# ISRAEL'S MILITARY USE OF AI TO FACILITATE GENOCIDE AND ITS INTERNATIONAL CONSEQUENCES

**IQRA BANO SOHAIL** 





# **Executive Summary**

The ongoing conflict in Gaza has underscored the urgent need for comprehensive international regulations concerning the use of Artificial Intelligence (AI) in military applications, particularly regarding the potential for human rights violations. One concerning manifestation of this issue is the emergence of Artificial Genocidal Intelligence (AGI), wherein AI systems are deliberately programmed to facilitate acts of genocide. The recent military operations conducted by Israel in Gaza exemplify the chilling implications of AGI and mass surveillance, including the deployment of Lethal Autonomous Weapon Systems (LAWS) and semi-LAWS. Reports reveal that the Israeli military employs sophisticated AI tools, such as Lavender, Gospel, Alchemist, and Red Wolf, for surveillance and targeting operations, resulting in civilian casualties and destruction. These technologies have significantly impacted the scale and precision of military actions, with alarming consequences for civilian populations. In light of these developments, the international community must act urgently to strengthen regulatory frameworks

### **Policy Recommendations**

- The UN must urgently regulate the use of AGI, particularly those employed by Israel, by integrating these into the existing framework of the Convention on Certain Conventional Weapons (CCW). Ensuring human oversight is crucial, including the requirement for a kill switch in all autonomous weapons to allow for immediate deactivation during malfunctions or ethical dilemmas, with regular testing to ensure reliability.
- Palestine should engage with UN human rights bodies by filing formal complaints under international treaties like the ICCPR to highlight Israel's use of AGI and its human rights violations. This action could stimulate international discourse, prompting other states to adopt diplomatic measures or resolutions condemning these practices.
- The United Nations Security Council should formally recognize the situation as a violation
  of international humanitarian law and draft a resolution demanding Israel's immediate
  cessation of the negligent and militarily unnecessary use of AGI.
- Pakistan is a party to CCW and all of its five Protocols, and remains fully compliant with their provisions. Pakistan should ensure that it is part of the process of regulating AGI under CCW. To that end, it should send representatives to meetings held by CCW's Group of Governmental Experts.

### **INTRODUCTION**

Recent debates regarding Artificial Intelligence (AI) have largely been characterized by futuristic predictions about sophisticated AI systems. However, the current situation in Gaza has exposed a more commonplace reality. The AI-enhanced warfare in Gaza serves as a stark reminder that it is imperative for governments to enact comprehensive bans on technologies that are incompatible with international human rights law<sup>1</sup>. Such prohibitions must apply not only in times of conflict but also during periods of peace.

The proliferation of these destructive technologies without adequate regulation poses a grave threat to global security. The absence of a robust international framework to oversee the development and use of AI for military and surveillance purposes leaves the world vulnerable to the devastating consequences of AGI.

# ARTIFICIAL GENOCIDAL INTELLIGENCE (AGI)

The concept of AGI represents a chilling intersection of technological advancement and historical atrocity. AGI refers to the deliberate programming or manipulation of artificial intelligence systems to facilitate acts of genocide. This emerging threat challenges the boundaries of AI ethics, international law, and human rights, underscoring the grave risks posed by AI when exploited for mass violence.<sup>2</sup>

When weaponized, AI systems could autonomously identify and eliminate targeted populations, accelerating the pace and scale of genocidal actions. The rapid development of AI, coupled with advancements in areas such as facial recognition and crowdsourcing, has created the potential for unprecedented efficiency and scale in mass killing.

### AGI AND MASS SURVEILLANCE: THE ISRAELI MILITARY OPERATIONS

The recent conflict in Gaza has highlighted the pressing need to confront the dystopian implications of AI-powered warfare. These systems exemplify broader concerns regarding the use of advanced technologies which have raised serious issues of human rights violations.

<sup>&</sup>lt;sup>1 1</sup> The Economist, "Israel's Use of AI in Gaza Is Coming under Closer Scrutiny" The Economist (April 11, 2024) <a href="https://www.economist.com/middle-east-and-africa/2024/04/11/israels-use-of-ai-in-gaza-is-coming-under-closer-scrutiny">https://www.economist.com/middle-east-and-africa/2024/04/11/israels-use-of-ai-in-gaza-is-coming-under-closer-scrutiny</a> accessed October 15, 2024

<sup>&</sup>lt;sup>2</sup> Marc Owen Jones, "Israel Is Carrying out an AI-Assisted Genocide in Gaza" (The New Arab, April 10, 2024) <a href="https://www.newarab.com/analysis/israel-carrying-out-ai-assisted-genocide-gaza">https://www.newarab.com/analysis/israel-carrying-out-ai-assisted-genocide-gaza</a> accessed October 15, 2024.

Lethal Autonomous Weapon Systems (LAWS) are a special class of weapon systems that use sensor suites and computer algorithms to independently identify a target and employ an onboard weapon system to engage and destroy the target without manual human control of the system<sup>3</sup>. Semi-Lethal Autonomous Weapons (semi-LAWS), on the other hand, only engage individual targets or specific target groups that have been selected by a human operator. Israel has used both of these in its strategy. Additionally, Israel has also deployed to mass surveillance. The New York Times<sup>4</sup> reported on how the Israeli military is using an expansive facial recognition system in Gaza:

"The expansive and experimental effort is being used to conduct mass surveillance there, collecting and cataloging the faces of Palestinians without their knowledge or consent, according to Israeli intelligence officers, military officials and soldiers."

### Lavender

Lavender, developed by the Israeli military, has played a pivotal role in the unprecedented bombing of Palestinians, particularly during the initial phases of the conflict. Sources indicate that the military relied on the outputs of this AI system as if it were a human decision. The AI operates by analyzing vast amounts of surveillance data on Gaza's population of approximately 2.3 million residents. It assigns a rating from 1 to 100 to each individual, reflecting their perceived likelihood of being associated with Hamas. This scoring is based on characteristics observed in known operatives, enabling the system to flag individuals as potential targets for military action<sup>5</sup>.

Lavender's deployment has led to a significant increase in targeted strikes. In its early stages, the AI identified around 37,000 individuals as suspects for potential assassination. In some cases, operations have been authorized despite the expectation of high collateral damage. For instance, during one targeting operation, it was reported that up to 100 civilians could be killed in the attempt to eliminate a single Hamas member.<sup>6</sup>

<sup>&</sup>lt;sup>3</sup> CRS In Focus IF11150, *Defense Primer: U.S. Policy on Lethal Autonomous Weapon Systems*, by Kelley M. Sayler

<sup>&</sup>lt;sup>4</sup> Sheera Frenkel, "Israel Deploys Expansive Facial Recognition Program in Gaza" The New York Times (March 27, 2024) <a href="https://www.nytimes.com/2024/03/27/technology/israel-facial-recognition-gaza.html">https://www.nytimes.com/2024/03/27/technology/israel-facial-recognition-gaza.html</a> accessed October 10, 2024.

<sup>&</sup>lt;sup>5</sup> Sadiq Bhat, "Israel's AI System 'Lavender' Decides Who Lives and Dies in Gaza" TRT WORLD (April 4, 2024) <a href="https://www.trtworld.com/middle-east/israels-ai-system-lavender-decides-who-lives-and-dies-in-gaza-17641013">https://www.trtworld.com/middle-east/israels-ai-system-lavender-decides-who-lives-and-dies-in-gaza-17641013</a> accessed October 11, 2024.

<sup>&</sup>lt;sup>6</sup> The New Arab, "Israel Using 'Lavender' AI Machine in Gaza Killing Spree" (The New Arab, April 4, 2024) <a href="https://www.newarab.com/news/israel-using-lavender-ai-machine-gaza-killing-spree">https://www.newarab.com/news/israel-using-lavender-ai-machine-gaza-killing-spree</a> accessed October 11, 2024.

### Gospel

Gospel is designed to identify buildings and structures that the Israeli military claims are used by militants for operational purposes. Gospel's algorithmic approach significantly increases the rate of target identification, reportedly escalating from approximately 50 targets annually to nearly 100 daily.

However, reports suggest that airstrikes frequently hit residential buildings without confirmed militant presence, contributing to a civilian death toll that has now surpassed 41,000<sup>7</sup>. This raises concerns regarding the accuracy of Gospel's target identification and whether its use complies with international humanitarian law.

### **Alchemist**

Alchemist is an advanced system that integrates various data sources to monitor activities along the Gaza border and other critical areas. Utilizing machine learning algorithms, it processes a range of intelligence inputs, including Signals Intelligence (SIGINT), Visual Intelligence (VISINT), Human Intelligence (HUMINT) and Geospatial Intelligence (GEOINT)<sup>8</sup>. This comprehensive data collection allows Alchemist to identify potential threats and provide real-time alerts to military personnel.

# Where's Daddy?

Where's Daddy? has been specifically employed to monitor targeted individuals and execute bombings. The primary purpose of this is to automate the tracking of individuals listed on a military kill list. Reports suggest that the Israeli military has utilized this tool to conduct strikes against suspected militants when they are at home<sup>9</sup>, which has generated significant ethical concerns regarding the safety of civilians and the tool's compliance with international legal standards. By linking mobile phone data to the identities of suspected militants, Israel is

<sup>-</sup>

<sup>&</sup>lt;sup>7</sup> Mahira Sarfraz, "How Israel Harnesses Technology to Advance Its Offensive in Middle East" DAWN.COM (October 7, 2024) https://www.dawn.com/news/1862118 accessed October 11, 2024.

<sup>&</sup>lt;sup>8</sup> Hisham Hisham, "Artificial Intelligence Applications in IDF Combat Strategy" (Aljundi Journal - A Military & Department of the Combat Strategy (Aljundi Journal - A Military & Department of the Combat Strategy (Aljundi Journal - A Military & Department of the Combat Strategy) accessed October 12, 2024.

<sup>&</sup>lt;sup>9</sup> "Questions and Answers: Israeli Military's Use of Digital Tools in Gaza" (*Human Rights Watch*, September 10, 2024) <a href="https://www.hrw.org/news/2024/09/10/questions-and-answers-israeli-militarys-use-digital-tools-gaza">https://www.hrw.org/news/2024/09/10/questions-and-answers-israeli-militarys-use-digital-tools-gaza</a> accessed October 12, 2024

able to carry out strikes with greater efficiency, prioritizing attacks on individuals within their homes <sup>10</sup>.

### **Red Wolf**

Red Wolf is a sophisticated facial recognition system employed by the Israeli military, primarily at checkpoints in the West Bank. This technology is part of a larger surveillance infrastructure designed to monitor and control the movement of Palestinians. Red Wolf operates by scanning the faces of individuals passing through military checkpoints, using biometric data to determine whether a person is permitted to cross<sup>11</sup>. This technology has been widely criticized for deepening systemic discrimination. It enforces stringent movement restrictions, often based on biometric data collected without legitimate consent, and denies individuals passage even when they have lawful reasons to cross checkpoints.

### INTERNATIONAL LAW ON AGI

# Illegality of LAWS and Semi-LAWS

LAWS have been condemned by the United Nations as "politically unacceptable and morally repugnant." The Convention on Certain Conventional Weapons (CCW) provides a framework for regulating the use of weapons with indiscriminate effects. Since 2014, discussions within the CCW have increasingly focused on the regulation of LAWS<sup>13</sup>. In 2018, a Group of Governmental Experts (GGE)<sup>14</sup> was established to explore the legal, ethical, and humanitarian implications of LAWS and to develop guidelines for their responsible development and use.

The GGE has prioritized several key objectives including emphasizing the importance of human accountability in the use of AGIs and assessing their potential proliferation to non-state actors and the broader implications for international security. Additionally, the First Committee of the United Nations General Assembly adopted a resolution in 2023 expressing

<sup>&</sup>lt;sup>10</sup> "Lavender & Where's Daddy: How Israel Used AI to Form Kill Lists & Bomb Palestinians in Their Homes" Democracy Now! (April 5, 2024) https://www.democracynow.org/2024/4/5/israel\_ai

<sup>&</sup>lt;sup>11</sup> "Israeli Authorities Using Facial Recognition to Entrench Apartheid" (Amnesty International, May 2, 2023) <a href="https://www.amnesty.org/en/latest/news/2023/05/israel-opt-israeli-authorities-are-using-facial-recognition-technology-to-entrench-apartheid/">https://www.amnesty.org/en/latest/news/2023/05/israel-opt-israeli-authorities-are-using-facial-recognition-technology-to-entrench-apartheid/</a>

<sup>12 &</sup>quot;AI in Israel's War on Gaza" (Access Now, May 9, 2024) <a href="https://www.accessnow.org/publication/artificial-genocidal-intelligence-israel-gaza/">https://www.accessnow.org/publication/artificial-genocidal-intelligence-israel-gaza/</a>

<sup>&</sup>lt;sup>13</sup> CSR In Focus IF11294, International Discussions Concerning Lethal Autonomous Weapon Systems, by Michael Moodie

<sup>&</sup>lt;sup>14</sup> "First Committee Approves New Resolution on Lethal Autonomous Weapons, as Speaker Warns 'An Algorithm Must Not Be in Full Control of Decisions Involving Killing'" (Meetings Coverage and Press Releases) <a href="https://press.un.org/en/2023/gadis3731.doc.htm">https://press.un.org/en/2023/gadis3731.doc.htm</a>

grave concern over their potential dangers. The resolution underscored the risks of an arms race, the lowering of the threshold for conflict, and the proliferation of LAWS. It also emphasized the critical need for human responsibility and accountability in decisions involving the use of lethal force.

The international community must act swiftly and decisively to establish a comprehensive legal framework that prohibits their development and use. Such a framework should prioritize human oversight, accountability, and the protection of civilians. The United Nations, through the CCW and the General Assembly, has a crucial role to play in advancing these goals.

# **International Humanitarian Law (IHL)**

Nevertheless, the deployment of such AI systems raises significant concerns about their compliance with the core principles IHL, particularly the principles of distinction, proportionality, and military necessity.

# Principle of Distinction

The principle of distinction<sup>15</sup> mandates that parties to a conflict must differentiate between combatants and civilians. Both Lavender and Gospel violate the principle of distinction because they rely on AI algorithms and the inability to differentiate between legitimate military targets and innocent civilians means that these are inherently prone to wrongful targeting. Additionally, while Where's Daddy? and Red Wolf are not directly used for targeting strikes, they impose severe restrictions on civilians, potentially leading to indiscriminate harm or restrictions, further violating the distinction principle.

# Principle of Proportionality

Principle of proportionality<sup>16</sup> prohibits attacks that would cause excessive civilian harm in relation to the anticipated military advantage gained. Israel's deployment of Lavender breaches this principle due to its 10% error rate<sup>17</sup>, meaning that 10% of individuals targeted could be innocent civilians. This level of collateral damage is likely disproportionate to the

<sup>&</sup>lt;sup>15</sup> Article 48 of the 1977 Additional Protocol I to the Geneva Convention

<sup>&</sup>lt;sup>16</sup> Article 51(5)(b) of the 1977 Additional Protocol I Geneva Convention

<sup>&</sup>lt;sup>17</sup> "AI in Israel's War on Gaza" (Access Now, May 9, 2024) <a href="https://www.accessnow.org/publication/artificial-genocidal-intelligence-israel-gaza/">https://www.accessnow.org/publication/artificial-genocidal-intelligence-israel-gaza/</a>

military objective of eliminating suspected militants. Similarly, the Gospel has also led to a high number of civilian casualties.

# Principle of Military Necessity

The principle of military necessity<sup>18</sup> allows for measures that are necessary to achieve a legitimate military objective. Where's Daddy? and Red Wolf operate under the guise of military necessity but their use in surveilling civilians and restricting movement often lacks a direct military objective. This calls into question whether these systems are truly necessary to achieve a legitimate military goal, especially when less harmful means could be available.

# **OPTIONS AVAILABLE TO THE INTERNATIONAL COMMUNITY**

### The Need for an Enhanced CCW Framework

The UN must take urgent steps to regulate the use of AGI, such as those deployed by Israel. Rather than creating a new instrument, the UN should incorporate the regulation of these systems into the existing framework of CCW as this would avoid the duplication of resources and efforts. The CCW already serves as a recognized platform for the regulation of emerging military technologies and includes additional protocols addressing specific weapons, such as blinding lasers. By leveraging the CCW, the UN can expedite discussions on AGI through its existing processes, including the GGE. Ensuring human control over autonomous weapons systems is critical. For instance, it is imperative to mandate the integration of a kill switch<sup>19</sup> in all autonomous weapons, enabling human operators to promptly deactivate the system in the event of malfunction, unintended actions, or ethical concerns. Furthermore, regular testing of the kill switch is necessary to guarantee its reliability and effectiveness.

# **Complaint Mechanisms under Treaties**

In addressing Israel's use of AGI, Palestine could engage with UN human rights bodies through the mechanisms provided under international treaties. While treaty bodies lack enforcement powers, their reviews and recommendations carry significant weight. They can influence domestic laws, policies, and practices to improve human rights protection. Moreover, some treaty bodies, such as the International Covenant on Civil and Political Rights (ICCPR)

<sup>&</sup>lt;sup>18</sup> "Doctors without Borders" (The Practical Guide to Humanitarian Law) https://guide-humanitarian-law.org/content/article/3/ military-necessity/ accessed October 20, 2024

<sup>&</sup>lt;sup>19</sup> Akbar Sheharyar Khan "Emerging Disruptive Technologies and Impacts on National Security", Islamabad Policy Research Institute (2024) <a href="https://ipripak.org/wp-content/uploads/2024/08/Policy-Brief-EDTS-NatSec-23-7-24-1.pdf">https://ipripak.org/wp-content/uploads/2024/08/Policy-Brief-EDTS-NatSec-23-7-24-1.pdf</a>

have complaint mechanisms before which member states can file complaints for non-compliance against other member states. In addition to the treaty bodies, the Special Committee to Investigate Israeli Practices Affecting the Human Rights of the Palestinian People and Other Arabs of the Occupied Territories<sup>20</sup> also closely monitors Israel's actions, documenting the human rights violations resulting from these attacks and reporting them domestically and internationally.

# **United Nations Security Council (UNSC) Resolutions**

UNSC must formally acknowledge the situation as a significant violation of IHL, particularly due to its direct contribution to civilian casualties and regional instability. Recognizing the severity of these actions, the Council should prioritize drafting a resolution that demands an immediate cessation of the negligent and militarily unnecessary use of AGI by Israel. This resolution should also call for full cooperation with international investigative bodies to ensure transparency and accountability. Alongside these punitive measures, the UNSC should explore complementary actions such as launching initiatives to raise global awareness about the illegality of such practices under international humanitarian law.

### **Pakistan's Commitment to the CCW**

Pakistan is a party to CCW and all of its five Protocols, and remains fully compliant with their provisions. Pakistan should ensure that it is part of the process of regulating AGI under CCW. To that end, it should send representatives to meetings held by GGE.

### **RECOMMENDATIONS**

- The UN must urgently regulate the use of AGI, particularly those employed by Israel, by
  integrating these into the existing framework of the Convention on Certain Conventional
  Weapons (CCW). Ensuring human oversight is crucial, including the requirement for a kill
  switch in all autonomous weapons to allow for immediate deactivation during malfunctions
  or ethical dilemmas, with regular testing to ensure reliability.
- Palestine should engage with UN human rights bodies by filing formal complaints under international treaties like the ICCPR to highlight Israel's use of AGI and its human rights

<sup>&</sup>lt;sup>20</sup> M.I, "Report of the Special Committee to Investigate Israeli Practices Affecting the Human Rights of the Palestinian People and Other Arabs of the Occupied Territories - (A/78/553) - Question of Palestine" (Question of Palestine, January 19, 2024) <a href="https://www.un.org/unispal/document/report-of-the-specialcommittee-to-investigate-israeli-practices-affecting-the-human-rights-of-the-palestinian-people-andother-arabs-of-the-occupied-territories-a-78-553/">https://www.un.org/unispal/document/report-of-the-specialcommittee-to-investigate-israeli-practices-affecting-the-human-rights-of-the-palestinian-people-andother-arabs-of-the-occupied-territories-a-78-553/</a>

- violations. This action could stimulate international discourse, prompting other states to adopt diplomatic measures or resolutions condemning these practices.
- The United Nations Security Council should formally recognize the situation as a violation
  of international humanitarian law and draft a resolution demanding Israel's immediate
  cessation of the negligent and militarily unnecessary use of AGI.
- Pakistan is a party to CCW and all of its five Protocols, and remains fully compliant with their provisions. Pakistan should ensure that it is part of the process of regulating AGI under CCW. To that end, it should send representatives to meetings held by CCW's Group of Governmental Experts.

# **Action Matrix**

# **Options for International Community**

Option	Pathways to Solution	Implementation of Solution	Actors Responsible	Implementation Timelines
UNSC Resolutions	After acknowledging the situation as a clear violation of International Law, the council can call for sanctions on Israel.	UNSC can draft a resolution demanding Israel to cease the unnecessary use of AGI. Additionally, the Council should launch initiatives to raise global awareness of the issue and provide humanitarian aid to victims affected by these devices	<ul> <li>United Nations         Security         Council.</li> <li>UN Office for         the         Coordination of         Humanitarian         Affairs</li> </ul>	<ul><li>1-3 Months to draft the resolution.</li><li>3-6 Months for implementation of sanctions.</li></ul>
Regulating AGI under Convention on Certain Conventional Weapons (CCW)	Rather than creating a new instrument, the UN should incorporate the regulation of these systems into the existing framework of CCW as this would avoid the duplication of resources and efforts. The CCW already serves as a recognized platform for the regulation of emerging military technologies and includes additional protocols addressing specific weapons, such as blinding lasers	The UN must urgently regulate the use of AGI, particularly those employed by Israel, by integrating these into the existing framework of the CCW. Ensuring human oversight would be crucial	<ul> <li>United Nations         General         Assembly</li> <li>United Nations         Security         Council</li> <li>Group of         Governmental         Experts</li> </ul>	6-12 months for the notifications and meetings
Resorting to Complaint Mechanisms under Treaties	Human rights committees possess the capability to influence compliance through various avenues including hearing complaints and providing recommendation for state behavior.	Treaty based bodies include:  Committee on Elimination of Racial Discrimination  Committee on Economic Social and Cultural Rights  Human Rights Committee  Committee on the Elimination of Racial Discrimination Against Women  Committee against Torture.  Committee on the Rights of the Child.	Human Rights     Committee     Special     Committee to     Investigate     Israeli Practices     Affecting the     Human Rights     of the     Palestinian     People and     Other Arabs of     the Occupied     Territories     National     Human Rights     Institutions	6-12 Months for Investigation and filing of application before relevant committee depending on the human right violation  Each human rights committee has its own rules and procedures

		Committee on	United Nations	
		Migrant Workers	Human Rights	
		<ul> <li>Committee on</li> </ul>	Council.	
		Enforced		
		Disappearances		
		Charter Based bodies		
		include the Human Rights		
		Council which includes		
		<ul> <li>Special Procedures</li> </ul>		
		and Mandates		
		<ul> <li>Universal Periodic</li> </ul>		
		Review		
		<ul> <li>Independent</li> </ul>		
		Investigations,		
		including the Special		
		Committee to		
		Investigate Israeli		
		Practices Affecting		
		the Human Rights of		
		the Palestinian People		
		and Other Arabs of		
		the Occupied		
		Territories		
Ensuring that	Pakistan is a party to	Pakistan should ensure that	Ministry of	As per the schedule
Pakistan is a Part	CCW and all of its five	it is part of the process of	Foreign Affairs	of the meetings held
of the	Protocols, and remains	regulating AGI under	• Attorney	by GGE.
Consultations	fully compliant with their	CCW. To that end, it	General's	
	provisions	should send	Office	
		representatives to meetings	Ministry of	
		held by CCW's Group of	Law and Justice	
		Governmental Experts.		