Women Mobilizing
to End the War
KOREA PEACE NOW

## Factsheet: Killer Robots and South Korea

**What are killer robots?**

Killer robots are lethal autonomous weapon systems that can operate without "meaningful human control" — that is, without a human remotely powering them. Unlike armed drones, killer robots can select and fire upon targets on their own, using preprogrammed algorithms and data analysis.

**Why should we be concerned about killer robots?**

There are many reasons why we should be concerned about killer robots. Fully autonomous weapons remove human control from the complex decision to use force, thus eliminating the possibility for empathy, conscience, emotion, judgment or care for the value of human life. Autonomous weapon systems cannot be relied upon to comply with international laws regarding war or human rights. If autonomous weapons accidentally kill civilians, it is unclear who, if anyone, would be held liable or accountable. This would make it difficult to ensure justice for the victims.

By replacing troops with machines, killer robots risk lowering the threshold for war, making it easier for countries to engage in conflicts. There is also the potential for killer robots to be used in circumstances outside of war, such as policing or border control. Finally, autonomous weapons are more susceptible to cyberattacks and hacking, making them less predictable and more uncontrollable, with potentially deadly results.

**What does race or gender have to do with killer robots?**

People can program killer robots with biases about race or gender — for example, by targeting someone based on their skin color or the way they are dressed. Recent studies on facial and vocal recognition software demonstrate that racism is already built into our technology. Furthermore, killer robots are part of a broader structure of militarization, which is driven by and reinforces patriarchal notions of dominance and control through violence, and which erodes the rights and safety of women and gender-nonconforming people.

**Which countries are currently developing killer robots?**

The United States, China, Israel, South Korea, Russia, and the UK are all developing weapons systems with significant autonomy in the critical functions of selecting and attacking targets. This represents a dangerous new arms race for autonomous weapons.

**What is the status of killer robots in South Korea?**

South Korea has long been pursuing the development of high-tech weapons. This is a direct result of the ongoing Korean War with North Korea, which has fueled a dangerous militarization on the Korean Peninsula.

In 1997, South Korea purchased 100 Harpy anti-radiation unmanned air vehicles. This autonomous weapon is pre-programmed to perform flights in a pre-defined area and can detect, attack, and destroy targets without human intervention.

In 2006, it was reported that Korea University and Samsung Techwin Co. had developed a Robot Military Sentry (SGR-A1) equipped with a machine gun (and optional grenade launcher), which the South Korean military stationed along the De-Militarized Zone (DMZ) separating North and South Korea. Although it was initially reported to need a human operator to fire upon targets, various sources confirmed that the stationary robot also had the ability to act autonomously. Using a low-light camera and pattern recognition software to distinguish humans from animals and other objects, the robot is able to detect when a person enters its range (from over 2 miles away).

The South Korean government has both acknowledged the ethical concerns about lethal autonomous weapon systems while also saying it is committed to "identify new and innovative means of countering the North Korean threat, including collaboration in robotics and autonomous technologies."

Such technology is increasingly being criticized for its dangerous implications. In 2018, more than 50 international scholars signed a letter calling for a boycott of Korea Advanced Institute of Science and Technology (KAIST) over concerns that it was developing autonomous weapons.

More recently, in 2019, the South Korean government acknowledged the need for "a concerted response against … potentially grave challenges" posed by lethal autonomous weapons systems and said that "Korea is … committed to joining international efforts in the long-term to develop realistic international norms" regarding their use.

**What can we do to stop killer robots?**

Since 2012, the Campaign to Stop Killer Robots has been working to ban fully autonomous weapons. There has been increasing support for such a ban. In 2019, UN Secretary-General António Guterres also called for banning fully autonomous weapons, saying "machines with the power and discretion to take lives without human involvement are politically unacceptable, morally repugnant and should be prohibited by international law." As of May 2020, 30 countries have endorsed the call for prohibiting fully autonomous weapons. However, the United States and South Korea are not among them.

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