



Access Now Submission to the United Nations Independent Expert on human rights and international solidarity for the United Nations General Assembly 79th Session Report on “Artificial Intelligence and International Solidarity”

5 July 2024

Introduction

Access Now welcomes this opportunity to provide relevant information to the United Nations (UN) Independent Expert on human rights and international solidarity to inform the thematic report on artificial intelligence and international solidarity to be presented to the UN General Assembly at the 79th session in October 2024.¹ Access Now, a UN Economic and Social Council (ECOSOC) accredited organization, routinely engages with the UN in support of our mission to extend and defend the digital rights of people and communities at risk around the world.² Since its founding in 2009, Access Now monitors the abuse and misuse of new and emerging technologies that threaten fundamental human rights, including freedoms of expression, association, and peaceful assembly, as well as the rights to privacy and non-discrimination. We also closely monitor internet shutdowns and coordinate the global #KeepItOn coalition and campaign against internet shutdowns.³

This submission addresses Israel’s use of AI surveillance systems in the Gaza Strip, highlighting its fatal consequences in warfare and its conflict with human rights and international solidarity principles.⁴ It calls on Big Tech companies to reconsider their partnerships with Israel, citing their technologies' role in perpetrating atrocity crimes. It is important to note that while this submission draws upon examples, these examples are non-exhaustive, and do not represent the lived experiences of all persons at risk. More information is required to take into full account the intersecting forms of oppression of those who are directly targeted.

I. The Israeli government’s deployment of AI weaponry and surveillance systems in the Gaza Strip

1. For decades, Israel has used the Gaza Strip as a testing ground for new technologies and weaponry, which it subsequently markets and sells to other states.⁵ In 2019, the Israeli army

¹ OHCHR, [Call for input for the report on Artificial Intelligence and international solidarity](#), 2024.

² As a grassroots-to-global organization, we partner with local actors to bring a human rights agenda to the use, development, and governance of digital technologies, and to intervene where technologies adversely impact our human rights. By combining direct technical support, strategic advocacy, grassroots grantmaking, and convenings such as RightsCon, we fight for human rights in the digital age. Access Now, [About Us](#), 2021.

³ Access Now, [#KeepItOn](#), 2023.

⁴ See also: ICRC, [Artificial intelligence and machine learning in armed conflict: A human-centred approach](#), 2021, Digital Technologies and War, 102 (913) 463-479.

⁵ Haaretz, [Shark Tanks: With Gaza as Testing Ground, Israeli Defense Startups Flourish](#), 3 Jan. 2024. See also Middle East Eye, [Gaza: a testing ground for Israeli military technology](#), 12 Feb. 2015; AlJazeera, [Dirty secret of Israel’s weapons exports: They’re tested on Palestinians](#), 17 Nov. 2023; Sipri, [TRENDS IN INTERNATIONAL ARMS TRANSFERS, 2023](#), Mar. 2024.

established the Targets Administrative Division, a center dedicated to using AI to accelerate target generation.⁶ In May 2021, the Israeli Defense Forces (IDF) referred to its 11-day military bombardment of Gaza as the “first artificial intelligence war.”⁷

2. The IDF has advanced its military capabilities in its current assault on Gaza through a range of technologies including lethal autonomous weapon systems (LAWS) like remote-controlled quadcopters armed with machine guns and missiles.⁸ These systems are used for surveillance and targeting, often deployed in civilian areas such as tents, schools, and hospitals, where they reportedly simulate sounds of babies and women crying to lure and attack Palestinians.⁹ Israel has also introduced semi-autonomous weapon systems (semi-LAWS) like the “Jaguar” military robot, touted as one of the first to potentially replace soldiers on borders.¹⁰ Both LAWS and semi-LAWS have been denounced by the UN as “politically unacceptable and morally repugnant,” sparking increasing calls for their prohibition.¹¹
3. In recent years, the IDF has deployed advanced AI-based systems that utilize mass surveillance data to identify potential targets among the civilian population, marking them for airstrikes and other military actions.
 - a. The IDF has developed an AI-based program called “**Lavender**,” designed to rapidly process vast amounts of data to generate thousands of potential military targets.¹² Lavender processes information collected from Gaza’s 2.3 million residents through a mass surveillance system, evaluating and ranking the likelihood that each individual is involved with the military wing of Hamas or Palestinian Islamic Jihad (PIJ).¹³ The system learns to identify characteristics of known Hamas and PIJ operatives using training data, then locates these same characteristics among the general population.¹⁴ It assigns almost every person in Gaza a rating from 1 to 100, indicating the probability of their militant involvement.¹⁵ An individual with several different incriminating

⁶ +972 Magazine, [‘A mass assassination factory’: Inside Israel’s calculated bombing of Gaza](#), Nov. 30, 2023; Ynet, [Aviv Kochavi: “The IDF is not what it was ten years ago. There is a real-time intelligence like in the ‘Matrix,’ the scope of bombs and missiles is increasing.”](#), 23 June 2023.

⁷ The Jerusalem Post, [Israel’s operation against Hamas was the world’s first AI war](#), 27 May 2021.

⁸ Access Now, [Artificial Genocidal Intelligence: how Israel is automating human rights abuses and war crimes](#), 9 May 2024; Zeteo, [Israel’s Armed Quadcopters in Gaza Mark a Dangerous New Era in Drone Warfare](#), 29 Apr. 2024; Middle East Eye, [War on Gaza: Israeli quadcopters, the hi-tech weapon menacing Palestinian civilians](#), 24 Jan. 2024; Reliefweb, [Gaza: Israel systematically uses quadcopters to kill Palestinians from a close distance](#), 19 Feb. 2024.

⁹ Access Now, [Artificial Genocidal Intelligence: how Israel is automating human rights abuses and war crimes](#), 9 May 2024; The New Arab, [Israeli army broadcasts baby cries and women screaming to ‘lure and kill’ Palestinians in Gaza: report](#), 17 Apr. 2024.

¹⁰ Access Now, [Artificial Genocidal Intelligence: how Israel is automating human rights abuses and war crimes](#), 9 May 2024; IDF, [‘Jaguar’: The IDF’s Newest, Most Advanced Robot](#), 27 Apr. 2021.

¹¹ Access Now, [Artificial Genocidal Intelligence: how Israel is automating human rights abuses and war crimes](#), 9 May 2024; United Nations, [Lethal Autonomous Weapon Systems \(LAWS\)](#).

¹² +972 Magazine, [‘Lavender’: The AI machine directing Israel’s bombing spree in Gaza](#), 3 Apr. 2024.

¹³ *Ibid.*

¹⁴ *Ibid.*

¹⁵ *Ibid.*

features will receive a high rating, automatically becoming a potential target for assassination.¹⁶

- b. Lavender is often used alongside “**Where’s Daddy?**”, a real-time tracking system that monitors individuals on the kill list and executes bombings when they return to their family homes.¹⁷ The IDF targets these individuals at night, when their families are present, rather than during active military operations, making it easier to identify targets in private residences.¹⁸ According to a source familiar with the system, this method involves inputting hundreds of targets into the system and waiting for opportunities to strike, a strategy known as “broad hunting.”¹⁹
- c. Similarly, another AI-based system called “**The Gospel**” has been used to target residential homes on a massive scale, often where only a single Hamas member resides, resulting in the deaths of entire families.²⁰ The Gospel processes vast amounts of data that “tens of thousands of intelligence officers could not process” and automatically generates a list of bombing targets.²¹ This system has also struck private residences with no known or apparent Hamas or other militant group members, causing significant civilian casualties.²² According to a senior intelligence officer at the IDF, this method is often used to save time rather than conducting more thorough work to achieve accurate targeting.²³

II. Human rights implications of AI in modern warfare.

- 4. While systems like Gospel or Lavender may seem cutting-edge, they are part of a broader AI practice known as predictive policing.²⁴ Similar to IDF’s uses of ‘data-driven systems to predict Hamas operatives, law enforcement uses AI to forecast potential criminal activity in children or gang involvement, and allocate resources accordingly.²⁵ However, concerns by experts like Professor Noriyoshi Takemura, in a UN report, highlight how predictive policing can perpetuate biases in policing and criminal justice data, leading to over-policing of minorities and privacy

¹⁶ *Ibid.*

¹⁷ *Ibid.*

¹⁸ *Ibid.*

¹⁹ *Ibid.*

²⁰ +972 Magazine, [‘A mass assassination factory’: Inside Israel’s calculated bombing of Gaza](#), Nov. 30, 2023.

²¹ *Ibid.*

²² *Ibid.*

²³ *Ibid.*

²⁴ Access Now, [Artificial Genocidal Intelligence: how Israel is automating human rights abuses and war crimes](#), 9 May 2024; EDRI, [Why EU needs to be wary that AI will increase racial profiling](#), 22 Apr. 2021.

²⁵ DW News, [Predictive policing: Crime prevention or profiling?](#) | [Techtopia](#), 24 June, 2022; Liberty, [5 THINGS YOU NEED TO KNOW ABOUT THE GANGS MATRIX](#), 3 Feb. 2022; Algorithm Watch, [AUTOMATING SOCIETY REPORT 2020](#).

violations through mass surveillance.²⁶ These biased systems have serious consequences, including lethal outcomes in places like Gaza.

5. Moreover, targeting systems are prone to malfunction due to their reliance on flawed training data. For instance, the Lavender system, which was trained on data that included non-combatant employees of Gaza's Hamas government, mistakenly flagged individuals as targets based solely on communication or behavioral patterns that resembled those of known Hamas militants.²⁷ The consequences were far-reaching and deeply concerning: police officers, civil defense workers, family members of militants, and even individuals who simply shared a name with Hamas operatives were mistakenly identified as legitimate targets.²⁸
6. In addition to flawed data, Lavender's automated implementation lacked crucial human oversight. Despite a recognized 10% error rate in identifying Hamas affiliations, the IDF broadly authorized Lavender's kill lists without human decision-making.²⁹ The sole check before authorizing bombings was a superficial verification of the target's gender, taking just 20 seconds.³⁰ Additionally, up to 15 or 20 civilians could be killed per junior Hamas operative targeted by Lavender.³¹ For senior officials like Ayman Nofal, hundreds of civilians were authorized for killings, based on imprecise targeting.³² The decision-making authority for such targets extended to relatively low-ranking IDF officers using systems like Where's Daddy?.³³ Given the life-or-death consequences, this minimal safeguard is grossly inadequate, highlighting dangerous overreliance on AI in military operations and a lack of human accountability.
7. Furthermore, the reliability and validation of AI-driven targeting systems pose significant challenges, lacking robust methodologies for accuracy and performance validation.³⁴ Machine learning systems' limitations in predicting complex human attributes, like "potential future criminality," stem from inadequate data and reliance on proxies such as arrests rather than actual crimes committed, challenging the assumption that "more data equals better predictions."³⁵ Beyond these technical issues, ethical concerns about human rights and dignity arise from Israel's aggressive use of AI targeting systems.³⁶ These systems prioritize maximum

²⁶ Fourteenth United Nations Congress on Crime Prevention and Criminal Justice, [AI-Algorithm-Big Data, Predictive Criminal Justice and Hyper Crime/Social Control: Surveillance Capitalism after 'Singularity' and Prospects of Informational Civilization](#), 15 Feb. 2021. See also The New York Times, [U.N. Panel: Technology in Policing Can Reinforce Racial Bias](#), 7 Dec. 2020.

²⁷ Access Now, [Artificial Genocidal Intelligence: how Israel is automating human rights abuses and war crimes](#), 9 May 2024; +972 Magazine, ['Lavender': The AI machine directing Israel's bombing spree in Gaza](#), 3 Apr. 2024.

²⁸ *Ibid.*

²⁹ +972 Magazine, ['Lavender': The AI machine directing Israel's bombing spree in Gaza](#), 3 Apr. 2024.

³⁰ *Ibid.*

³¹ *Ibid.*

³² *Ibid.*

³³ *Ibid.*

³⁴ Access Now, [Artificial Genocidal Intelligence: how Israel is automating human rights abuses and war crimes](#), 9 May 2024.

³⁵ Access Now, [Artificial Genocidal Intelligence: how Israel is automating human rights abuses and war crimes](#), 9 May 2024; [Coalition for Critical Technology. Abolish the #TechToPrisonPipeline](#), 23 June 2020; MIT Technology Review, [AI can't predict how a child's life will turn out even with a ton of data](#), 2 Apr. 2020.

³⁶ Access Now, [Artificial Genocidal Intelligence: how Israel is automating human rights abuses and war crimes](#), 9 May 2024.

damage, as acknowledged by the IDF, pressuring soldiers to identify daily bombing targets and using unguided bombs on identified militants, resulting in the mass killing of Palestinians and unprecedented destruction.³⁷

III. Big Tech's involvement in atrocity crimes in the Gaza Strip

8. Big Tech companies have played a significant role in enabling human rights abuses in the Gaza Strip. By neglecting their human rights responsibilities and continuing to provide services to Israel's government, companies such as Google, Amazon Web Services (AWS), and Meta risk being complicit in supporting the IDF in its atrocity crimes in Gaza.³⁸
 - a. The IDF and its intelligence officers have used **Google Photos** to identify Palestinians through facial recognition technology.³⁹ Israeli officers uploaded a database of known individuals to Google Photos, leveraging the service's photo search function to identify people.⁴⁰ Despite Google's assertion that Google Photos is a free consumer product that "does not provide identities for unknown people in photographs," one Israeli officer noted that Google's ability to match faces, even when only a small portion of the face was visible, was superior to other technologies.⁴¹
 - b. Furthermore, through **Project Nimbus**, **Google**, and **AWS** have extended cloud computing and machine learning services, including AI, to Israel amid the war in Gaza.⁴² According to a collection of training documents and videos obtained by The Intercept from a publicly accessible educational portal intended for Nimbus users, Google is equipping the Israeli government with its full suite of machine learning and AI tools available through Google Cloud Platform.⁴³ The documents suggest that this new cloud infrastructure enhances Israel's capabilities in facial detection, automated image categorization, object tracking, and even sentiment analysis, which claims to evaluate the emotional content of images, speech, and text.⁴⁴ Additionally, the Nimbus materials highlight specialized training courses available to government personnel through online platforms like Coursera, with examples citing the Ministry of Defense.⁴⁵ Despite Google's claims that its contract with Israel primarily serves civilian purposes,

³⁷ Access Now, [Artificial Genocidal Intelligence: how Israel is automating human rights abuses and war crimes](#), 9 May 2024; The Guardian, ['We're focused on maximum damage': ground offensive into Gaza seems imminent](#), 10 Oct. 2023; +972 Magazine, ['Lavender': The AI machine directing Israel's bombing spree in Gaza](#), 3 Apr. 2024; Al Jazeera, [Gaza will need largest post-war reconstruction effort since 1945, UN says](#), 2 May 2024.

³⁸ Access Now, [Artificial Genocidal Intelligence: how Israel is automating human rights abuses and war crimes](#), 9 May 2024.

³⁹ The New York Times, [Israel Deploys Expansive Facial Recognition Program in Gaza](#), 27 Mar. 2024.

⁴⁰ *Ibid.*

⁴¹ *Ibid.*

⁴² Access Now, [Artificial Genocidal Intelligence: how Israel is automating human rights abuses and war crimes](#), 9 May 2024; Time, [Exclusive: Google Contract Shows Deal With Israel Defense Ministry](#), 12 Apr. 2024.

⁴³ The Intercept, [DOCUMENTS REVEAL ADVANCED AI TOOLS GOOGLE IS SELLING TO ISRAEL](#), 24 July 2022.

⁴⁴ *Ibid.*

⁴⁵ *Ibid.*

recent reports indicate an intensification of Google's partnership with the Israeli Ministry of Defense during the war in Gaza.⁴⁶

- c. Additionally, reports indicate that **Meta's WhatsApp** metadata is used in the IDF's Lavender targeting system, checking if individuals are in groups with suspected Hamas members.⁴⁷ Software engineer Paul Biggar argues that IDF access implies Meta's cooperation, potentially implicating Meta in targeting Palestinians with predictive algorithms, violating international law, and contradicting Meta's human rights stance.⁴⁸ In October 2023, Meta apologized for labeling Palestinian users as "terrorists" due to a translation error on **Instagram** and faced accusations of suppressing pro-Palestinian content through shadow banning.⁴⁹ In 2021, Human Rights Watch criticized Instagram for similar actions, adversely affecting Palestinian freedom of expression.⁵⁰ The European Commission has also requested Meta and **TikTok** for measures combating Gaza-related disinformation.⁵¹ **Meta's AI** during the Gaza war also showed biases, generating aggressive images for terms like "Palestinian" versus benign ones for "Israeli."⁵²
- d. AI chatbots like **Google's Bard AI** and **Open AI's ChatGPT** have also faced criticism for mishandling Gaza-related content. Bard AI has implemented "temporary guardrails" preventing it from addressing queries about Israel and Palestine, citing concerns about errors amid escalating conflicts.⁵³ It typically responds with variations of "I'm a text-based AI and can't assist with that" to questions about Gaza but readily provides information on other topics like the war in Ukraine.⁵⁴ Similarly, ChatGPT has shown inconsistencies in addressing questions about Israelis and Palestinians, reflecting biases in its training data. It responded more definitively to questions about justice for Israelis compared to Palestinians, describing the latter as "a complex and highly debated issue."⁵⁵

Recommendations

9. Based on the foregoing submission Access Now makes the following recommendations:

⁴⁶ Time, [Exclusive: Google Contract Shows Deal With Israel Defense Ministry](#), 12 Apr. 2024. See also No Tech for Apartheid Campaign, [STATEMENT from Google workers with the No Tech for Apartheid campaign on Google's mass, retaliatory firings of workers](#), 17 Apr. 2024.

⁴⁷ Access Now, [Artificial Genocidal Intelligence: how Israel is automating human rights abuses and war crimes](#), 9 May 2024; Paul Biggar, [Meta and Lavender](#), 16 Apr. 2024. See also +972 Magazine, ['Lavender': The AI machine directing Israel's bombing spree in Gaza](#), 3 Apr. 2024.

⁴⁸ Paul Biggar, [Meta and Lavender](#), 16 Apr. 2024. See also ICRC, [Protocols Additional: To the Geneva Conventions of 12 August 1949](#), art. 47(2), (3); Meta, [Corporate Human Rights Policy](#).

⁴⁹ BBC, [Instagram sorry for adding 'terrorist' to some Palestinian user bios](#), 20 Oct. 2023.

⁵⁰ *Ibid.*

⁵¹ *Ibid.*

⁵² The Guardian, [WhatsApp's AI shows gun-wielding children when prompted with 'Palestine'](#), 2 Nov. 2023.

⁵³ Mashable, [Google Bard, ChatGPT: Are AI chatbots suppressing information about Israel and Palestine?](#), 26 Oct. 2023.

⁵⁴ *Ibid.*

⁵⁵ *Ibid.*; IHP, [What happened to "All human beings are born free"? Reflections on a ChatGPT "experiment"](#), 9 Nov. 2023.

1. States

- a. Implement strict regulations, oversight mechanisms, and preserve human control and judgment at all stages of the LAWS's life cycle, for the development and use of AI-powered surveillance and targeting systems in military operations, especially in conflict zones, to prevent human rights violations and ensure compliance with international humanitarian and human rights law.
- b. Establish international cooperation frameworks to address the ethical and human rights implications of AI in warfare, including efforts to ban or strictly regulate lethal autonomous weapon systems (LAWS) and semi-autonomous weapon systems.

2. Private sector (applicable to both the private sector and the investors of the private sector)

- a. Conduct thorough human rights due diligence and impact assessments before providing AI technologies, cloud services, or other digital infrastructure to governments, especially in conflict situations, to ensure these technologies are not used to commit or facilitate human rights abuses.
- b. Develop and implement robust policies, oversight mechanisms, and safeguards to prevent the misuse of consumer products and services (such as facial recognition features in photo apps) for mass surveillance or military targeting purposes.

3. International organizations

- a. Develop comprehensive guidelines and standards for the ethical use of AI in military operations, emphasizing the importance of human oversight, accountability, and compliance with international human rights and humanitarian law.
- b. Establish an international monitoring mechanism to investigate and report on the use of AI technologies in conflict zones, with a focus on their impact on civilian populations and potential violations of human rights.



Access Now (<https://www.accessnow.org>) defends and extends the digital rights of individuals and communities around the world. As a grassroots-to-global organization, we partner with local actors to bring a human rights agenda to the use, development, and governance of digital technologies, and to intervene where technologies adversely impact our human rights. By combining direct technical support, strategic advocacy, grassroots grantmaking, and convenings such as RightsCon, we fight for human rights in the digital age.

For more information, please contact: un@accessnow.org and mena-advocacy@accessnow.org