presence. Generally the vehicle either operates by way of sensors that help it autonomously make decisions on its movement, or are operated by human operators remotely. They are the land-based counterparts of UCAVs and ROVs.



http://www.worldtribune.com/wp-content/uploads/2012/09/SP0000_0600x0450x0072_000x000000_id264@jpg.png

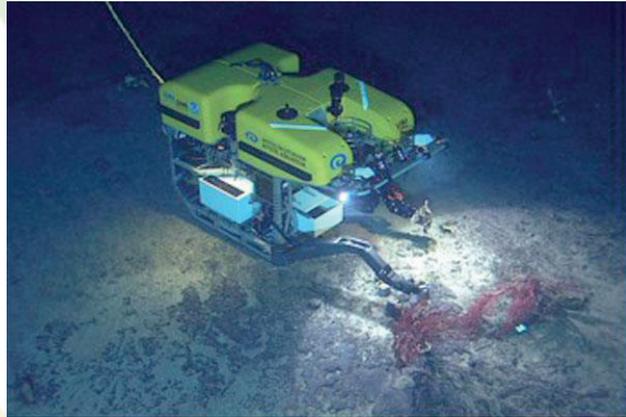
UGVs can be divided into two groups: either usable by riders or only for cargo. Another way of categorization is either completely autonomous UGVs or remotely controlled ones. UGVs can be used for a wide variety of tasks, mostly where human operated vehicles are inconvenient or dangerous – explosive ordnance disposal or repairing nuclear power plants. However, for our session, we are focused on their combat usage.

In combat, UGVs can be used to draw first fire, or they can also be armed with weapons, for example, light machine guns or grenade launchers, and can be deployed in combat situations without risking the loss of human life. Such platforms include the Foster-Miller TALON or the Russian Taifun-M.

2.3 ROVs

ROV stands for Remotely Operated Underwater Vehicle.

ROVs are unoccupied, highly maneuverable and are operated by a crew aboard a mother ship. They are, generally, not used in combat situations, however, there are a few instances where they are used by military, and in the future, might also become an important part of naval warfare.



http://oceanexplorer.noaa.gov/explorations/04mountains/logs/summary/media/herc_collecting_blocks_600.jpg

In naval combat, they are generally used for mine warfare – whether it be placing mines or deactivating them. They can also be used for surveillance, reconnaissance, port security or stalking enemy waters. As their capabilities grow, more and more naval forces start to adapt them into their fleets, both as individual watercraft, and as those that can be deployed from other, larger ships.

2.4 LAWs

LAW stands for Lethal Autonomous Weapon.

They are not limited to operating area, as they may be used on ground, in air, on or under water or theoretically even in space. Modern systems are able to autonomously search and identify targets, however, as of 2016, these weapons require human intervention in giving the final approval to attack.

Currently, lethal autonomous platforms in air are rather much advanced, but not so much in other areas. However, it is largely anticipated that over the coming years, full autonomy in combat, both in air, land or sea systems will largely increase.



<http://jurist.org/images/wiki/14/05/swords%20robot.jpg>

2.5 Advantages, dangers and questions of ethics

2.5.1 Advantages

Obviously, the main advantage of conducting warfare by robots is removing the risk factor of endangering human life. For example, the War on Terror

resulted in over sixty-six thousand US casualties. With military robots, those numbers could be dramatically reduced.

Robots also don't get tired. Within their operational limits, whatever is asked of them, they'll do. They are built and programmed in ways that they can and will outperform their human counterparts with their capabilities, their speed and their strength.

While many might not count such as positives, objectively, robots do not feel, but are designed to comply with laws of war and rules of engagement, significantly reducing the risks of unethical behavior by militants. Also, any and all conditions that might affect the judgement of soldiers – fatigue or emotions – won't do any sort of harm on the robots' operational effectiveness. They don't feel. They have no psychological problems. They have no PTSD. They do not need to defend themselves. They are more precise. By removing their humanity, their effectiveness is bettered in multiple ways.

2.5.2 Dangers



Workhorse military robots do wonders for war budgets, meaning that their usage, and thereby warfare might become more common, as it is cheaper to wage war. They make killing easier, and thereby, instead of reducing the risk of endangering human life, they just elevate such risks. Lest we forget that this cheap and cold way of warfare brings

http://www.toonpool.com/user/20172/files/error_on_terror_1305965.jpg

with itself the clear danger of violating Jus ad bellum – while they are now programmed to comply with the laws of war, who knows what improvements to artificial intelligence will bring?

American soldiers who work with drones are known to have named them and become affectionate with them. Surviving dangerous situations together just increased their bond. While that might be good, it is an interesting question on whether or not feelings between human and artificial intelligence are maddening or not.

Also, it is of great risk if a system identifying targets fails, and instead, the machine attacks either allies or civilians. Unmanned warfare must adhere to the Geneva Conventions and international humanitarian law as well, and for safe usage, friend-or-foe identification must be top notch, and collateral damage be kept to a minimum. Furthermore, actions demand responsibilities, and unmanned operations make identification that much harder. Those who make the final decision, those who “pull the trigger” must accept their roles as combatants and be aware of the consequences that their actions will bring.

2.5.3 The question of ethics

Ethics on their own are a really interesting question and a rather large part of this topic. Machine ethics, which are concerned with the ethics of the artificial

intelligence that we create, and “roboethics”, which are concerned with the ethics of the human beings who consciously choose to develop such platforms, cannot be ignored when a topic like this is put to debate.

Since 2013, the Campaign to Stop Killer Robots has its member organizations, for example Amnesty International or the Human Rights Watch urging the United Nations to implement a pre-emptive ban on lethal autonomous weapons systems. In July 2015, a letter underlining this request and also warning of a military AI race was signed in Buenos Aires by celebrities, including Elon Musk,



https://upload.wikimedia.org/wikipedia/commons/3/3d/Stop_Killer_Drones_%2815836463196%29.jpg

Stephen Hawking or Steve Wozniak.

3. Measures and solutions

3.1 Those already taken

The issue of drone strikes was touched on by the United Nations Human Rights Council and the General Assembly, in their resolutions A/HRC/25/L.32 and A/RES/68/178, respectively. The Campaign to Stop Killer Robots was established in 2013, and ever since has been campaigning for a complete disarmament of LAWs. The United Nations Office at Geneva, since 2014, has hosted informal meetings of Experts on Lethal Autonomous Weapons Systems, or LAWs. The Geneva Conventions, just as with conventional warfare, apply to autonomous weapons systems as well to ensure humanitarian treatment at wartime.

3.2 Those that might possibly be taken

- Create a global framework to set ground rules for the deployment of LAWs worldwide:
 - o keeping collateral damage to a minimum,
 - o ensuring high efficiency,
 - o ensuring that operators of such platforms are completely aware of the consequences of their actions and accept their role as combatant,
 - o developing a strict criteria system on the question of situations where LAW deployment can take place, mainly aiming to reduce collateral damage but also ensuring that the relatively cheap force that these vehicles provide are in no way exploited,
- Ensure support and adherence to the aforementioned framework,

- Possibly answer the question on whether or not soldiers should be robots or robots should be soldiers?
- Ensure that the deployment of such platforms can maintain a level of ethics, are in complete adherence with international humanitarian law, with the Geneva Conventions and that they can meet an international standard of distinction and proportionality,
- Underline former United Nations resolutions on the issue,
- Aim to keep global peace and security, so that these weapons platforms can in no way threaten or harm them,

4. Resources for preparation

- http://www.navy.mil/navydata/fact_display.asp?cid=4200&tid=1900&ct=4
- <http://science.howstuffworks.com/military-robot.htm>
- http://www.swri.org/4org/d10/isd/ivs/marti.htm?utm_source=wiki-external&utm_medium=link&utm_campaign=ugv-marti
- <https://www.hrw.org/topic/arms/killer-robots>
- <https://www.icrc.org/applic/ihl/ihl.nsf/vwTreaties1949.xsp?redirect=0>
- <http://philpapers.org/rec/SIMJWA>
- <http://www.theguardian.com/technology/2015/jul/27/musk-wozniak-hawking-ban-ai-autonomous-weapons>
- <http://ethics.calpoly.edu/robots.htm>
- <http://science.howstuffworks.com/reaper.htm>
- <https://ccdcoe.org/sites/default/files/documents/UN-131218-ProtectionOfHRFFWhileCounteringTerrorism.pdf>
- <http://wilpf.org/wp-content/uploads/2014/04/resolution.pdf>
- All relevant Wikipedia articles on the matters mentioned above

5. A reminder from your chairs

Dear Delegates,

While we certainly hope that our committee guide will be a helpful resource for you all in preparing for the 2016 session of OLMUN, we would like to remind you that this guide on its own will not be enough to prepare for the conference! Please dig deeper and conduct your own research as well apart from working from this committee guide, as it will make for a better and more in-depth debate.

Sincerely yours,
 The presidency of the ECOSOC:
 Marieke Reichelt and Áron Kormosi