

AUTOMATED APARTHEID

HOW FACIAL RECOGNITION FRAGMENTS, SEGREGATES AND CONTROLS PALESTINIANS IN THE OPT



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GLOSSARY

360 Camera	Camera able to capture footage across 360 degrees
Al	Artificial Intelligence
Algorithm	A series of instructions given to a computer
Apartheid	Inhuman acts committed for the purpose of establishing and maintaining domination by one racial group of persons over any other racial group of persons and systematically oppressing them
Apartheid Convention	International Convention on the Suppression and Punishment of the Crime of Apartheid
Biometric data	Biologically unique markers
Biometric registration	The registration of biologically unique markers
Biometric surveillance	The surveillance of person using biologically unique markers
Breaking the Silence	An Israeli organization of IDF veterans who served in the occupied territories, and who collect and corroborate testimonies from other former soldiers about their experiences serving in the West Bank and Gaza Strip
ССТУ	Closed Circuit Television
CERD	(UN) Committee on the Elimination of Racial Discrimination
Computer vision	A technique used to render real-life conditions computationally intelligible, using algorithms that can measure depth, height, shape, colour, edges, etc.
DVC	Amnesty Internationa's Digital Verification Corps
Facial recognition	Computer vision technique used to identify the faces of humans on the basis of images used for the prior training of an algorithm.
FRT	Facial Recognition Technologies
FRT training data	Images used to train a facial recognition algorithm to perform comparison and identification of future facial images
GPS	Global Positioning System
ICCPR	International Covenant on Civil and Political Rights
ICERD	International Convention on the Elimination of All Forms of Racial Discrimination
IDF	Israel Defense Forces
ILC	(UN) International Law Commission
INCD	Israel National Cyber Directorate
Mabat 2000	A networked video surveillance system capable of facial recognition, active in occupied East Jerusalem, controlled by Israel police.
Machine Learning	Techniques using large datasets to teach algorithms to perform complex tasks
Mass surveillance	Indiscriminate surveillance of persons in violation of the right to privacy

NGOs	Non-Governmental Organisation
ОСНА	United Nations Office for the Coordination of Humanitarian Affairs
OECD Guidelines	Organisation for Economic Co-operation and Development Guidelines for Multinational Enterprises
OHCHR	United Nations Office of the High Commissioner for Human Rights
OPT	Occupied Palestinian Territories
PLO	Palestine Liberation Organization
Rome Statute	Rome Statute of the International Criminal Court
Settlers	Israeli citizens illegally transferred to Palestinian territories by the state of Israel
UDHR	Universal Declaration of Human Rights
UNGP	United Nations Guiding Principles on Business and Human Rights

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1. EXECUTIVE SUMMARY

By Checkpoint 56 in H2, a towering barrier features two turnstiles, and at least 24 cameras on the outside. Palestinians rely on passage through the checkpoint to access most, if not all, of goods and services, work, education, family life, and healthcare. It is here where witnesses described coming face to face with a new facial recognition system, Red Wolf, in 2022.

Palestinians are the only racial group of residents in H2 required to use these checkpoints, and the system relies on databases consisting exclusively of Palestinian individuals' data.

This is not the first time Palestinians in Hebron have been subjected to experimental and problematic surveillance technologies. Since 2020, soldiers in Hebron have been instructed by their commanders to use the Blue Wolf app via smartphones to register as many Palestinians as possible and to "demonstrat[e] [our] presence", according to Breaking the Silence. The gamified biometric surveillance system ranks military units by numbers of pictures captured and incentivizes them to keep Palestinians under constant observations.

In Hebron City and East Jerusalem the rights of Palestinians are violated through a range of legal and military measures that help maintain Israel's system of apartheid over Palestinians. While these threats to Palestinians' human rights have been increasingly well-documented, the ways in which these measures have been further intensified and expanded by technological means was, until now, less well-understood.

The Israeli authorities have imposed a closure system since the mid-1990s, subjecting millions of Palestinians who live in the West Bank, including East Jerusalem and the Gaza Strip, to stringent restrictions on movement based on legal status and residency. Since the beginning of the second *intifada*, or uprising, of Palestinians against Israel in 2000, the closure system has been reinforced by a web of hundreds of Israeli military checkpoints, earth mounds and road gates, in addition to roadblocks and the 700 kilometre-long fence/wall, which Israel is still extending in and around the West Bank, mostly within the OPT, isolating Palestinian communities inside "military zones". Palestinians in these zones must obtain multiple special permits any time they enter or leave their homes or land.

Checkpoint officials not only control all entry and exit points in the Occupied Palestinian Territories (OPT), but also administer a system of arbitrary checks and restrictions on access to rights and services, affecting Palestinians exclusively. Among other things, these arbitrary restrictions on the freedom of movement reduce the ability of Palestinians to access healthcare, employment and education, as well as their ability to exercise their right to freedom of peaceful assembly.

The constant surveillance Palestinians face means they not only live in a state of insecurity, but they are also at risk of arbitrary arrest, interrogation, and detention. This repression was especially exacerbated in Hebron, as well as in the Sheikh Jarrah and Silwan neighbourhoods of East Jerusalem, in the immediate aftermath of the crackdown on protests in May 2021.

This report examines the use of facial recognition technology (FRT) as a tool in this broader system of arbitrary restrictions on movement. It looks specifically at the emblematic cases of Hebron and East Jerusalem, the only two cities in the OPT with Israeli settlements within their bounds.

Checkpoints in the city of Hebron employ facial recognition technology (FRT) to record the biometric data of people who move around the city. Notably, the technology records individuals' information on the surveillance system even if they have not knowingly or consensually registered with it. Known as Red Wolf, the system is the latest experimental surveillance tool deployed against Palestinians, following at least two other known surveillance systems and databases, including Blue Wolf and Wolf Pack. These databases and tools exclusively record the data of Palestinians and are used to determine the ability of individual Palestinians to enter or exit their neighbourhoods and other locations. In Hebron, the majority Palestinian population of some 33,000 people is restricted to certain areas due to the presence of some 850 Israeli settlers – whose occupancy violates international law – and the Israeli military orders, checkpoints and surveillance that support settlers' continued presence. A Youth Against Settlements activist from Tel Rumeida, has called the constant remote surveillance "dehumanizing".

They told Amnesty International, "Before 2021, the facial recognition technology was only at the checkpoints, but since 2021 it's in the hands of every soldier in their mobile phones. The soldier scans our faces with the phone camera, and suddenly their behaviour towards us changes, because they see all the information."

They added: "We don't know how soldiers are using this information, and we don't know what they have access to or what they will use against me. There is no influence we can have on the system."

In East Jerusalem, the Israeli police have expanded their city-wide surveillance system across the Old City. There, an ever-growing network of cameras supports a vast facial recognition system known as Mabat 2000. The system enables Israeli authorities to identify protesters and keep Palestinians under constant observation, even as they go about their ordinary daily activities. Such systems have expanded alongside illegal Israeli settlements, which have encroached upon Palestinian neighbourhoods in the Old City and other areas in occupied East Jerusalem.

Amnesty International cannot say with certainty which companies are providing these facial recognition tools. However, this research has identified Hangzhou Hikvision Digital Technology Co, Ltd) and TKH Security Solutions as vendors of several high-resolution CCTV cameras found in East Jerusalem, suspected of possibly being connected with the Mabat 2000 system mounted in illegal settlements, with a great many of the models capable of facial recognition identification out of the box. Amnesty contacted these companies in an effort to shed light on their possible relationship with Israeli security forces, but obtained only a limited response, which has been incorporated into this report.

Neda, a Palestinian resident of East Jerusalem, spoke of the impact this oppressive technology has on her daily life: "I'm being watched the whole time...[it] gives me a really bad feeling everywhere in the street. Every time I see a camera, I feel anxious. Like you are always being treated as if you are a target."

This report establishes that facial recognition technologies are providing the Israeli authorities with powerful new tools for curbing freedom of movement – a pre-requisite for the realization of basic rights – adding further layers of technological sophistication to the system of apartheid that Israel is imposing on Palestinians in the OPT. This is achieved via:

• The establishment of compounding technological infrastructure to expand the reach of Israeli authorities' control. As checkpoints govern the ability of Palestinians in H2—the area of Hebron under military rule by the Israeli Civil Administration—to travel outside their homes,

Israel is able to contain Palestinians geographically, using domination by way of military force and surveillance tools such as Red Wolf and Blue Wolf to deter resistance.

Surveillance as part of a coercive environment aimed at forcing Palestinians to leave areas
of strategic interest to Israeli authorities, by making their ordinary lives unbearable. As
described in soldiers' testimony used in this report, arbitrary searches, registrations and lookups facilitated by the use of Blue Wolf have interfered with the daily activities of Palestinians
in, for example, the H2 and Silwan areas. As communities resist the expansion of settlements
and the demolition of Palestinian homes, their participation in protests in turn exposes them
to further surveillance.

This report is based on field visits to Hebron and East Jerusalem, involving observations, interviews, and the collection of visual evidence, as well as on open-source intelligence and previous reporting. Between May and June 2022, Amnesty International met with Palestinian families, activists, students and experts from across Hebron and East Jerusalem, who were routinely exposed to daily surveillance. In doing so, Amnesty International researchers gathered testimonies and experiences related to the human rights harms associated with the deployment of invasive and wide-reaching remote biometric surveillance technologies, in particular facial recognition.

Given the sensitive nature of the research, risk of leaks, and risks posed to Amnesty researchers, a decision was made from the beginning of the research not to engage directly with Israeli officials.

The research focuses on evidence captured via observations by Amnesty International researchers, interviews with Palestinian families and military personnel via NGO facilitators. Amnesty International issued a right of response letter to the state of Israel on 19 April 2023 but had not received a response at the date of publication.

Amnesty International has found that facial recognition technology is used extensively by the Israeli authorities to support their continued domination and oppression of Palestinians in the OPT. With a record of discriminatory and inhuman acts that maintain a system of apartheid, the Israeli authorities are able to use facial recognition software – in particular at checkpoints – to consolidate existing practices of discriminatory policing and segregation, violating Palestinians' basic rights.

Amnesty International is not convinced that the security justifications which Israel cites as the basis for its treatment of Palestinians – including restricting their freedom of movement – justify the severe restrictions that the Israeli authorities have imposed. While some of Israel's policies may have been designed to promote legitimate security objectives, they have been implemented in a grossly disproportionate and discriminatory way which fails to comply with international law. Other policies have absolutely no reasonable basis in security and are clearly shaped by the intent to oppress and dominate. This includes differential treatment in the occupied territories, supporting the settlement of Jewish Israelis in the OPT, the designation of closed military zones, and the imposition of certain restrictions on movement such as travel bans. Examined in the context of systematic discrimination and oppression, and in the light of the mass human rights violations these policies have entailed, it becomes clear that genuine security considerations, including in the context of the deployment of facial recognition, are not the driving force behind these measures.

This report makes references to rights protected under the International Covenant on Civil and Political Rights (ICCPR) in analysing human rights violations relating to the deployment of remote biometric technologies against Palestinians, in particular the rights to freedom of movement, privacy, freedom of

^{1.} International Court of Justice, 'Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory', December 2004, https://www.icj-cij.org/public/files/case-related/131/131-20040709-ADV-01-00-EN.pdf

expression and peaceful assembly, and equality and non-discrimination. It also builds on the detailed legal analysis set out in Amnesty International's 2022 report, *Israel's apartheid against Palestinians: Cruel system of oppression and crime against humanity*, including in relation to the definition of apartheid in international law as an institutionalized regime of domination and systematic oppression by one racial group over another.

This report elaborates on Amnesty International's finding that Israel's treatment of Palestinians, whose rights it controls, amounts to apartheid.² It specifically examines Israel's use of surveillance, including facial recognition technology, as a tool with which Israel enforces and maintains its system of oppression and domination over Palestinians in the OPT. The report focuses primarily on its impact on Palestinians' rights to privacy and freedom of movement, and how such rights are severely restricted by a set of exclusionary and discriminatory Israeli laws, policies and practices.

This report presents a non-exhaustive overview of the scale and breadth of biometric surveillance, and the human rights violations associated with these technologies, in particular facial recognition, in Hebron and East Jerusalem. The main focus of the report is facial recognition surveillance as carried out by the Israeli security forces, including the Israeli army operating under the Ministry of Defense and Israeli police forces under the Ministry of National Security. However, the expanding use of surveillance by settlers – at times using similar hardware – is also briefly covered.

This report focuses on FRT used for identification purposes (also known as 1:n or "one-to-many"), a type of facial recognition Amnesty considers to be a technology of mass surveillance and wholly incompatible with international human rights law.

The research also focuses on the corporate actors that provide surveillance technology to the Israeli authorities. These include TKH Security, domiciled in the Netherlands, and Hikvision, domiciled in the People's Republic of China.

Amnesty International makes the following recommendations to end this abusive system:

- The state of Israel should immediately cease the deployment of facial recognition technologies for the identification of Palestinians in the OPT, including at checkpoints, due to its inherently discriminatory nature. More fundamentally, Israel should end its reliance on mass surveillance and discriminatory targeted surveillance. In addition, to ensure that Palestinians enjoy their right to freedom of movement without discrimination of any kind, Israel should end the regime of closures in its current form, as well as other arbitrary restrictions on freedom of movement of people and goods, which result in the collective punishment of Palestinians.
- Other states and regional actors should regulate companies domiciled in their jurisdictions to ensure they do not provide any surveillance technology that can be used by Israel to maintain the apartheid system and commit inhuman and inhumane acts, and war crimes, including the maintenance of illegal settlements. Furthermore, states should enact legislation to ban the use, development, production, sale and export of remote biometric recognition technology for mass surveillance as well as remote biometric or facial recognition technology used for identification purposes, as they contribute to discriminatory practices and stand at odds with international human rights standards.
- Businesses should stop supplying technologies that can be used by the Israeli state to implement a system of apartheid against Palestinians in the OPT, and commit crimes against

^{2.} Amnesty International, 'Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity', February 2022, https://www.amnesty.org/en/documents/mde15/5141/2022/en/

humanity and war crimes, including the maintenance of illegal settlements. Businesses should also immediately cease the production of facial recognition and remote biometric recognition technologies that enable mass surveillance and discriminatory targeted surveillance, and delete any illegitimately acquired biometric data used to build databases and any models or products built upon such data.

 The United Nations General Assembly should pass a resolution calling for a ban on facial recognition technologies that are used for mass surveillance and discriminatory targeted surveillance.

2. SCOPE

This report is part of Amnesty International's global campaign to ban the use of facial recognition technologies for identification, with an emphasis on racially discriminatory contexts where these technologies stand to exacerbate existing methods of violence and control. It is also part of Amnesty International's effort to dismantle the Israeli state's system of oppression and domination against Palestinians. It builds upon a previous report, *Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity*, published in February 2022, in which the organization called for Israel to be held accountable for the crime against humanity of apartheid against Palestinians.³

2.1 LOCATION AND TIME

In late 2021, Amnesty International began research to investigate the extent of the use of biometric surveillance – and possible human rights violations associated in particular with remote biometric registration and surveillance, including facial recognition – in the OPT, specifically Hebron and East Jerusalem. This was in reaction to growing reporting by NGOs and the media of Israel's increased investments in closed-circuit television (CCTV) surveillance and artificial intelligence (AI) tools for security ends, between 2018 and 2022. The surveillance and tools were reported to be directed largely towards Palestinian communities, particularly in the aftermath of the 2021 Sheikh Jarrah protests. Paired with Amnesty's documentation of Israel's regime of apartheid, the possible reinforcement of apartheid policies against Palestinians via surveillance technologies such as facial recognition was identified as an urgent line of inquiry for Amnesty International.

The research undertaken by Amnesty International for this report focused on the emblematic cases of East Jerusalem and Hebron, as the only two cities in the OPT with Israeli settlements within their urban areas. As described in the report, specific neighbourhoods in the two cities are targeted for property takeovers and settlement expansion by ideologically driven settlers and settlers' organizations, due to their strategic or religious significance.

In East Jerusalem, surveillance became a particular concern following mass protests against the planned forced evictions of seven Palestinian families from their homes in Sheikh Jarrah, a Palestinian

^{3.} Amnesty International, 'Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity', February 2022, https://www.amnesty.org/en/documents/mde15/5141/2022/en/;

^{4.} WhoProfits, "Big Brother" in Jerusalem's Old City: Israel's Militarized Visual Surveillance System in Occupied East Jerusalem', November 2018, https://www.whoprofits.org/wp-content/uploads/2018/11/surveil-final.pdf; Privacy International, 'Israel shifts to digital surveillance of Palestinians ', July 2021, https://privacyinternational.org/examples/4659/israel-shifts-digital-surveillance-palestinians; Privacy International, 'Biometrics and counter-terrorism: Case study of Israel/Palestine', May 2021, https://privacyinternational.org/report/4527/biometrics-and-counter-terrorism-case-study-israelpalestine

^{5.} Amnesty International, 'Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity', February 2022, https://www.amnesty.org/en/documents/mde15/5141/2022/en/

neighbourhood near the Old City in East Jerusalem, in May 2021.6 To stop the threatened evictions, the families launched a campaign on social media using the hashtag #SaveSheikhJarrah, attracting worldwide attention and mobilizing protesters on the ground. Israeli security forces responded to the protests with excessive force. They arbitrarily arrested peaceful demonstrators, threw sound and stun grenades at crowds, dispersed them with excessive force and skunk water (a foul-smelling liquid), and fired concussion grenades at worshippers and protesters gathered in the Al-Aqsa mosque compound.⁷ Amnesty International became aware via researchers in the Old City of Jerusalem that the area – and in particular residential neighbourhoods historically home to Palestinians, such as Silwan - had seen an increase in video surveillance infrastructure since the threatened Sheikh Jarrah evictions.8 Amnesty International focused on East Jerusalem in part due to information regarding the geographic domain of the Mabat 2000 system, an extensive networked video surveillance system first launched in 2000 and later upgraded in 2018 to support more advanced AI functionality, such as object and facial recognition, in the Old City. Owing to mounting evidence of the possible ongoing development and expansion of facial recognition systems for identification and the known human rights violations associated with the design of these systems,⁹ Amnesty International included East Jerusalem in its research. And within East Jerusalem, the neighbourhoods of Sheikh Jarrah, Wadi Jouz, Issawiya, at-Tur, the Damascus Gate area, Salah el Din Street, the Old City and Silwan constituted the focus of the research.

This report also examines what Israeli security forces describe as the Hebron "Smart City" system: a technologically advanced programme designed "to locate unusual events in the City of Hebron, and ultimately manipulate them from end to end". ¹⁰ A 1997 agreement divided Hebron into two sectors: H1, where the civil and military administration was handed to the Palestinian Authority, and H2, which is under full Israeli administrative and military control. ¹¹ H2 is an area that includes at least seven Israeli settlement enclaves inside and around the Old City and that has historically been the city's cultural and economic heart. ¹² Here, Palestinian residents are overseen by the Civil Administration, a sub-unit of the Coordinator for Government Activities in the Territories (COGAT) which is part of Israel's Ministry of Defence and has overall responsibility for the implementation of Israeli policies, including the deployment and usage of surveillance tools, in the OPT. ¹³

- 8. Data shared with Amnesty by researchers at the Post-Visual Security project at Tampere University.
- 9. More information about facial recognition developments, globally, at banthescan.amnesty.org.
- 10. IDF Website, 'The technological revolution in the war rooms at the IOS division', November 2020, https://www.idf.il/55516

^{6.} On 7 May 2021, more than 170 Palestinians were injured as Israeli forces stormed the Al-Aqsa mosque compound and dispersed worshippers along with protesters, firing 40mm kinetic impact projectiles and concussion grenades into crowds gathered for prayers on the last Friday of Ramadan. At the same time, Palestinian families in Sheikh Jarrah, a neighbourhood in occupied East Jerusalem, began protesting against Israel's plan to forcibly evict them from their homes to make way for Jewish settlers. Many of the families are refugees, who settled in Sheikh Jarrah after being forcibly displaced around the time of Israel's establishment as a state in 1948. In response to the demonstrations in Sheikh Jarrah, thousands of Palestinians across Israel and the OPT held their own protests in support of the families, and against their shared experience of fragmentation, dispossession, and segregation. These were met with unnecessary, excessive and deadly force by Israeli authorities with thousands injured, arrested and detained. In Jerusalem alone, 840 Palestinians were injured over the course of four days of repression. https://www.amnesty.org/en/latest/press-release/2021/05/israel-opt-scrap-plans-to-forcibly-evict-palestinian-families-in-silwan/

^{7.} Amnesty International, 'Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity', February 2022, https://www.amnesty.org/en/documents/mde15/5141/2022/en/

^{11.} All civilian matters for Jewish Israeli settlers and Palestinian residents are overseen by the Civil Administration, a sub-unit of the Coordinator for Government Activities in the Territories (COGAT) which is part of Israel's Ministry of Defence and has overall responsibility for the implementation of Israeli policies, including the deployment and usage of surveillance tools, in the OPT. https://www.breakingthesilence.org.il/inside/wp-content/uploads/2022/07/Military_rule_testimony_booklet.pdf

^{12.} In Hebron, policies aimed at keeping Palestinians out of strategic areas with encroaching Israeli settlement activity are having devastating impacts on the rights of tens of thousands of Palestinians. Despite the Interim (Oslo) Agreement of 1995, the Israeli military did not withdraw from Hebron, owing to the continued presence of Jewish Israeli settlers.

^{13.} Breaking the Silence, 'Military Rule', July 2022, https://www.breakingthesilence.org.il/inside/wp-content/uploads/2022/07/Military_rule_testimony_booklet.pdf

Since the establishment of settlements in Hebron, Israel has continued to impose stringent restrictions on Palestinians in Hebron. In 2015, a wave of alleged, attempted and actual stabbing attacks by Palestinians against Israeli soldiers and settlers, Israel established a "closed military zone" encompassing the majority of H2, restricting access to the areas only to those Palestinians registered as permanent residents in the neighbourhoods. As of 2019, OCHA documented 21 permanently-staffed checkpoints, out of which six checkpoints fortified by turnstiles, metal detection and facial recognition, as efforts by Israeli security forces to exert even greater control over the Palestinian population in H2 took place. 15

A 2020 article on the website of the Israeli army said that the army's operations room was turned into a "multi-sensor military intelligence system", using anomaly detection and ambient noise detection to alert forces to potential security risks for deployment. In November 2021, Amnesty International was alerted to the deployment of facial recognition at checkpoints in Hebron through military testimonies gathered by the organization Breaking the Silence, an Israeli organization of army veterans who served in the occupied territories, and who collect and corroborate testimonies from other former soldiers about their experiences serving in the West Bank and Gaza Strip. These testimonies noted that facial imagery was captured and recognized at carousels at checkpoints within the city. Amnesty International included the area within its research to investigate and understand the possible deployment and human rights consequences of facial recognition systems at checkpoints in Hebron. In Hebron, the work was focused largely on the H2 sector, including Tel Rumeida and Hebron Old City, with particular attention to the bolstering of surveillance in and around Checkpoint 56 on Shuhada Street.

2.2 LIMITATIONS

This report focuses exclusively on Hebron and East Jerusalem, and does not examine the use of facial recognition technology elsewhere in the occupied West Bank, in the Gaza Strip or inside Israel. These limitations on the geographic scope of the research were necessary given considerations around security, as well as resource considerations: specifically, the question of where Amnesty researchers could gain meaningful access to information and data around the deployment and use of facial recognition systems, and their associated human rights violations.

The focus on East Jerusalem reflects two factors: i. the situation of occupied East Jerusalem due to Israel's de jure illegal annexation formalised in 1980, ¹⁸ and; ii. the time-period of focus for this research, being the immediate aftermath of the Sheikh Jarrah eviction protests of 2021, and the expansion in surveillance capabilities that followed. These protests took place in and around Sheikh Jarrah in East Jerusalem. The crackdowns and security measures that followed by Israeli authorities primarily affected Palestinians,

^{14.} United Nations Office for the Coordination of Humanitarian Affairs, October 2018. 'Over 700 road obstacles control Palestinian movement within the West Bank': https://www.ochaopt.org/content/over-700-road-obstacles-control-palestinian-movement-within-west-bank; Since then, Israeli soldiers have intensified their use of lethal force against Palestinians who do not pose an imminent danger, killing scores of Palestinian civilians at checkpoints and elsewhere in Hebron, many of them unlawfully including in possible extrajudicial executions. https://www.amnesty.org/en/documents/mde15/4812/2016/en/; The attacks are described in Amnesty International, September 2016. 'Lethal force and accountability for unlawful killings by Israeli forces in Israel and the Occupied Palestinian Territories': https://www.amnesty.org/en/documents/mde15/4812/2016/en/

^{15.} UN OCHA, 'Dignity denied: Life in the settlement area of Hebron city', February 2020, https://www.ochaopt.org/content/dignity-denied-life-settlement-area-hebron-city

^{16.} IDF Website, 'The technological revolution in the war rooms at the IOS division', November 2020, https://www.idf.il/55516

^{17.} Breaking the Silence, 'The computer already knows them', 2020, https://www.breakingthesilence.org.il/testimonies/database/820366, shared with Amnesty International,

^{18.} Knesset, 'Basic-Law: Jerusalem the Capital of Israel', 1 May 2022, https://main.knesset.gov.il/EN/activity/documents/BasicLawsPDF/BasicLawJerusalem.pdf

It should be noted that Amnesty International researchers were unable to conduct an in-depth survey of surveillance infrastructure in Hebron using the same methodologies as in East Jerusalem because of concerns for the safety of staff. The researchers did document images of select infrastructures using phone cameras, where possible, and field observations.

Amnesty International recognizes that private security companies are increasingly operating Israeli checkpoints across the West Bank, including in East Jerusalem. It is clear that they also act as private security guards for Israeli settlers and that they install, protect and maintain surveillance infrastructure in East Jerusalem in cooperation with the Israeli authorities. However, their actions fall outside of the scope of this report, which is focused specifically on the surveillance infrastructure used directly by the Israeli security forces.

Facial recognition technology can be used for authentication purposes, for example in airports, to verify that you are the individual in your passport photograph (also known as 1:1 or "one-to-one" facial recognition). This type of use falls outside of the scope of this report.

This report focusses on two "smart" systems of surveillance that are connected to the infrastructure in Hebron and East Jerusalem, and that use FRT. A third "smart" system that is not discussed at length is one that is designed to detect and manage "anomalies", ¹⁹ and which comprises sensors and algorithms that detect movement or the presence of individuals and objects considered out of the ordinary. This system renders Israeli army officials capable of "identifying in real time what is out of the ordinary and quickly providing the soldiers on the ground with all the relevant information about what is happening". ²⁰ Because this report is part of the Ban the Scan campaign of Amnesty International, which focusses on the ban on FRT, the focus is on the "smart" systems in Hebron and East Jerusalem that include FRT, and thus, this third system is excluded from its scope.

^{19.} Ibid.

^{20.} Seibt, S., France24, 'How Israel uses facial recognition to monitor West Bank Palestinians', November 2021, https://www.france24.com/en/middle-east/20211110-how-israel-uses-facial-recognition-technology-to-monitor-west-bank-palestinians

3. METHODOLOGY

The research for this report was undertaken in several stages using mixed qualitative research methods. First, Amnesty International conducted desk research between October 2021 and March 2022, using open-source intelligence and semi-structured interviews to develop a better picture of the types of technologies and companies involved in the surveillance of Palestinians, of the locations of surveillance, and of the range of rights violations. This stage culminated in the selection of sites for the field research, which was limited to the OPT exclusively. The early indicative findings of this desk research informed the decision to focus on Hebron and East Jerusalem, as areas where there were significant reports about the expansion of – and potential human rights harms associated with – Israel's surveillance infrastructure directed at Palestinian individuals.

To design the research project, Amnesty International established an advisory committee in early 2022 consisting of half a dozen researchers at the forefront of research on surveillance in the context of the OPT, with proven track records of scholarship and human rights advocacy in relation to the topic. They included academics, lawyers, campaigners and activists. The advisory committee was crucial in informing the research project, including but not limited to formulating the research questions, identifying potential witnesses and research partners, and addressing ethical and security-related concerns associated with the project.

The second stage of the project involved carrying out field visits in Hebron and East Jerusalem. In May and June 2022, Amnesty International conducted in-person interviews with 21 individuals between the ages of 25 to 55, as well as several follow-up interviews to collect testimonies in the days and weeks after the field work. Amnesty International met with Palestinian families that were resident in these areas, as well as activists, students and experts from across Hebron and East Jerusalem who were routinely exposed to everyday surveillance. Palestinian interviewees were anonymized and given pseudonyms to mitigate any possible risks resulting from their participation in this research. While geographic and local reference points mentioned in testimonies will always pose a risk of identification, Amnesty International took measures to ensure interviewees were in a position to provide informed consent, and that they were aware that their consent could be withdrawn at any point. Seven of the interviewees were based in Hebron; 14 in East Jerusalem. Interviews were conducted using a semistructured approach, in a Arabic and English. Testimonies from interviewees were cross-compared and corroborated via visual in-person observations and secondary literature including media articles, NGO and UN reports, court decisions and company documents – in particular, product brochures. presentations and websites. A review of government websites included official statements, reports, official policy documents and legislation, official budget data and videos released by security forces. This included a review of an official report issued by the Identity and Biometric Applications Unit of the Israel National Cyber Directorate (INCD) in 2021.

Furthermore, Breaking the Silence provided Amnesty International with testimonies portraying Israel's use of "smart" surveillance technologies in Hebron. Breaking the Silence also provided access to

testimonies gathered from Israeli military personnel, including a commander and two officers, who served in early 2022. In addition, Amnesty International made use of testimonies published by the group on earlier uses of facial recognition and other technology-augmented interception practices undertaken under the mandate of the military occupation in Hebron, from November 2021.



Camera survey path in occupied East Jerusalem, as conducted by Amnesty International. @ Mapbox, @ OpenStreetMap

In May 2022, Amnesty International researchers carried out a survey using a GPS-enabled 360 camera to map and revisit areas with reports of expanded surveillance infrastructure. This involved a walking tour from the beginning of the Sheikh Jarrah neighbourhood to Damascus Gate by the Old City. A second more detailed tour inside the Old City started from Damascus Gate and went through to the Armenian quarter. Amnesty International researchers were joined by a Palestinian legal scholar, Professor Nadera Shalhoub-Kevorkian from the Hebrew University,²¹ who resides in the Old City. A total area of 10 square kilometres was covered during the two tours.

Extensive documentation of surveillance cameras in Silwan had already been carried out by research partners at the Post-Visual Security project at Tampere University in Finland, 22 who provided Amnesty International with exclusive access to the latest camera data, along with additional context for the relationship between the increase in settler activity and the expansion of surveillance.

Amnesty International's Digital Verification Corps (DVC) collected and analysed open-source videos (media shared openly and publicly on the internet, predominantly via social media platforms) related to the interception, detention and other forms of harassment and violations of the rights of Palestinians by Israeli security forces. The DVC verified thirty-nine videos as authentic, 15 of which displayed the detention of Palestinians where surveillance technologies appeared to have been used for registration, identification or recording. These occured in areas of East Jerusalem, including Lion's Gate, Sheikh Jarrah, Damascus Gate, Al Aqsa Mosque, and Al-Wad street.

To complement the evidence collected through field visits and open-source investigations, Amnesty International also interviewed five international experts on biometric surveillance and its use in contexts of apartheid and segregation, including earlier iterations of similar techniques used in apartheid South Africa.

^{21.} Professor Shalhoub-Kevorkian's research focuses on law, society and crimes of abuse of power. She is the Lawrence D. Biele Chair in Law at the Faculty of Law-Institute of Criminology and the School of Social Work and Public Welfare at the Hebrew University of Jerusalem. She is a Palestinian feminist activist and the Chair in Global Law at Queen Mary University of London.

^{22.} https://www.tuni.fi/en/research/post-visual-security

Research into companies identified during field research was also conducted. In particular, companies such as Hangzhou Hikvision Digital Technology Co, Ltd and TKH Security Solutions were identified as the vendors of several high-resolution CCTV cameras found in Hebron and East Jerusalem, suspected of being at risk of being connected with the Mabat 2000 system, or being capable of facial recognition identification out of the box. Amnesty contacted these companies in an effort shed light on possible relationships with Israeli security forces as well as to understand how these companies fulfilled their international human rights responsibilities in relation to the findings of this report. The limited responses provided by these companies have been incorporated into this report.

4. APPLICABLE LEGAL STANDARDS

This chapter lays down the relevant international law framework to which the findings on the use of biometric surveillance, including facial recognition by the Israeli authorities in the OPT will be assessed. This chapter discusses the framework around apartheid, privacy, the right to equality and non-discrimination, the rights to freedom of expression, association, and peaceful assembly, as well as the right to freedom of movement. The chapter includes the legal and contextual framework around the phenomenon of a "chilling effect" and the misuse of "national security" justifications to arbitrarily restrict rights and freedoms. Lastly, this chapter explains the international legal framework that applies to businesses, including the businesses that provide the surveillance equipment to the Israeli authorities.

4.1 APPLICABILITY OF INTERNATIONAL LAW TO THE OCCUPIED PALESTINIAN TERRITORIES

This section discusses the applicability of international law to the OPT. Three branches of international law relevant to this report apply to Israel's conduct in the occupied West Bank, including East Jerusalem:

- 1. International humanitarian law, specifically the law of occupation, which includes rules imposing obligations on any power exercising effective control over a territory beyond its jurisdiction.
- 2. International human rights law, which applies to states and their agents, such as their armed forces, and private actors, including in the territories they occupy. It includes treaties and customary norms that guarantee civil and political rights, and economic, social and cultural rights. A fundamental principle of international human rights law is that victims of serious human rights violations have the right to remedies, including justice, truth and reparations.
- 3. International criminal law, which establishes individual criminal responsibility for certain violations and abuses of international human rights law and international humanitarian law, such as war crimes, crimes against humanity (including apartheid), as well as torture and ill-treatment, extrajudicial executions and enforced disappearance.

4.1.1 INTERNATIONAL HUMANITARIAN LAW

As the occupying power in the West Bank and the Gaza Strip, Israel has obligations under international humanitarian law applicable to belligerent occupation, including:

- Specific provisions of the Hague Convention (IV) respecting the Laws and Customs of War on Land, and its annexed Regulations respecting the Laws and Customs of War on Land, of 18 October 1907 (Hague Regulations).
- Convention IV relative to the Protection of Civilian Persons in Time of War, of 12 August 1949 (Fourth Geneva Convention).
- Rules of customary international humanitarian law applicable to military occupations

Although it is a party to the 1949 Geneva Conventions, Israel has argued that the Fourth Geneva Convention is not applicable in the OPT on the basis that the territories in question are "disputed" rather than occupied. The Israeli authorities have stated previously that Israel "voluntarily" observes the "humanitarian provisions" of the Geneva Conventions, without enumerating which provisions Israel considers "humanitarian". However, all relevant international legal and political bodies, including the High Contracting Parties to the Geneva Conventions, the UN Security Council and General Assembly, and the International Court of Justice, have reaffirmed on numerous occasions the full *de jure* applicability of the Fourth Geneva Convention to the OPT, including illegally annexed East Jerusalem. ²⁴

Under the Fourth Geneva Convention the population of the occupied territory are "protected persons" who are entitled to special protection and humane treatment at all times. The Convention prohibits the occupying power from, among other things, settling civilians in occupied territory (Article 49), deporting or forcibly transferring the population (Article 49), annexing territory (Article 47), and carrying out collective punishments (Article 33). Breaches of many of these rules constitute war crimes. The occupying power is responsible for the welfare of the population under its control, which means that it must ensure that public order and safety are maintained "while respecting, unless absolutely prevented, the laws in force in the country" (Hague Regulations, Article 43).

The occupying power may take certain measures of control or security that are "necessary as a result of the war" (Article 27, Fourth Geneva Convention). However, the International Committee of the Red Cross (ICRC) has emphasized that "regulations concerning occupation... are based on the idea of the personal freedom of civilians remaining in general unimpaired... What is essential is that the measures of constraint they adopt should not affect the fundamental rights of the persons concerned... those rights must be respected even when measures of constraint are justified."²⁶

4.1.2 INTERNATIONAL HUMAN RIGHTS LAW

Israel's actions in the occupied West Bank, including East Jerusalem, are bound by its obligations under the international human rights treaties that it has ratified, as well as customary rules of international human rights law. Israel is a party to most of the major international human rights treaties,

^{23.} Israel Ministry of Foreign Affairs, Disputed Territories: Forgotten Facts About the West Bank and *Gaza Strip*, 1 February 2003, https://web.archive.org/web/20130821162131/http://mfa.gov.il/MFA/MFA-Archive/2003/Pages/DISPUTED%20TERRITORIES-%20Forgotten%20 Facts%20About%20the%20We.aspx

^{24.} See, for example Declaration of the Conference of High Contracting Parties to the Fourth Geneva *Convention*, 5 December 2001, para. 2 https://www.icrc.org/en/doc/resources/documents/statement/57jrgw.htm; International Court of Justice Advisory Opinion, Legal Consequences of the Construction of a Wall in the *Occupied Palestinian Territory* (ICJ Advisory Opinion), 9 July 2004, para. 101 http://www.icjcij.org/docket/files/131/1671.pdf; and UN General Assembly Resolution 67/119 (A/Res/67/19), adopted on 18 December 2012 https://palestineun.org/wp-content/uploads/2013/08/67-119-Geneva-Convention.pdf

^{25.} Rome Statute of the International Criminal Court, Art 8(a)(viii); Art8(b)(viiii); International Committee of the Red Cross (ICRC), Customary IHL Vol. I: Rules (ICRC Customary IHL Study), Rule 156.

^{26.} ICRC, Commentary to Article 27 of the Fourth Geneva Convention http://www.icrc.org/ihl.nsf/COM/380-600032?OpenDocument.

including the International Covenant on Civil and Political Rights (ICCPR) and the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD), which are particularly relevant to this report.

All the UN bodies monitoring adherence to these treaties and the International Court of Justice have confirmed that the above-mentioned treaties apply to Israel's actions in the OPT and have rejected Israel's argumentation that the obligations do not exist in the OPT.²⁷ Specific treaty bodies have also clarified that the treaty provisions apply extraterritorially in general. For example, the UN Human Rights Committee has stated, with respect to the ICCPR, that "a State party must respect and ensure the rights laid down in the Covenant to anyone within the power or effective control of that State Party, even if not situated within the territory of the State Party."²⁸

4.1.3 INTERNATIONAL CRIMINAL LAW

War crimes, crimes against humanity, genocide and certain serious human rights violations such as torture, extrajudicial executions and enforced disappearances are crimes under international law, and states are required to make such violations criminal offences in domestic legislation. All states are also obligated to investigate and, where sufficient admissible evidence is gathered, prosecute those suspected of responsibility for these and other serious violations or extradite them to states intending to prosecute such crimes.

Individuals – whether civilians or military – can be held personally criminally responsible for such crimes. Commanders and civilian superiors may be responsible for crimes under international law under a number of modes of liability, including committing, planning, ordering, aiding and abetting, as well as command responsibility.²⁹

Article 8 of the Rome Statute of the International Criminal Court lists war crimes during an international armed conflict, including military occupations. Article 7 of the Rome Statute lists inhumane acts, including apartheid, which, if directed against a civilian population as part of a widespread or systematic attack, and as part of a state or organizational policy, constitute crimes against humanity.

Israel is not a party to the Rome Statute. But in January 2015, the State of Palestine accepted the jurisdiction of the ICC over alleged crimes committed "in the occupied Palestinian territory, including East Jerusalem, since June 13, 2014". And it then acceded to the Rome Statute. In 2018, the STATE of Palestine referred the situation to the ICC Prosecutor, requesting and investigation into "past, ongoing and future crimes within the court's jurisdiction, committed in all parts of the territory of the State of Palestine." In March 2021, the Prosecutor confirmed the initiation of an investigation.³⁰

4.2 THE RIGHT TO PRIVACY

The following section explains both the material scope of the right to privacy as well as the legitimate restrictions that can be made on this right under international human rights law. Where possible the specific explanations on the right to privacy in the context of remote biometric surveillance is included.

^{27.} Concluding Observations of the Committee on the Elimination of Racial Discrimination, Israel, 27 January 2020, CERD/C/ISR/CO/17-19, para. 9 https://www.ohchr.org/en/documents/concluding-observations/cerdcisrco17-19-committee-elimination-racial-discrimination; Concluding Observations of the Human Rights Committee of the Fourth Periodic Report of Israel, 21 November 2014, CCPR/C/ISR/CO/4, para.5 https://www.ohchr.org/en/documents/concluding-observations/ccprcisrco4-concluding-observations-fourth-periodic-report-israe; and ICJ Advisory Opinion, 9 July 2004, paras 111-113. https://www.icjcij.org/docket/files/131/1671.pdf

^{28.} Human Rights Committee, General Comment 31 [80] Nature of the General Legal Obligation Imposed on States Parties to the Covenant, CCPR/C/21/Rev.1/Add.13m, 25 May 2004, para. $10 \frac{https://digitallibrary.un.org/record/533996?ln=en$.

^{29.} ICRC Customary IHL Study, Rules 151-153

^{30.} Statement of ICC Prosecutor, Fatou Bensouda, respecting an investigation of the Situation in Palestine, 3 March 2021. https://www.icc-cpi.int/news/statement-icc-prosecutor-fatou-bensouda-respecting-investigation-situation-palestine

4.2.1 MATERIAL SCOPE OF THE RIGHT TO PRIVACY

The right to privacy is protected under a number of international human rights instruments, including Article 17 of the ICCPR which provides that no one should be subject to "arbitrary or unlawful interference" with their privacy, family, home or correspondence, and this should be protected by law.³¹ The UN Human Rights Committee has long recognized that such protection includes regulating "the gathering and holding of personal information on computers, data banks and other devices, whether by public authorities or private individuals or bodies."³²

The Human Rights Committee has established that information and data available in "public areas" can be protected by Article 17.³³ As the UN High Commissioner for Human Rights (OHCHR) has further clarified:

"the right to privacy comes into play when a Government is monitoring a public space, such as a marketplace or a train station, thereby observing individuals... The public sharing of information does not render its substance unprotected."³⁴

The scope of privacy has always evolved in response to societal change, particularly new technological developments. The OHCHR has stated that "[p]rivacy can be considered as the presumption that individuals should have an area of autonomous development, interaction and liberty, a 'private sphere' with or without interaction with others, free from State intervention and from excessive unsolicited intervention by other uninvited individuals." This encompasses three interrelated concepts: the freedom from intrusion into our private lives, the right to control information about ourselves, and the right to a space in which we can freely express our identities.

Interference with an individual's right to privacy is only legitimate under international human rights law if it is neither arbitrary nor unlawful. International human rights law and standards contain a three-part test to determine whether an interference with the right to privacy is legitimate or amounts to a violation. Firstly, any interference must be prescribed by and in accordance with the law (legality) and this law must be sufficiently clear and precise. It must contain sufficient safeguards, such as judicial oversight. Secondly, the interference must be pursuant to a legitimate aim. This can include the protection of national security and public order. Thirdly, the interference must be strictly necessary and proportionate to meet this legitimate aim. This means ensuring that there is no less rights-restricting measure that could be used instead of the interference (necessity) and balancing the nature and the extent of the interference against the reason for interfering to make sure that the harm caused does not outweigh the desired outcome (proportionality). What is more, interferences that are discriminatory are unlawful and/or arbitrary under international law.

4.2.2 LEGALITY

Any interference with the right to privacy must be authorized in accordance with laws that are publicly accessible and foreseeable. The law must be sufficiently clear to give people an adequate indication of the conditions and circumstances under which the authorities are empowered to resort to surveillance measures.³⁷ In particular, the law must set out in sufficient detail the extent and scope, and the

^{31.} Universal Declaration of Human Rights, Article 12; International Covenant on Civil and Political Rights, Article 17.

^{32.} UN Human Rights Committee (HRC), CCPR General Comment No. 16: Article 17 (Right to Privacy), The Right to Respect of Privacy, Family, Home and Correspondence, and Protection of Honour and Reputation, 8 April 1988, https://www.refworld.org/docid/453883f922.html

^{33.} Human Rights Committee, Concluding observations on the seventh periodic review of Colombia (17 November 2016) UN Doc CCPR/C/COL/7, para. 32.

^{34.} UN High Commissioner for Human Rights, The right to privacy in the digital age, 3 August 2018, A/HRC/39/29. para. 6.

^{35.} UN High Commissioner for Human Rights, The right to privacy in the digital age, 3 August 2018, A/HRC/39/29, para.5.

^{36.} Amnesty International, Surveillance giants: How the business model of Google and Facebook threatens human rights, 21 November 2019. https://www.amnesty.org/en/documents/pol30/1404/2019/en/

manner of exercise, of any discretion granted to the relevant authorities to authorize and implement surveillance. Effective safeguards against abuse, including knowledge and consent, must be set forth in law and include the nature, scope and duration of the possible surveillance measures, the grounds required for ordering them, the authorities competent to permit, carry out and supervise them, and the remedy process provided.³⁸

The legality and legitimacy of government-led surveillance with digital technologies, including with facial recognition technology, has been discussed by the Special Rapporteur on the right to privacy in their Working Draft Legal Instrument on Government-led Surveillance and Privacy.³⁹ The document states that the law should include appropriate safeguards, such as the length of time information obtained from a surveillance system should be kept, by whom it may be accessed and requirements for permanent deletion or destruction.⁴⁰ States should also provide adequate safeguards to protect data against risks violating its integrity, confidentiality, availability and resilience.⁴¹

4.2.3 LEGITIMATE AIM

Under human rights law, any interference with the right to privacy must be strictly necessary and proportionate to a legitimate aim, such as public order or national security, and the interference must be the least intrusive method possible to achieve the government's legitimate aim. Section 4.8 of this report discusses the abuse of national security arguments by states to limit rights and freedoms of individual, specifically and often times individuals that belong to a marginalised group.

In accordance with human rights principles and in order to justify any interference with the right to privacy, states must proactively demonstrate that facial recognition systems meet a specified legitimate need, and show that sensitive personal data collected about individuals (including biometric data, such as facial images, gait, or other identifying biometric features) is done so with a legitimate aim and purpose and in a limited way, with set parameters around collection, storage and use.

4.2.4 NECESSITY AND PROPORTIONALITY

States must demonstrate that an interference, including those mediated by FRT, with the right to privacy is a necessary and proportionate means of addressing a legitimate aim, which means balancing the nature and the extent of the interference against the reason for interfering with the right to privacy, and ensuring that the technology used is the least intrusive means available.

FRT for identification entails widespread bulk monitoring, collection, storage, analysis or other use of material and collection of sensitive personal data (biometric data) without individualised reasonable suspicion of criminal wrongdoing – which amounts to indiscriminate mass surveillance. Amnesty International believes that indiscriminate mass surveillance is never a proportionate interference with the rights to privacy, freedom of expression, freedom of association and of peaceful assembly; this policy complements Amnesty's existing policy on government mass surveillance.

Moreover, facial recognition systems are trained with image recognition algorithms that rely on vast amounts of individuals' faces as input data to improve its 'success rate', without their knowledge or

^{37.} UN, 'Surveillance and human rights. Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression', A/HRC/41/35, 28 May 2019, para. 24 (a).

³⁸ Ihid

^{39.} UN Special Rapporteur on the right to privacy, Working Draft Legal Instrument on Government-led Surveillance and Privacy. Including the Explanatory memorandum, version 7.0, 28 February 2018, art. 2 (1).

^{40.} UN Special Rapporteur on the right to privacy, Working Draft Legal Instrument on Government-led Surveillance and Privacy. Including the Explanatory memorandum, version 7.0, 28 February 2018, art. 4 (1) (L).

^{41.} UN Special Rapporteur on the right to privacy, Working Draft Legal Instrument on Government-led Surveillance and Privacy. Including the Explanatory memorandum, version 7.0, 28 February 2018, art. 12 (1).

consent, and such an action cannot be 'undone'. Even where input data or training data is deleted, the faces captured by the system have been used to train a facial recognition system (likely without their knowledge or control).

Amnesty International considers that all indiscriminate mass surveillance fails to meet the test of necessity and proportionality and therefore violates international human rights law.⁴²

4.3 THE RIGHT TO EQUALITY AND NON-DISCRIMINATION

The right to equality and non-discrimination is a critical principle that underpins all human rights.⁴³ It is protected by a number of international human rights instruments, including the ICERD and ICCPR. The Committee on the Elimination of Racial Discrimination has underscored that the principle of equality must be understood expansively, to include both formal equality before the law and substantive or de facto equality in the enjoyment and exercise of human rights.⁴⁴ The prohibition on racial discrimination applies to all states independently of their treaty obligations, and creates obligations that are owed to the international community as a whole that states have to fulfil with no exceptions.⁴⁵ Racial discrimination is defined broadly in international human rights law to include discrimination on the basis of race, colour, descent or national or ethnic origin.⁴⁶ The prohibitions on discrimination on the grounds of sex and religion have arguably also reached this status under international law.⁴⁷

According to the UN Special Rapporteur on Contemporary Forms of Racism, Racial Discrimination, Xenophobia and Related Intolerance, Tendaye Achiume, digital technologies such as facial recognition and other biometric technologies have been used by states in ways that "produce racially discriminatory structures that holistically or systematically undermine enjoyment of human rights for certain groups, on account of their race, ethnicity or national origin, in combination with other characteristics". All In light of this, the UN Special Rapporteur contends that outright bans on certain digital technologies may be required to prevent racially discriminatory outcomes and other human rights violations until such risks can be mitigated. The UN Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression has noted that facial recognition can lead to profiling on ethnicity, race, national origin, gender and other characteristics, which is often the basis for unlawful discrimination.

^{42.} Amnesty International, *Out of Control: Failing EU Laws for Digital Surveillance Export*, 21 September 2020, https://www.amnesty.org/en/documents/eur01/2556/2020/en/

^{43. &#}x27;Non-discrimination and equality are fundamental components of international human rights law and essential to the exercise and enjoyment of economic, social and cultural rights.' – UN CESCR, General Comment No. 20: Non-discrimination in economic, social and cultural rights, UN Doc. E/C.12/GC/20 (2009), I Para. 2; 'Non-discrimination, together with equality before the law and equal protection of the law without any discrimination, constitute a basic and general principle relating to the protection of human rights.' – UN Human Rights Committee, General comment No. 18, UN Doc. HRI/GEN/1/Rev.9 Vol. 1 (1989), Para. 1

^{44.} Committee on the Elimination of Racial Discrimination, General Recommendation No. 32, para 6.

^{45.} The prohibition on racial discrimination is a peremptory norm of customary international law (also known as *jus cogens*), which means that it applies to all states independently of their treaty obligations, and gives rise to obligations *erga omnes* (obligations that are owed to the international community as a whole) from which states cannot derogate. Case Concerning the Barcelona Traction, Light and Power Company, Limited (Belgium v Spain) (Jud- gement) International Court of Justice Rep 3 (1970), paras. 33–34.

^{46.} Committee on the Elimination of Racial Discrimination, General Recommendation No. 32, para 6.

^{47.} United Nations Human Rights Committee, General comment No. 18, UN Doc. HRI/GEN/1/Rev.9 Vol. I (1989), Para. 7; Daniel Moeckli, Sangeeta Shah & Sandesh Sivakumaran (eds), *International Human Rights Law. 3rd edition* (Oxford; Oxford University Press 2018), p. 151: Malcolm Shaw, *International Law. 8th edition* (Cambridge: Cambridge University Press 2017), p. 287.

^{48.} Report of the Special Rapporteur on Contemporary Forms of Racism, Racial Discrimination, Xenophobia and Related Intolerance, UN Doc. A/HRC/44/57, 18 June 2020, paras. 38–43.

^{49.} Ibid., para 56.

^{50.} Surveillance and human rights: Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression to the UN Human Rights Council, UN General Assembly, A/HRC/41/35, 28 May 2019, Para. 12: https://documents-dds-ny.un.org/doc/UNDOC/GEN/G19/148/76/PDF/G1914876.pdf

4.4 THE RIGHTS TO FREEDOM OF EXPRESSION, ASSOCIATION AND PEACEFUL ASSEMBLY

States have a duty to safeguard the right to seek, receive and impart information and ideas of all kinds – including political, religious or philosophical, artistic and cultural information and ideas – by any means, regardless of frontiers. The right to privacy is "an essential requirement for the realization of the right to freedom of expression". Freedom of expression is a collective right, enabling people to seek and receive information as a social group and to "voice their collective views". Sa

States must also respect, protect and fulfil the right to freedom of peaceful assembly without discrimination. The right to assemble peacefully is fundamental not only as a means of political expression but also to safeguard other rights.⁵⁴ Peaceful protests are a fundamental aspect of a vibrant society, and states should recognize the positive role of peaceful protest in strengthening human rights. This means that states have an obligation to protect the exercise of this right.⁵⁵ The right to freedom of association allows for individuals to form or join formal or informal groups to take collective action to pursue a common goal.⁵⁶

It is often the ability to be part of an anonymous crowd that allows people to participate in peaceful assemblies. As UN Special Rapporteur on freedom of opinion and expression, David Kaye, has stated:

"In environments subject to rampant illicit surveillance, the targeted communities know of or suspect such attempts at surveillance, which in turn shapes and restricts their capacity to exercise rights to freedom of expression [and] association." ⁵⁷

The UN Committee on the Elimination of Racial Discrimination (CERD) has warned that widespread use of FRT puts certain groups of people at disproportionate risk of interferences with their rights to seek, ⁵⁸ receive and impart information and freely assemble or associate. ⁵⁹ The UN Special Rapporteur on freedom of opinion and expression has called for a moratorium on surveillance technology, including facial recognition systems. ⁶⁰

- 51. UDHR Article 19; ICCPR Article 19
- 52. Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression, Frank La Rue, 17 April 2013, A/HRC/23/40, para.24.
- 53. Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression, Frank La Rue, 20 April 2010, A/HRC/14/23, para. 29.
- 54. UN High Commissioner for Human Rights, Report on Effective measures and best practices to ensure the promotion and protection of human rights in the context of peaceful protests, A/HRC/22/28, 21 January 2013, Para. 77
- 55. UN Human Rights Committee, General Comment 37 on the right of peaceful assembly; para 8
- 56. The Universal Declaration of Human Rights (UDHR), Article 20: https://www.un.org/en/universal-declaration-human-rights/; The International Covenant on Civil and Political Rights (ICCPR), Article 22: https://www.ohchr.org/en/professionalinterest/pages/ccpr.aspx; The International Covenant on Economic, Social and Cultural Rights (ICESCR), Article 8: https://www.ohchr.org/en/professionalinterest/pages/cescr.aspx; The American Convention on Human Rights (ACHR), Article 16: https://www.cidh.oas.org/basicos/english/basic3.american%20 https://www.achpr.org/instruments/achpr/; The European Convention on Human Rights (ECHR), Article 11: https://www.echr.coe.int/Documents/Convention_ENG.pdf
- 57. Kaye, Surveillance and human rights: Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression 28 May 2019 para. 21
- 58. United Nations, Human Rights Council, Report of the Special Rapporteur on contemporary forms of racism, racial discrimination, xenophobia and related intolerance, June 2020. 'Radical discrimination and emerging digital technologies: a human rights analysis': https://documents-dds-ny.un.org/doc/UNDOC/GEN/G20/151/06/PDF/G2015106.pdf?OpenElement
- 59. Committee on the Elimination of Racial Discrimination (CERD), Draft General Recommendation No. 36 on preventing and combating racial profiling, 14 May 2019, Para. 23.
- 60. UN News, June 2019. 'Moratorium call on surveillance technology to end "free-for-all" abuses: UN expert': $\underline{\text{https://news.un.org/en/story/2019/06/1041231}}$

4.5 THE RIGHT TO FREEDOM OF MOVEMENT

The right to freedom of movement is enshrined in article 12 of the ICCPR, which also holds that this right cannot be arbitrarily denied:

- 1. "Everyone lawfully within the territory of a State shall, within that territory, have the right to liberty of movement and freedom to choose his residence.
- 2. Everyone shall be free to leave any country, including his own.
- 3. The above-mentioned rights shall not be subject to any restrictions except those which are provided by law, are necessary to protect national security, public order (ordre public), public health or morals or the rights and freedoms of others, and are consistent with the other rights recognized in the present Covenant.
- 4. No one shall be arbitrarily deprived of the right to enter his own country."

Following Article 12 of the ICCPR, some restrictions on the right to freedom of movement can be allowed, when necessary, in service of national security. The 'national security' argument should not be misused by States, (See Section XX of this report on the misuse of the "national security" justification by states.)

The UN Human Rights Committee has made clear that:

"States should always be guided by the principle that the restrictions must not impair the essence of the right... [and] the relation between right and restriction, between norm and exception, must not be reversed. The laws authorizing the application of restrictions should use precise criteria and may not confer unfettered discretion on those charged with their execution".⁶¹

The Committee goes on to state:

"Thus, it would be a clear violation of the Covenant if the rights enshrined in article 12, paragraphs 1 and 2, [relating to freedom of movement] were restricted by making distinctions of any kind, such as on the basis of race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status." 62

The lawfulness of any restriction should, therefore, be assessed in light of Article II(c) the Apartheid Convention, which defines the crime of apartheid, as including:

"Any legislative measures and other measures calculated to prevent a racial group or groups from participation in the political, social, economic and cultural life of the country and the deliberate creation of conditions preventing the full development of such a group or groups, in particular by denying to members of a racial group or groups basic human rights and freedoms, including the right to work, the right to form recognized trade unions, the right to education, the right to leave and to return to their country, the right to a nationality, the right to freedom of movement and residence, the right to freedom of opinion and expression, and the right to freedom of peaceful assembly and association."

4.6 THE CRIME OF APARTHEID

Apartheid refers to a system of segregation, oppression and domination by one racial group over another. The term apartheid originates from the name given to policies of racial segregation and discrimination implemented in South Africa between 1948 and 1994. Through international

 $^{61. \ \} UN\ Human\ Rights\ Committee,\ "General\ Comment\ \ 27\ on\ Article\ 12\ Freedom\ of\ Movement,"\ para\ 13.$

^{62.} UN Human Rights Committee, "General Comment 27 on Article 12 Freedom of Movement," para 18.

condemnation of these policies, the practice of apartheid came to be expressly prohibited in public international law, international human rights law and international criminal law. Although the South African apartheid system formally ended in 1994, the prohibition of apartheid remains entrenched in international law as both a crime under international law and a grave violation of international human rights law. Apartheid is prohibited and/or expressly criminalized by numerous international treaties, including the ICERD, the International Convention on the Suppression and Punishment of the Crime of Apartheid (Apartheid Convention) 4 and the Rome Statute.

The prohibition on apartheid under international human rights law also forms part of customary international law. In international human rights law, apartheid constitutes an egregious violation of a range of fundamental human rights, most notably the right to dignity and the right to equality and non-discrimination. Under Article 3 of the ICERD, states parties are required to prevent, prohibit and eradicate all apartheid practices. Israel is a state party to the ICERD, having ratified the treaty in 1979. The Committee on the Elimination of Racial Discrimination has concluded more than once that Israel has violated Article 3 and called on Israel to eradicate all such policies and practices against non-Jewish communities, in particular "policies or practices that severely and disproportionately affect the Palestinian population in Israel and the OPT". 66 The International Court of Justice has ruled that apartheid constitutes "a denial of fundamental human rights [and] is a flagrant violation of the purposes and principles of the Charter [of the United Nations]".67

From the perspective of international criminal law, apartheid is defined as a crime against humanity under customary international law, the Apartheid Convention and the Rome Statute, requiring all states to investigate and prosecute or extradite individuals suspected of criminal responsibility for apartheid.⁶⁸ The crime against humanity of apartheid is committed when certain inhuman or inhumane acts (serious human rights violations) are perpetrated in the context of an institutionalized regime of systematic oppression and domination by one racial group over another, with the intention to maintain that system.⁶⁹ These prohibited acts are set out in the Apartheid Convention and the Rome Statute, and include unlawful killing, torture, forcible transfer and the denial of basic rights and freedoms. A regime of oppression and domination can best be understood as the systematic, prolonged and cruel discriminatory treatment by one racial group of members of another racial group with the intention to control the second racial group. Because the prohibition and criminalization of apartheid is customary international law, Israel is bound to dismantle the system, investigate, and prosecute the crime and provide redress to its victims, irrespective of whether or not Israel is a party to the Rome Statue and/or Apartheid Convention.⁷⁰

- 64. International Convention on the Suppression and Punishment of the Crime of Apartheid, Article II
- 65. Rome Statute of the International Criminal Court, Article 7
- 66. CERD, Concluding Observations: Israel, 27 January 2020, UN Doc. CERD/C/ISR/CO/17-19, paras 21, 22, 23 and 24; CERD, Report, March 2012, UN Doc. A/67/18, paras 28(24) and 28(27).
- 67. ICJ, Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) notwithstanding Security Council Resolution 276 (1970), advisory opinion, 21 June 1971
- 68. The International Law Commission has concluded that the prohibition of crimes against humanity is a peremptory norm of international law, from which no deviation is permitted, that is, no state may withdraw from its obligation to respect them under any circumstances. See, for example, paragraph (4) of the commentary on the preamble to the ILC's draft articles on crimes against humanity in ILC, Report on the Work of the Sixty-Ninth Session, 2017, UN Doc. A/72/10, para. 46
- 69. International Convention on the Suppression and Punishment of the Crime of Apartheid, G.A. res. 3068 (XXVIII)), 28 U.N. GAOR Supp. (No. 30) at 75, U.N. Doc. A/9030 (1974), 1015 U.N.T.S. 243, entered into force July 18, 1976.
- 70. For a detailed analysis of apartheid in international law see: Amnesty International, Israel's Apartheid Against Palestinians: Cruel System of Domination and Crime Against Humanity, February 2022, Chapter 4.

^{63.} In addition, "practices of apartheid" are listed as grave breaches of international humanitarian law and war crimes. See, in particular, Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Protocol I), adopted 8 June 1977, entered into force 7 December 1978, Article 85(4)(c); International Committee of the Red Cross (ICRC), Customary International Humanitarian Law, 2005, Rule 156: Definition of War Crimes. Apartheid has also been criminalized under the following: UN Transitional Administration in East Timor Regulation 2000/15, 6 June 2000, UN Doc. UNTAET/REG/2000/15, Section 5(1)(j); Statute of the Extraordinary African Chambers Within the Courts of Senegal Created to Prosecute International Crimes Committed in Chad between 7 June 1982 and 1 December 1990, Article 6(e); Protocol on Amendments to the Protocol on the Statute of the African Court of Justice and Human Rights (Annex: Statute of the African Court of Justice and Human and Peoples' Rights), adopted on 27 June 2014.

4.7 WHAT IS THE 'CHILLING EFFECT'?

A 'chilling effect' occurs when the actions of a state cause people to refrain from exercising their human rights, for fear of the consequences. This is especially true in contexts where states fail to enact adequate safeguards, including transparency, around the use of surveillance tools, such that people are not able to know whether they are under surveillance, or how such surveillance may impact on their rights. For example, the UN Human Rights Committee has made clear that the use of surveillance at protests and other assemblies can in some circumstances have a chilling effect. In other words, people may choose not to exercise their right to freedom of peaceful assembly for fear that their identity could be logged and that this could have negative repercussions. Chilling effects can occur in a multitude of settings, impacting the exercise of a number of rights. That such an effect can occur has been recognized by regional courts around the world. The UN Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression, David Kaye, has acknowledged the chilling effect of surveillance on the rights to freedom of expression and association:

"In environments subject to rampant illicit surveillance, the targeted communities know of or suspect such attempts at surveillance, which in turn shapes and restricts their capacity to exercise rights to freedom of expression [and] association."⁷³

4.8 LIMITING RIGHTS IN THE NAME OF NATIONAL SECURITY

National security is often invoked as a justification for the restriction of human rights by states. However, international standards are clear that such limitations can only be justified in very specific circumstances. Firstly such limitations can be taken only to protect the existence of the nation or its territorial integrity or political independence against force or threat of force. Secondly, national security cannot be used as a pretext for imposing vague or arbitrary limitations and may only be invoked when there exist adequate safeguards and effective remedies against abuse. Finally, international standards provide that the systematic violation of human rights undermines true national security and may jeopardize international peace and security. Standards provide that a state responsible for such violation shall not invoke national security as a justification for measures aimed at suppressing opposition to such violation or at perpetrating repressive practices against its population. What this means in practice is that restrictions on human rights made under the purported justification of national security should be carefully scrutinized to ensure that they go no further than what can be considered necessary and proportionate.

Every state has an obligation under international law to protect all persons within its jurisdiction from violence, and therefore has a duty to ensure security within all territories under its jurisdiction or effective control. In the context of an international armed conflict and a military occupation

76. Ibid. para 31

77. Ibid. para 32

^{71.} UN Human Rights Committee, "General Comment 37: Article 21 Right of peaceful assembly," para 10

^{72.} See, European Court of Human Rights cases of: Christian Democratic People's Party v. Moldova, 2006, § 77; Nurettin Aldemir and Others v. Turkey, 2007, § 34; Inter-American Court of Human Rights: Herrera Ulloa v. Costa Rica; Moiwana Village v. Suriname. Community Court of Justice of the Economic Community of West African States: AJ v Gambia

^{73.} Kaye, Surveillance and human rights: Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression 28 May 2019 para 21

^{74.} A/HRC/23/40, para 58-60. https://www.ohchr.org/sites/default/files/Documents/HRBodies/HRCouncil/RegularSession/Session23/A.HRC.23.40 EN.pdf

^{75.} International Commission of Jurists, Siracusa Principles on the Limitation and Derogation Provisions in the International Covenant on Civil and Political Rights, para 29

there may be circumstances where treating different groups differently is based on lawful grounds and this may therefore occur in a manner that does not infringe the prohibition on discrimination. Indeed, international humanitarian law allows, and in certain circumstances requires, nationals of the occupying power and the occupied population to be treated differently. Nevertheless, security-related policies must comply with international law, including by ensuring any limitations or restrictions to rights are necessary and proportionate to the security threat. As clearly stated in the Siracusa Principles:

"The systematic violation of human rights undermines true national security and may jeopardize international peace and security. A state responsible for such violation shall not invoke national security as a justification for measures aimed at suppressing opposition to such violation or at perpetrating repressive practices against its population."⁷⁸

4.9 EFFECTIVE REMEDIES

Under international human rights law and international humanitarian law, it is the responsibility of every state to ensure that violations, including those stemming from the unnecessary and disproportionate use of Al-driven surveillance tools, including facial recognition, are investigated and effectively remedied. ⁷⁹ Victims of gross human rights violations and serious violations of international humanitarian law have the right to reparation, including restitution, compensation, rehabilitation, satisfaction and guarantees of non-repetition. ⁸⁰

4.10 BUSINESS AND HUMAN RIGHTS STANDARDS

Companies have a responsibility to respect all human rights wherever they operate in the world and throughout their operations. This is a widely recognized standard of expected conduct as set out in international business and human rights standards, including the UN Guiding Principles on Business and Human Rights (UN Guiding Principles) and the OECD Guidelines for Multinational Enterprises (OECD Guidelines).⁸¹ The UN Guiding Principles also make clear that companies have a responsibility to respect standards of international humanitarian law, including those that apply to situations of military occupations.⁸² The OHCHR has explained that international humanitarian law imposes obligations on business managers and staff not to breach the rules of international humanitarian law.⁸³

The corporate responsibility to respect human rights and international humanitarian law is independent of a state's own human rights obligations and exists over and above compliance with national laws and

^{78.} International Commission of Jurists, "Siracusa Principles on the Limitation and Derogation Provisions in the International Covenant on Civil and Political Rights" para 32

^{79.} See e.g. Article 8, Universal Declaration of Human Rights; Article 2 (3), International Covenant on Civil and Political Rights; Article 2, International Covenant on Economic, Social and Cultural Rights. International Committee of the Red Cross, Customary International Humanitarian Law, Vol. I: Rules, Rules 150 and 158.

^{80.} Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law, adopted by General Assembly Resolution60/147 (2005)

^{81.} This responsibility was expressly recognized by the UN Human Rights Council on 16 June 2011, when it endorsed the UN Guiding Principles on Business and Human Rights (UN Guiding Principles), and on 25 May 2011, when the 42 governments that had then adhered to the Declaration on International Investment and Multinational Enterprises of the OECD unanimously endorsed a revised version of the OECD Guidelines for Multinational Enterprises. See Human Rights and Transnational Corporations and other Business Enterprises, Human Rights Council, Resolution 17/4, UN Doc A/HRC/RES/17/4, 6 July 2011; OECD Guidelines for Multinational Enterprises, OECD, 2011, www.eved.org/corporate/mne

^{82.} UN Guiding Principles, Principle 12 including Commentary

^{83.} UN Human Rights, Office of the High Commissioner (OHCHR), The Corporate Responsibility to Respect Human Rights: An Interpretive Guide, 2012. See also, ICRC, Business and International Humanitarian Law: An Introduction to the Rights and Obligations of Business Enterprises under International Humanitarian Law, 2006.

regulations protecting human rights.⁸⁴ UN Guiding Principle 13 outlines that companies' responsibility to respect human rights entails a requirement to "avoid causing or contributing to adverse human rights impacts through their own activities, and address such impacts when they occur; and seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts."⁸⁵

To meet their corporate responsibility to respect human rights, companies should have in place ongoing and proactive human rights due diligence processes to identify, prevent, mitigate and account for how they address their impacts on human rights. Due diligence is based on the concept of proportionality: the more severe the risk, the more adapted the due diligence processes must be to the context and particularity of the risk. Severity of impacts are assessed by their scale, scope and irremediable character. The scale is a severe to the context and particularity of the risk. The scale is a severe to the context and particularity of the risk. The scale is a severe to the context and particularity of the risk. The scale is a severe to the context and particularity of the risk. The scale is a severe to the context and particularity of the risk. The scale is a severe to the context and particularity of the risk. The scale is a severe to the context and particularity of the risk. The scale is a severe to the context and particularity of the risk. The scale is a severe to the context and particularity of the risk. The scale is a severe to the context and particularity of the risk. The scale is a severe to the context and particularity of the risk. The scale is a severe to the context and particularity of the risk. The scale is a severe to the context and the scale is a severe to the context and the scale is a severe to the context and the scale is a severe to the context and the scale is a severe to the context and the scale is a severe to the context and the scale is a scale is a severe to the context and the scale is a scale is a scale in the scale in the scale in the scale is a scale in the scale in th

It has been acknowledged that in conflict-affected contexts, the risk of gross human rights abuses is heightened and, therefore, due diligence by business should be heightened accordingly.⁸⁸ In June 2022, the UN Development Programme published a guide for companies on "Heightened Human Rights Due Diligence for Business in Conflict-Affected Contexts" (UN Guide).⁸⁹ According to this document, heightened due diligence requires companies to do as the UN Guiding Principles recommend, but also to identify the relation between business activities and conflict, which requires businesses to understand the conflict, identify their impact on the conflict and act upon those findings.⁹⁰

According to the UN Guide, assessments of the impact business activities have on conflict should be "undertaken at regular intervals: prior to a new activity or relationship; prior to major decisions or changes in the operation [...]; in response to or anticipation of changes in the operating environment (e.g. rising social tensions); and periodically throughout the life of an activity or relationship." ⁹¹ Importantly, "[r]obust stakeholder engagement practices and grievance management systems are key elements to accomplishing this." ⁹²

When conducting human rights due diligence, a company may identify that it may cause or contribute to – or already be causing or contributing to – a serious human rights abuse through its own activities. In these cases, companies must cease or prevent the activities that are responsible for those adverse human rights impacts. Where impacts are outside of the business enterprise's control but are directly linked to their operations, products or services through their business relationships, the UN Guiding Principles require the company to seek to mitigate the human rights impact by exercising leverage, or seek to improve leverage where leverage is limited, including through collaboration if appropriate. If companies are not able to exercise leverage – or the leverage exercised is insufficient to mitigate the harm – then a company must responsibly disengage.

^{84.} UN Guiding Principles, Principle 11 including Commentary.

^{85.} UN Office of the High Commissioner for Human Rights (UNOHCHR), 'Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework', 2011, UN Doc HR/PUB/11/04, Principle 13 including Commentary, www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf

^{86.} UNDP, "Heightened Human Rights Due Diligence for Business in Conflict-Affected Contexts: A Guide", 16 June 2022.

^{87.} UN Guiding Principles, Principle 14 including Commentary.

^{88.} Working Group on the issue of human rights and transnational corporations and other business enterprises, "Towards Heightened Action", UN doc A/75/212, 21 July 2020; https://documents/thematic-reports/a75212-report-business-human-right-and-conflict-affected-regions-towards

^{89.} UNDP, "Heightened Human Rights Due Diligence for Business in Conflict-Affected Contexts: A Guide", 16 June 2022.

^{90.} UNDP Guide, p. 23. As the UNDP Guide goes on to explain, "[u]nderstanding how business activities interact with conflict in a particular context and how to mitigate unintended negative effects is commonly known as 'conflict sensitivity'".

^{91.} UNDP Guide, p. 20.

^{92.} UNDP Guide, p. 20.

Transparency is a key component of human rights due diligence. As the UN Guiding Principles make clear, companies "need to know and show that they respect human rights" and "showing involves communication, providing a measure of transparency and accountability to individuals or groups who may be impacted and to other relevant stakeholders."	

93. UN Guiding Principles, Commentary to Principle 15.94. UN Guiding Principles, Commentary to Principle 21.

5. BACKGROUND

This chapter explains facial recognition technology as well as its compatibility with international human rights law. The chapter also refers to the findings of Amnesty International 2022 report, in which it concluded that Israel imposes a system of oppression and domination against Palestinians in the OPT and that this amounts to apartheid as prohibited under international law.

5.1 FACIAL RECOGNITION

Facial recognition technology uses software in combination with high-resolution surveillance cameras to recognize facial features in order to verify or identify an individual. FRT is one of numerous biometric technologies being deployed by states and commercial entities in a wide range of scenarios. The development, trade and use of biometric technologies is on the rise globally. The technology can be used for multiple purposes. Firstly, it can be used for authentication purposes, for example to unlock a mobile phone. Secondly, it can also be used for authorization purposes, for example to grant someone access to a certain part of a city. Lastly, the technology can be used for identification purposes, for example to identify someone who passes a camara. A widespread camera network connected to FRT can lead to mass surveillance. This report focusses on latter two uses of FRT.

As Amnesty International has previously documented, ⁹⁶ imagery from any camera, regardless of its age, can be fed into facial recognition software, as long as the resolution of the input cameras allows for faces to be identified. ⁹⁷ Facial recognition software then compares the imagery with a large database of images, many scraped without the user's consent, in search for a match, or automatically registers unknown faces into the database.

FRT creates a means to identify and categorize people at scale based on their physical features, including observations or inferences of protected characteristics – for example, race, ethnicity, gender, age and disability status. Research has consistently found that FRT systems process some faces more accurately than others, depending on key characteristics including skin colour, ethnicity and gender.⁹⁸ FRT classification and categorization is limited and does not allow for nuance. For example, FRT may

^{95.} Feldstein, S., September 2019, 'The Global Expansion of Al Surveillance', Carnergie Endowment for International Peace: https://carnergieendowment.org/files/WP-Feldstein-AlSurveillance_final1.pdf; Global biometric system market revenue is nearly USD 43bn: https://www.statista.com/topics/4989/biometric-technologies/#topicOverview

^{96.} https://banthescan.amnesty.org/decode/

^{97.} Amnesty International, Citizen Evidence Lab, November 2021, 'Decode Surveillance NYC early analysis': https://citizenevidence.org/2021/11/17/decode-surveillance-early-analysis/

^{98.} United Nations, Human Rights Council, Report of the Special Rapporteur on contemporary forms of racism, racial discrimination, xenophobia and related intolerance, Racial discrimination and emerging digital technologies: a human rights analysis, A /HRC/44/57, 18 June 2020, https://documents-ddsny.un.org/doc/UNDOC/GEN/G20/151/06/PDF/G2015106.pdf?OpenElement

assign a face with a probability score for being male or female (with varying degrees of success in terms of accuracy) but will struggle to accurately identify non-binary, queer or genderfluid identities. ⁹⁹ In addition to skin tone and gender, there is a notable lack of research documenting the extent to which FRT systems accurately identify people with certain disabilities or those who have undergone facial surgery. ¹⁰⁰

FRT can involve the widespread and bulk monitoring, collection, storage and analysis of biometrics-based identification data at scale. Facial recognition uses existing cameras in combination with new software and commercial databases to track individuals. This software is built by companies using millions of images taken from e.g. social media, drivers' license registries and other databases, without people's prior knowledge or consent. These tools often claim to be able to identify and track individuals irrespective of time of day and in any urban environment when paired up with a CCTV camera network.¹⁰¹

Biometric surveillance technologies pose various unique risks to human rights, specifically when deployed widespread in high-stakes scenarios, such as law enforcement. FRT has a growing impact on human rights worldwide.

5.1.1 FRT, MASS SURVEILLANCE AND THE RIGHT TO PRIVACY

Any interference with the right to privacy must always meet three tests: it must be provided for by law, serve a legitimate aim and be necessary and proportionate to that aim (See Section 4.2. for the legal framework). FRT that scans, captures and oftentimes stores data from all faces within its radius. In relying on massive databases curated often without individuals' knowledge and consent, FRT can be described as a tool of mass surveillance by design. Amnesty International believes that indiscriminate mass surveillance, including through FRT, is never a proportionate interference with the right to privacy.

5.1.2. DISCRIMINATION THROUGH TARGETED AND DISCRIMINATORY SURVEILLANCE

FRT can support differential treatment of people. The categorization can be based on observations or inferences. Because this happens on the basis of protected characteristics in FRT systems, they undermine the right to equality and non-discrimination. Because FRT is less accurate for categorizing for people with darker skin tone, female faces, disabilities, and certain gender identities, these people are at risk of being miscategorized or identified. Individuals are therefore at risk of disproportionally being subjected to differential treatment and restrictions on their rights as a result of the technology not being able to process their protected characteristic correctly. This constitutes discrimination. FRT can reinforce and augment existing discriminatory treatment of certain groups, potentially without the system owner being aware of the risks. ¹⁰²

The systems are by design predisposed to embed and augment existing biases – reinforcing structural inequalities. Training datasets may be unrepresentative and have the effect of encoding historic bias;

102. The Toronto Declaration, 2018, https://www.torontodeclaration.org/declaration-text/english/

^{99.} Pew Research Center, September 2019, 'The challenges of using machine learning to identify gender in images': https://www.pewresearch.org/internet/2019/09/05/the-challenges-of-using-machine-learning-to-identify-gender-in-images/; The Telegraph, October 2019, 'Facial recognition software unable to recognise trans people, university study suggests': https://www.telegraph.co.uk/news/2019/10/30/facial-recognition-software-unable-recognise-trans-people-university/

^{100. &}quot;Not much information is available on the extent to which facial recognition technologies work accurately for different forms of disabilities or injuries to the face, such as people whose face has been altered as a result of an accident or paralysis, people who have had facial surgeries or people with craniofacial differences." – EU Agency for Fundamental Rights, 'Facial recognition technology: fundamental rights considerations in the context of law enforcement', 2019: https://fra.europa.eu/sites/default/files/fra_uploads/fra-2019-facial-recognition-technology-focus-paper-1_en.pdf; See also 'Disability, Bias and Al', Al Now Institute, 2019, https://ainowinstitute.org/disabilitybiasai-2019.pdf

^{101.} Anyvision. 'Better Tomorrow Technical Product Overview': https://www.imotionsecurite.com/pdf/anyvision/Anyvision_Better%20
Tomorrow.pdf; Anyvision Better Tomorrow brief: https://www.gov.il/BlobFolder/generalpage/ihsf_tech/en/minister_conference_AnyVision.pdf; IDF Website, November 2020, 'The technological revolution in the war rooms at the IOS division': https://www.idf.il/55516; Shezaf, Hagar., Haaretz, September 2022, 'Israeli Army Installs Remote-control Crowd Dispersal System at Hebron Flashpoint': <a href="https://www.haaretz.com/israeli-news/2022-09-24/ty-article/.premium/israeli-army-installs-remote-control-crowd-dispersal-system-at-hebron-flashpoint/00000183-70c4-d4b1-a197-ffcfb24f0000

accuracy rates may be skewed to favour certain characteristics if systems are tested and evaluated on unrepresentative datasets (systems cannot account for gaps in datasets). For example, using FRT for identification in law enforcement risks replicating any existing discriminatory practices. Researchers at Georgetown University warn that FRT "will disproportionately affect African Americans", in large part because there are significantly more black faces on US police watchlists than white faces. "Police face recognition systems do not only perform worse on African Americans; African Americans are also more likely to be enrolled in those systems and be subject to their processing." 103

Some groups of people are more likely than others to have biometric data or sensitive personal data collected about them by state agencies and/or private sector actors. ¹⁰⁴ Refugee and migrant populations, for example, are increasingly subject to biometric data collection in order to receive humanitarian services from aid agencies, ¹⁰⁵ including access to shelter and food. ¹⁰⁶ As such, FRT poses a significant threat to the right to equality and non-discrimination. Amnesty's research in New York City has also shown that facial recognition is deployed asymmetrically along lines of race; the higher the proportion of non-white residents, the higher the concentration of facial recognition compatible CCTV cameras. ¹⁰⁷ The research also found that communities most targeted with stop-and-frisk are also at greater risk of discriminatory policing through invasive surveillance. ¹⁰⁸

FRT can, in other words, have a disproportionate impact on marginalized groups, undermining the right to equality and non-discrimination. The technology can and is being used by states to target certain individuals or groups of people based on their protected characteristics, including ethnicity, race and gender. Even if this is not the stated aim of the technology, discriminatory impacts are nevertheless a huge risk of this technology that can exacerbate and entrench existing societal disadvantages and further disempower already marginalized groups of people.

5.1.3. FRT CAN THREATEN THE RIGHTS TO FREEDOM OF EXPRESSION AND PEACEFUL ASSEMBLY

The use of FRT to analyse photo and video footage of peaceful protests and demonstrations in order to identify and/or punish protesters may deter participants from participating in protests, thus limiting the right to freedom of peaceful assembly and undermining their capacity to organize. Crucially, opacity in the future use or sharing of data and the lack of safeguards against this, can also further complicate any calculation an individual makes to assemble. It may also generate fears that documentation of assemblies by members of the public and by the media might be seized by authorities and used to identify protestors, which has consequences for police accountability, since documentary evidence is a key tool in holding law enforcement personnel to account for abuses in the context of protests. In other words, the use of FRT may act as a double-edged deterrent, through disrupting both peaceful assemblies in public spaces and the documentation of potential police abuses.

FRT hampers the rights to freedom of expression and peaceful assembly. States are increasingly turning to FRT to police protests, festivals and sporting events. This is a violation of the rights to

^{103. &#}x27;The Perpetual Line-Up: Unregulated Police Face Recognition in America', Clare Garvie, Alvaro Bedoya, Jonathan Frankle, Center on Privacy & Technology at Georgetown Law, Georgetown University, Washington DC (2016): https://www.perpetuallineup.org/

^{104.} United Nations, Human Rights Council, Report of the Special Repporteur on contemporary forms of racism, racial discrimination, xenophobia and related intolerance, 'Racial and xenophobic discrimination and the use of digital technologies in border and immigration enforcement', December 2021, https://documents-dds-ny.un.org/doc/UNDOC/GEN/G21/379/61/PDF/G2137961.pdf?OpenElement_

^{105.} Amnesty International, 'Race, borders, and digital technologies: Submission to the UN Special Rapporteur on contemporary forms of racism, xenophobia and related intolerance', September 2020, https://www.amnesty.org/en/documents/ior40/3330/2020/en/

 $^{106. \,} UNHCR, \, 'Biometric \,\, Identity \,\, Management \,\, System', \,\, \underline{https://www.unhcr.org/uk/protection/basic/550c304c9/biometric-identity-management-system.html}$

^{107.} Amnesty International, 'USA: Facial recognition technology reinforcing racist stop-and-frisk policing in New York – new research' February 2022, https://www.amnesty.org/en/latest/news/2022/02/usa-facial-recognition-technology-reinforcing-racist-stop-and-frisk-policing-in-new-york-new-research/#:~:text=February%2015%2C%202022-,USA%3A%20Facial%20recognition%20technology%20 reinforcing%20racist%20stop%2Dand%2Dfrisk,in%20New%20York%20%E2%80%93%20new%20research&text=New%20Yorkers%20 living%20in%20areas,International%20and%20partners%20has%20revealed.

^{108.} Banthescan.amnesty.org/decode

freedom of peaceful assembly, freedom of association and freedom of expression, not least because it can create a chilling effect and seriously deter many forms of dissent for the foreseeable future.

5.1.4 CONCLUSION: FRT IS INCOMPATIBLE WITH HUMAN RIGHTS AND MUST BE BANNED

The dependency on mass surveillance and the above-described discrimination risks and risks to freedom of expression and assembly make facial recognition technology for identification purposes, irreconcilable with human rights. Just as the mere threat of unlawful digital surveillance creates a chilling effect on people's free expression, the use of FRT may foreseeably deter people from expressing legitimate concerns and grievances, for fear of being identified (automatically and from a distance) and subjected to arrest, detention or reprisals.

Amnesty International, together with more than 250 civil society organizations across the globe, has, for the reasons above, previously called for public and private entities involved in the supply of facial recognition for identification to cease the development, sale, deployment and export of FRT.¹⁰⁹ Amnesty International calls for a full ban on the use, development, production, sale and export of FRT for identification purposes by both state agencies and private sector actors.

5.2 APARTHEID IN THE OCCUPIED PALESTINIAN TERRITORIES

In February 2022, Amnesty International detailed how Israel enforces a system of oppression and domination against the Palestinian people wherever it has control over their rights, in its report titled *Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity.* This includes Palestinians living in Israel and the OPT, as well as displaced Palestinian refugees in other countries who are prevented from returning. The research outlined in this report builds on those findings.

Amnesty International's 2022 apartheid report set out how territorial fragmentation; legal segregation and control through drastic movement restrictions, the denial of nationality and citizenship to Palestinians, and restrictions on political participation and the right to freedom of peaceful assembly; massive seizures of Palestinian land and property, and deprivation of economic and social rights are all components of a system which amounts to apartheid under international law. This system is maintained by inhuman or inhumane acts which Amnesty International found to constitute apartheid as a crime against humanity, as defined in the Statute of the International Criminal Court and the Apartheid Convention. 112 Such acts include deportations and forcible transfers, arbitrary detention and torture, unlawful killings, the infliction of serious injuries, the denial of basic rights and freedoms, and persecution. Of particular relevance here is the denial of basic rights and freedoms and persecution, including severe restrictions on movement and residence (see below), which Israel imposes on Palestinians in a discriminatory and collective manner on the basis of their racialized identity as Palestinians, and which affect their participation in political, social, economic and cultural life in Israel and the OPT, deliberately preventing their full development as a group.

^{109.} Amnesty International, 'Amnesty International and more than 170 organisations call for a ban on biometric surveillance', July 2021, https://www.amnesty.org/en/latest/press-release/2021/06/amnesty-international-and-more-than-170-organisations-call-for-a-ban-on-biometric-surveillance/#:~:text=Amnesty%20International%20and%20partners%20including,biometric%20recognition%20 technologies%20that%20enable; Access Now. 'Ban Biometric Surveillance': https://www.accessnow.org/ban-biometric-surveillance/

^{110.} Amnesty International, 'Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity', 1 February 2022, https://www.amnesty.org/en/documents/mde15/5141/2022/en/

^{111.} United Nations, Human Rights Council, March 2022, 'Special Rapporteur on the situation of human rights in the Occupied Palestinian Territories: Israel has imposed upon Palestine an apartheid reality in a post-apartheid world', https://www.ohchr.org/en/press-releases/2022/03/special-rapporteur-situation-human-rights-occupied-palestinian-territories

^{112.} International Convention on the Suppression and Punishment of the Crime of Apartheid, G.A. res. 3068 (XXVIII)), 28 U.N. GAOR Supp. (No. 30) at 75, U.N. Doc. A/9030 (1974), 1015 U.N.T.S. 243, entered into force July 18, 1976.

Amnesty International concluded that the Israeli state considers and treats Palestinians as an inferior, non-Jewish racial group. ¹¹³ The segregation is conducted in a systematic and highly institutionalized manner through laws, policies and practices, all of which are intended to prevent Palestinians from claiming and enjoying equal rights with Jewish Israelis within the territory of Israel and within the OPT, and thus are intended to oppress and dominate the Palestinian people. This system is complemented by a legal regime that prevents Palestinian refugees who reside outside Israel and the OPT from returning to their homes.

Since Amnesty International published its report, in February 2022, the UN Special Rapporteur on the human rights situation in the OPT concluded that the "political system of entrenched rule" in the occupied West Bank, including East Jerusalem and the Gaza Strip "satisfies the prevailing evidentiary standard for the existence of apartheid". 114

Since the mid-1990s, Israeli authorities have imposed increasingly stringent restrictions on freedom of movement for Palestinians in the OPT. A web of military checkpoints, roadblocks, fences and other structures and its associated permit regime, which applies differently to Palestinians with different statuses, controls the movement of Palestinians within the OPT and restricts their travel into illegally annexed occupied East Jerusalem, Israel or abroad. These restrictions are among the tools through which Israel segregates Palestinians into separate enclaves, isolates them from each other and the world, and ultimately enforces their oppression and subjugation.

In 1994, the Oslo Accords between Israel and the Palestine Liberation Organization (PLO) created the Palestinian Authority and granted it limited control over Palestinian civil affairs in urban centres. In addition to failing to end Israel's occupation, the Oslo Accords divided the West Bank, excluding East Jerusalem, into three different administrative areas, with varying levels of Palestinian and Israeli military and civil jurisdiction, fragmenting and segregating Palestinians even further to Israel's benefit. Israel withdrew Israeli settlers from the Gaza Strip in 2005, but it has retained effective control over the territory, which it tightened further through an unlawful air, sea and land blockade and an official policy separating Gaza from the West Bank, following Hamas' takeover of the territory two years later. As a result, the entirety of the West Bank and Gaza Strip remains under Israeli military occupation, with Israel controlling the Palestinian population living there, their natural resources and, with the exception of Gaza's short southern border with Egypt, their land and sea borders and airspace.

Palestinians in the OPT living under these separate jurisdictions require permits from the Israeli authorities to cross between them – from and to the Gaza Strip, illegally annexed occupied East Jerusalem and the rest of the West Bank – and are also separated from Palestinian citizens of Israel, both geographically and on the basis of their status. Meanwhile, Palestinian refugees displaced during the 1947-49 and 1967 conflicts continue to be physically isolated from those residing in Israel and the OPT through Israel's continuous denial of their right to return to their homes, towns and villages. Palestinian citizens of Israel are subject to Israeli civil laws, which in general afford them greater freedoms and human rights protections than Palestinians living in the OPT, but nonetheless deny them equal rights with Jewish Israelis (including to political participation) and institutionalize discrimination against them. While Palestinians in illegally annexed occupied East Jerusalem also live under Israeli civil laws, they are granted permanent residence that can be revoked through the application of vague

^{113.} Amnesty International, 'Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity', 1 February 2022, https://www.amnesty.org/en/documents/mde15/5141/2022/en/

^{114.} Amnesty International, 'Israel/OPT: Israel is committing apartheid, says UN Special Rapporteur', 23 March 2022. https://www.amnesty.org/en/latest/news/2022/03/israel-opt-israel-is-committing-apartheid-says-un-special-rapporteur/

^{115.} Section 5.2, Ibid.

and arbitrary criteria, such as the centre of life policy. ¹¹⁶ According to OCHA, since 1967, Israel has revoked over 14,500 Palestinian Jerusalemites residency permits. ¹¹⁷ On the other hand, Palestinians in the rest of the West Bank remain subject to Israel's military rule and draconian military orders, some of which date back of the Ottoman period and others have been imposed by Israel since 1967. The vast majority of these orders no longer apply to the Gaza Strip after Israel removed most aspects of its military rule there with the withdrawal of settlers in 2005. Palestinians in the West Bank and Gaza Strip are additionally subject to Palestinian laws.

Obstacles blocking roads have quelled the freedom of movement across the West Bank, in particular into occupied East Jerusalem in recent years. Checkpoints along roads leading to East Jerusalem cause long traffic queues given the strict requirement for constant checks. Further restrictions of movement into East Jerusalem have also been known to form spontaneously; in 2017, OCHA reported some 341 access restriction incidents.

Since March 2015, Israel has generally allowed women aged over 50 and men aged over 55 from the West Bank to enter Occupied East Jerusalem or Israel without permits, but only if they have no "security" record or ban. This is not necessarily a guaranteed right; in June 2016, Israel froze permits for more than 80,000 Palestinians to visit Israel and occupied East Jerusalem during Ramadan. 119 Meanwhile, Palestinians from the Gaza Strip can enter the West Bank, including East Jerusalem, only for treatment of urgent and life-threatening medical conditions, essential business and exceptional humanitarian reasons under Israel's military "separation policy" between the West Bank and Gaza Strip, where movement between the two areas has been severely restricted since 2005 and is considered to be the most extreme separation in the OPT. 120 Palestinians must obtain Israeli military permits – which has become virtually impossible to do – in order to travel between the areas, with no transparent procedure for the decisions made behind any outcome.

The permit regime, which is part of the multi-layered closure system, is a military, bureaucratic and arbitrary procedure that involves the Israeli Civil Administration issuing over 100 types of permits. ¹²¹ The regime applies only to Palestinians in the West Bank and Gaza Strip. It does not apply to Jewish settlers, other Israeli citizens or foreign nationals, who generally move freely within the West Bank and between the West Bank and Israel except when Israeli authorities temporarily restrict their movement for specific reasons, such as Israeli national or Jewish religious holidays. In such cases, the Israeli army declares "general closures" in the West Bank, and no movement is allowed for Palestinians with a permit through checkpoints into occupied East Jerusalem and Israel, as well as through other checkpoints between Palestinian areas near Israel. In its Wall Opinion, the International Court of Justice notes that the administrative regime of permits, along with its accompanying checkpoints, were contrary to international law. ¹²² These restrictions to the freedom of movement were determined to

^{116.} Introduced in 1996, the centre of life policy requires Palestinians residents to prove that Jerusalem is the centre of their residence, services, work, education, etc.; those who fail to demonstrate this stand to lose their Jerusalem ID and their right to reside in the city. Wari, Shahd. 'Jerusalem: One Planning System, Two Urban Realities'. City 15, no. 3–4 (1 August 2011): 456–72. https://doi.org/10.1080/13604

 $^{117.0 \}text{CHA, West Bank I East Jerusalem: key humanitarian concerns, } 21 \text{ Dec 2017, } \underline{\text{https://www.ochaopt.org/content/west-bank-east-jerusalem-key-humanitarian-concerns}}$

^{118.} United Nations Office for the Coordination of Humanitarian Affairs, October 2018. 'Over 700 road obstacles control Palestinian movement within the West Bank': https://www.ochaopt.org/content/over-700-road-obstacles-control-palestinian-movement-within-west-bank

^{119.}NPR, 'After Attack, Israel Imposes New Movement Restrictions On Palestinians', June 2016, https://www.npr.org/sections/thetwo-way/2016/06/09/481374928/after-attack-israel-imposes-new-movement-restrictions-on-palestinians

^{120.} Page 15, Amnesty International, 'Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity', February 2022, https://www.amnesty.org/en/documents/mde15/5141/2022/en/

^{121.} Amnesty International, 'Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity', February 2022, https://www.amnesty.org/en/documents/mde15/5141/2022/en/

 $^{122.} International \ Court \ of \ Justice, \ 'Legal \ Consequences \ of \ the \ Construction \ of \ a \ Wall \ in \ the \ Occupied \ Palestinian \ Territory', \ December \ 2004, \ https://www.icj-cij.org/public/files/case-related/131/131-20040709-ADV-01-00-EN.pdf$

impede the exercise by the persons concerned of the right to work, to health, to education and to an adequate standard of living". 123

A 700km fence/wall, which Israel is still extending in and around the West Bank, mostly within the OPT, has isolated Palestinian communities inside "military zones". Palestinians in these zones must obtain multiple special permits any time they enter or leave their homes or land. In the Gaza Strip, more than 2 million Palestinians live under a 16-year-long Israeli blockade which has created a humanitarian crisis. It is near-impossible for Gazans to travel abroad or into the West Bank, including occupied East Jerusalem, and they are effectively segregated from the rest of the world.

Amnesty International has previously examined the security justifications which Israel cites as the basis for its treatment of Palestinians including restricting their freedom of movement. The analysis shows that while some of Israel's policies may have been designed to fulfil legitimate security objectives, they have been implemented in a grossly disproportionate and discriminatory way which fails to comply with international law. Other policies have absolutely no reasonable basis in security, and are clearly shaped by the intent to oppress and dominate. This includes differential treatment in the occupied territories, to the advantage of settlement of Jewish Israelis in the OPT, the designation of closed military zones, and the imposition of restrictions on movement such as travel bans, closure of roads, and blocking access to certain areas, including villages. Examined in the context of systematic discrimination and oppression, and in the light of the mass human rights violations these policies have entailed, it becomes clear that the element of genuine security considerations has been far outweighed by the clear, and illegitimate, intent to dominate and oppress.

^{123.} International Court of Justice, 'Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory', December 2004, https://www.icj-cij.org/public/files/case-related/131/131-20040709-ADV-01-00-EN.pdf

 $^{124.} Section \ 6.5. \ Amnesty \ International, \ 'Israel's apartheid against \ Palestinians: \ Cruel \ system \ of \ domination \ and \ crime \ against \ humanity', \ February \ 2022, \ https://www.amnesty.org/en/documents/mde15/5141/2022/en/$

6. MACHINE-READABLE MARGINALITY: FACIAL RECOGNITION IN HEBRON AND EAST JERUSALEM

This chapter provides an overview and analysis of how digital surveillance systems, in particular facial recognition technology, are being deployed in the OPT, with a focus on Hebron and East Jerusalem. These are the only two cities in the OPT where Israeli settlers live in Palestinians urban areas, protected by the Israeli army and supported by discriminatory Israeli laws. Each section in this chapter details the deployment by area. It begins by describing the context in which the surveillance should be assessed. Next, an overview is given of the discovered technology used to deploy facial recognition. This is immediately followed by a documentation of everyday encounters with surveillance systems, through interviews with families resident in these areas, as well as activists, students and experts who have been routinely exposed to everyday surveillance. The final section of this chapter takes stock of some of the corporate actors identified during the research.

These sections unveil some of the testimonies and experiences gathered by Amnesty International during field visits in May 2022 and conversations over subsequent months, as well as human rights harms associated with the deployment of invasive and wide-reaching remote biometric surveillance technologies, in particular facial recognition. It looks specifically at the ways in which freedom of movement has been affected by these developments, and how the risks from participating in peaceful assemblies may have increased.

In Hebron, Amnesty International researchers visited H2, Tel Rumeida and Hebron Old City, paying special attention to the increased surveillance in and around Checkpoint 56 on Shuhada Street. In occupied East Jerusalem, the sites visited and investigated included Sheikh Jarrah, Wadi Jouz, Issawiya, at-Tur, the Damascus Gate area, Salah el Din Street, the Old City and Silwan.

6.1 HEBRON "SMART CITY" INITIATIVE

This section details the specifics of the "Hebron Smart City Initiative". It covers the background to the roll-out of the "Smart City Initiative" and the physical surveillance infrastructure that makes the initiative possible. Next, it discusses the tools of the Israeli government that facilitate, interact with, or include facial recognition technology that is directed exclusively at Palestinians. The experiences of Palestinians are documented in the last part of this section.

6.1.1 A SMART CITY UNDER MILITARY RULE

An agreement in 1997 divided Hebron into two sectors: H1, where the civil and military administration was handed to the Palestinian Authority, and H2, which is under full Israeli administrative and military control. H2 is an area that includes at least seven Israeli settlement enclaves inside and around the Old City and that has historically been the city's cultural and economic heart. All civilian matters for Jewish Israeli settlers and Palestinian residents are overseen by the Civil Administration, a sub-unit of the Coordinator for Government Activities in the Territories (COGAT), which is a unit within Israel's Ministry of Defence and has overall responsibility for the implementation of Israeli policies, including the deployment and usage of surveillance tools, in the OPT.

The Civil Administration is also the authority in charge of processing work permits, access to healthcare, travel, the trade of food, agriculture and construction products, natural resource allocation and civilian infrastructure for Palestinians. According to more recent statistics, some 33,000 Palestinians and approximately 800 Israeli settlers reside in H2.¹²⁸

Since the establishment of settlements in Hebron, Israel has continued to impose stringent restrictions on Palestinians in Hebron. In 2015, a wave of alleged, attempted and actual stabbing attacks by Palestinians against Israeli soldiers and settlers, Israel established a "closed military zone" encompassing the majority of H2, restricting access to the areas only to those Palestinians registered as permanent residents in the neighbourhoods. ¹²⁹ As of 2019, OCHA documented 21 permanently-staffed checkpoints, out of which six checkpoints fortified by turnstiles, metal detection and facial recognition, as efforts by Israeli security forces to exert even greater control over the Palestinian population in H2 took place. ¹³⁰

6.1.2 THE TECHNOLOGY IN PLACE FOR FACIAL RECOGNITION IN HEBRON

Biometric identification of Palestinians has been tested by the Israeli forces since 1999. First the Basel system was deployed in Gaza and later in the West Bank. That system was followed by the Maoz

125. All civilian matters for Jewish Israeli settlers and Palestinian residents are overseen by the Civil Administration, a sub-unit of the Coordinator for Government Activities in the Territories (COGAT) which is part of Israel's Ministry of Defence and has overall responsibility for the implementation of Israeli policies, including the deployment and usage of surveillance tools, in the OPT. https://www.breakingthesilence.org.il/inside/wp-content/uploads/2022/07/Military_rule_testimony_booklet.pdf

126. In Hebron, policies aimed at keeping Palestinians out of strategic areas with encroaching Israeli settlement activity are having devastating impacts on the rights of tens of thousands of Palestinians. Despite the Interim (Oslo) Agreement of 1995, the Israeli military did not withdraw from Hebron, owing to the continued presence of Jewish Israeli settlers.

127.All civilian matters for Jewish Israeli settlers and Palestinian residents are overseen by the Civil Administration, a sub-unit of the Coordinator for Government Activities in the Territories (COGAT) which is part of Israel's Ministry of Defence and has overall responsibility for the implementation of Israeli policies, including the deployment and usage of surveillance tools, in the OPT. https://www.breakingthesilence.org.il/inside/wp-content/uploads/2022/07/Military_rule_testimony_booklet.pdf

128. Figures cited by OCHA and other organizations in recent years have varied, estimating the total number of settlers anywhere between 700 and 1,000. For the latest OCHA figures, please see here: [can we make sure to include the most up to date numbers?] https://www.un.org/unispal/wp-content/uploads/2021/03/EUSETTLERPT_120321.pdf; In H2, systematic acts of violence such as beatings or stone throwing, threats including repeated death threats, and intimidation by settlers, who benefit from the protection of Israeli soldiers, are aimed at coercing Palestinians to leave their homes.

129. United Nations Office for the Coordination of Humanitarian Affairs, October 2018. 'Over 700 road obstacles control Palestinian movement within the West Bank': https://www.ochaopt.org/content/over-700-road-obstacles-control-palestinian-movement-within-west-bank; Since then, Israeli soldiers have intensified their use of lethal force against Palestinians who do not pose an imminent danger, killing scores of Palestinian civilians at checkpoints and elsewhere in Hebron, many of them unlawfully including in possible extrajudicial executions. https://www.amnesty.org/en/documents/mde15/4812/2016/en/; The attacks are described in Amnesty International, 'Lethal force and accountability for unlawful killings by Israeli forces in Israel and the Occupied Palestinian Territories', September 2016, https://www.amnesty.org/en/documents/mde15/4812/2016/en/

130.UN OCHA, 'Dignity denied: Life in the settlement area of Hebron city', February 2020, https://www.ochaopt.org/content/dignity-denied-life-settlement-area-hebron-city

131. Privacy International, 'BIOMETRICS AND COUNTER-TERRORISM: Case study of Israel/Palestine', May 2021, https://privacyinternational.org/sites/default/files/2021-06/PI%20Counterterrorism%20and%20Biometrics%20Report%20Israel_Palestine%20v7.pdf

system in 2004.¹³² In the immediate aftermath of the second *intifada* and onwards, the Israeli security apparatus has been developing its technological capabilities rapidly and paired it with extensive deployment and use of CCTV infrastructure in the OPT.¹³³



Cameras, lights and ambient sound detection mounted on a rooftop in H2.

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Defined and conceived by Israeli security forces as a "smart city initiative", 134 the streets of Hebron, in particular Shuhada Street and the neighbourhood of Tel Rumeida, are laden with cameras mounted on the sides of buildings, light poles, surveillance towers and rooftops. The intensely equipped Checkpoint 56 on Shuhada Street has at least 24 audio-visual surveillance devices and other sensors mounted on it.135 One Palestinian resident told the Washington Post in November 2021 that in his quarter of Hebron, close to the Ibrahimi Mosque/Cave of the Patriarchs, a site that is sacred to Muslims. Jews and Christians. 136 surveillance cameras have been mounted about every 100m.137 The Israeli army contend that, with new smart city surveillance systems, soldiers could respond to security incidents, identify individuals and

be alerted with object and sound detection in the city faster and at lower cost. ¹³⁸ According to the information available on its website, the Israeli army exported aspects of these systems from the Gaza Strip and adjusted them for the purposes of their security needs in Hebron. ¹³⁹ A researcher at Breaking the Silence told Amnesty International that "the Hebron smart city system is a further deterioration in the way we control Palestinians in Hebron, using it to let them know that they are always being

132. Developed by the Israeli Ministry of Defense, Basel is a biometric recognition system which governs passage of Palestinian workers in and out of the occupied Palestinian territory: https://privacyinternational.org/sites/default/files/2021-06/PI%20Counterterrorism%20and%20Biometrics%20Report%20Israel_Palestine%20v7.pdf; Maoz is a database of foreign workers established in 2004 without any underlying legal or regulatory framework. According to Privacy International, the system was established to expedite deportation of illegal workers and to prevent their return: https://privacyinternational.org/sites/default/files/2021-06/PI%20Counterterrorism%20and%20Biometrics%20Report%20Israel_Palestine%20v7.pdf.

133.Goodfriend, S., 7amleh, 'The Expansion of Digital Surveillance in Jerusalem and Impact on Palestinian Rights', Fall 2021, https://7amleh.org/storage/Digital%20Surveillance%20Jerusalem_7.11.pdf

134. Goodfriend, S., Foreign Policy, 'How the Occupation Fuels Tel Aviv's Booming Al Sector', February 2022, <a href="https://foreignpolicy.com/2022/02/21/palestine-israel-ai-surveillance-tech-hebron-occupation-privacy/#:~:text=Today%2C%20a%20network%20of%20artificial,calls%20a%20%E2%80%9Csmart%20city.%E2%80%9D

135. Video of checkpoint taken by Amnesty researchers on 7/5/2022

136. H. Vincent, E.J.H. Mackay And F.M. Abel. Hébron - Le Haram El-Khalil: Sépulture Des Patriarches, Paris, 1923.

137. Dwoskin, E., Washington Post, 'Israel escalates surveillance of Palestinians with facial recognition program in West Bank', November 2021, https://www.washingtonpost.com/world/middle_east/israel-palestinians-surveillance-facial-recognition/2021/11/05/3787bf42-26b2-11ec-8739-5cb6aba30a30_story.html

138.IDF Website, 'The technological revolution in the war rooms at the IOS division', November 2020, https://www.idf.il/55516
139.Ibid.

watched". ¹⁴⁰ Breaking the Silence described Hebron's "smart city" system as "another level of mass surveillance because it's [monitoring] everyone all the time". ¹⁴¹

During Amnesty International's research on the use of remote biometric surveillance in Hebron, several different configurations of physical surveillance infrastructure were identified in H2, Tel Rumeida and Hebron Old City, particular around Checkpoint 56 on Shuhada Street. These included:

- Surveillance towers –usually with more than four camera attachments,
- Ambient noise detection and a long-range camera which are placed in large numbers on streets, main roads, between houses and shops, and in residential neighborhoods;
- Checkpoints equipped with cameras capable of facial recognition.
- Surveillance infrastructure set up by Israeli settlers in and around settler homes, using similar hardware to that operated by Israeli forces to surveil Palestinian residents; and,
- Surveillance cameras placed on buildings, with the ability to pan, tilt and rotate.

6.1.3 WOLF PACK: A DATABASE EXCLUSIVELY OF PALESTINIANS, UNDER ISRAELI SURVEILLANCE

In 2021, a report in the Washington Post exposed a programme by the Israeli military known as the Wolf Pack system; a vast database containing imagery and all the information available exclusively on Palestinians from the West Bank, such as permits, family members, license plates, and whether they are wanted by the Israeli authorities or not. The purpose of the Wolf Pack database is storing the profiles of every Palestinian in the West Bank. The purpose of the Wolf Pack database is storing the profiles of every Palestinian in the West Bank. The purpose of the Wolf Pack database is storing the profiles of every Palestinian in the West Bank. The purpose of the Wolf Pack database is storing the profiles of every Palestinian in the West Bank. The purpose of the Wolf Pack database is storing the profiles of every Palestinian in the West Bank. The purpose of the Wolf Pack database is storing the profiles of every Palestinian in the West Bank. The Wolf Pack system contains basic identification data of West Bank Palestinians, including their name, where they live, their family members, photos and any information that might otherwise be collected by the Civil Administration. The information is also shared and controlled by the Israel Security Agency (also known as Shabak or Shin Bet), that collects intelligence on the Palestinian population and determines, among other things, who should be arrested.

According to the testimony of the former soldier, the Wolf Pack database is intended to provide extensive intelligence on Palestinians for soldiers across the OPT. As soldiers encounter a Palestinian individual, they can call the "war room" to get access to information about the individual in question. The "war room" is an operational room with an operator who has access to the Wolf Pack database. The soldier will be instructed by the operator as to whether the individual in question can or cannot cross, and whether they need to be arrested. Wolf Pack can in this way be accessed during arrests, raids, and dispersal of protests. The Wolf Pack system has historically been used in a way which often results in Palestinians being held for a very long time until an answer was provided on what to do with them by the operator in the "War Room", according to Breaking the Silence.

140. Breaking the Silence interview conducted on 11 May 2022; In one example from September 2021, a resident of Hebron told the Washington Post that soldiers were notified to take security measures after his daughter dropped a teaspoon from their balcony, resulting in the immediate summoning of soldiers to the scene. https://www.washingtonpost.com/world/middle_east/israel-palestinians-surveillance-facial-recognition/2021/11/05/3787bf42-26b2-11ec-8739-5cb6aba30a30_story.html

141. Breaking the Silence interview conducted on 11 May 2022

142. Dwoskin, E., Washington Post, 'Israel escalates surveillance of Palestinians with facial recognition program in West Bank', November 2021, https://www.washingtonpost.com/world/middle_east/israel-palestinians-surveillance-facial-recognition/2021/11/05/3787bf42-26b2-11ec-8739-5cb6aba30a30 story.html

143. Mona, S., Middle East Institute, 'Nowhere to hide: The impact of Israel's digital surveillance regime on the Palestinians', April 2022, https://www.mei.edu/publications/nowhere-hide-impact-israels-digital-surveillance-regime-palestinians

144. Breaking the Silence interview conducted on 11 May 2022.

145. Breaking the Silence, Military Rule, July 2023, https://www.breakingthesilence.org.il/inside/wp-content/uploads/2022/07/Military_rule_testimony_booklet.pdf

146. Ibid.

147. Ibid.

6.1.4 BLUE WOLF: THE FACIAL RECOGNITION "FACEBOOK OF PALESTINIANS"

In recent years, details have emerged of how databases such as Wolf Pack work in tandem with extensive camera and remote biometric surveillance systems across the West Bank, in particular with facial recognition systems. Where before the Wolf Pack could only be accessed through making a call, modern mobile phone apps like Blue Wolf take away these barriers. Blue Wolf gives instant access to the information collected on Palestinian individuals and stored in the Wolf Pack database. In Hebron, the Wolf Pack system, which according to Breaking the Silence was used until recently in a way which often resulted in Palestinians being held for a very long time until an answer was provided on what to do with them, works in combination with the modern app-based surveillance system Blue Wolf, which has been dubbed "the Facebook for Palestinians" by some Israeli solders. While Israeli forces have not officially confirmed the use of facial recognition specifically, the combination of four testimonies gathered by Breaking the Silence, wolf app via an instructional video from Israeli security forces, all provide ample evidence for the existence of the mobile facial recognition system. For Example, on 5 February 2023 an activist with Youth Against Settlements told Amnesty International:

"About 10 activists in our group cannot enter the area and when the soldiers recognize them, they are thrown out. Before 2021, the facial recognition technology was only at the checkpoints, but since 2022 it's in the hands of every soldier in their mobile phones. The soldier scans our faces with the phone camera, and suddenly their behaviour towards us changes, because they see all the information."

This system incentivizes military personnel to capture photos of as many Palestinians as possible, creating new exclusively Palestinian biometric entries, fleshing out their profiles, and complementing the information held in the Wolf Pack database. ¹⁵³ A testimony from 2020 by a First Sergeant in Hebron given to Breaking the Silence demonstrates how soldiers would arbitrarily summon Palestinians under the auspices of an identity check, in order to register their biometrics:

"...come here for a sec, give me your ID, like, we're taking a photo of you, and give us your ID, and then it's kept, like, and then next time when like, it becomes this thing where if he arrives at the police or something like that then it just pops up immediately, like, his photo. And then also, when you do the Blue Wolf you can also get an option to detain, arrest, release, like, kind of leave him alone, to [the soldier operating Blue Wolf]" 154

In 2020, soldiers in Hebron were instructed by their commanders to use the Blue Wolf system via smartphones. Breaking the Silence described that this was done in service of "demonstrating [our]

148. Dwoskin, E., Washington Post, 'Israel escalates surveillance of Palestinians with facial recognition program in West Bank', November 2021, https://www.washingtonpost.com/world/middle_east/israel-palestinians-surveillance-facial-recognition/2021/11/05/3787bf42-26b2-1ec-8739-5cb6aba30a30_story.html; Breaking the Silence interview conducted on 11 May 2022

149. Ibid.

150. Breaking the Silence, 'Military Rule: Testimonies of soldiers from the Civil Administration, Gaza DCL and COGAT', July 2022, https://www.breakingthesilence.org.il/inside/wp-content/uploads/2022/07/Military_rule_testimony_booklet.pdf; Breaking the Silence, 'they scan the face', 2021, https://www.breakingthesilence.org.il/testimonies/database/837133; Breaking the Silence, 'The computer already knows them', 2020, https://www.breakingthesilence.org.il/testimonies/database/820366; https://www.breakingthesilence.org.il/testimonies/database/820366; https://www.breakingthesilence.org.il/testimonies/database/820366; https://www.breakingthesilence.org.il/testimonies/database/424318, shared with Amnesty International, courtesy of Breaking the Silence.

151. Dwoskin, E., Washington Post, 'Israel escalates surveillance of Palestinians with facial recognition program in West Bank', November 2021, https://www.washingtonpost.com/world/middle_east/israel-palestinians-surveillance-facial-recognition/2021/11/05/3787bf42-26b2-11ec-8739-5cb6aba30a30_story.html

152. Ynet, 'The Palestinian photography project: this is how it was explained to the fighters how to identify suspects - and win prizes', December 2021, https://www.ynet.co.il/news/article/hkkonfgyk

153. Breaking the Silence interviews conducted on 11 May 2022.

154. Breaking the Silence, 'The point was to take photos', 2020, https://www.breakingthesilence.org.il/testimonies/database/280983, shared with Amnesty International, courtesy of Breaking the Silence. Blue Wolf testimony 1309, shared with Amnesty International, courtesy of Breaking the Silence.

presence", incentivized via a gamified system of competition underlying the system. Two testimonies from soldiers who served in Hebron in 2020, shared with Amnesty International by Breaking the Silence, state that the Blue Wolf app generates rankings based on the number of Palestinians faces captured via Blue Wolf per unit (of which the high score appears to be above 1000 per week), with prizes and rewards being provided by commanders in the Israeli army for the battalion with the highest rankings. Facial images captured and uploaded through the app by Israeli soldiers will render the individuals rapidly identifiable in future, regardless of whether or not there is any indication that they have been involved in any wrongdoing. The state of the system of the syst

The app can also be used to scale the ability of Israeli security forces to carry out intelligence mapping, which is a practice involving raids on Palestinian homes at night to gather intelligence about residents and buildings. Raids involving the mass capture of images of Palestinian faces have taken place in Hebron, where Israeli security forces appears to use Blue Wolf most actively. Since at least 2020, the media has reported "intelligence mapping" raids – where soldiers raid Palestinian homes with no suspicion of any wrongdoing among the occupants, in order to map the characteristics of the occupants and the building. The practice was condemned by Yesh Din, Breaking the Silence and Physicians for Human Rights in November 2020. Through 18 detailed cases of intelligence mappings, documented over the course of the year covered by the report, the three organisations show any officer (or soldier provided authority by an officer) can engage in a "home invasion", in service of "making the military's presence felt". 160

The scale of the practice is extensive, with hundreds of testimonies collected by Breaking the Silence over the years from soldiers relating to mapping operations. A video captured by B'Tselem on 3 September 2021 shows that such raids on Palestinian homes, which are carried out in the absence of any warrant or explanation, have continued in the West Bank despite an order of cessation issued by Major General Tamir Yadai, commander of the Israeli military's Central Command. In the video, the family, including children, are forced to line up outside their home to have their photos taken, without any explanation or reason provided.

6.1.5 RED WOLF: AUTOMATED APARTHEID AT THE CHECKPOINT

During Amnesty International's field visit to Hebron in May 2022, researchers were alerted to the deployment of facial recognition at checkpoints in Hebron. ¹⁶⁴ Facial imagery was captured and used for

155. Breaking the Silence, 'The point was to take photos', 2020, https://www.breakingthesilence.org.il/testimonies/database/280983, shared with Amnesty International, courtesy of Breaking the Silence; Breaking the Silence interview conducted on 11 May 2022.

156. Ibid.

157. Breaking the Silence interview conducted on 11 May 2022.

158. Dwoskin, E., Washington Post, 'Israel escalates surveillance of Palestinians with facial recognition program in West Bank', November 2021, https://www.washingtonpost.com/world/middle_east/israel-palestinians-surveillance-facial-recognition/2021/11/05/3787bf42-26b2-11ec-8739-5cb6aba30a30 story.html

159. Haaretz, 'Israeli Soldiers Awoke, Gathered and Illegally Recorded Palestinian Minors', November 2021, https://www.haaretz.com/israel-news/2021-11-17/ty-article/israeli-soldiers-awoke-gathered-and-illegally-recorded-palestinian-minors/0000017f-e31a-d75c-a7ff-ff9fcc160000

160. Ibid

161. Yesh Din, Breaking the Silence, Physician for Human Rights, 'A Life Exposed: Military invasions of Palestinian homes in the West Bank', November 2020, https://s3-eu-west-1.amazonaws.com/files.yesh-din.org/Exposed_Life_2020/Exposed_Life_ENG.pdf
162. Ibid.

163.B'tselem, 'Central Hebron: Soldiers enter residential building and conduct lineup for school-age children', September 2021, https://www.youtube.com/watch?v=kQrCRalfkEk

164. B'Tselem reported as early as 2019 that facial recognition technology had been observed at increasingly fortified checkpoints around H2. B'tselem, September 2019. 'Playing the Security Card: Israeli Policy in Hebron as a Means to Effect Forcible Transfer of Local Palestinians': https://www.btselem.org/sites/default/files/publications/201909_playing_the_security_card_eng.pdf

recognition at carousels at checkpoints within the city, without any explanation or reason provided. There are typically about 10 to 15 cameras at checkpoints. By Checkpoint 56 in H2, a towering barrier features two turnstiles, Amnesty International researchers observed at least 24 cameras on the outside. This checkpoint is where Palestinians interface most intensely with Israeli security forces, and the limitations to their rights. Many Palestinians rely on passage through the checkpoint to access most, if not all, of goods and services, work, education, family life, and healthcare. It is here where witnesses describe coming face to face with a new facial recognition system, Red Wolf.



Red Wolf operates via facial recognition performed at checkpoints in Hebron. As an individual enters the checkpoint and is kept in place with cameras facing them, their picture is taken and they are, according to testimonies gathered by Breaking the Silence, assessed against the information available on record and – subject to whether they have permission to pass, or whether they are due to be arrested or questioned – they are either allowed through or barred from moving to the exit turnstiles of the checkpoint. This process does not necessarily require the production of identity documents or any other documentation by the person entering the checkpoint.

According to the testimonies, if someone passes by the checkpoint a lot, the solder in the checkpoint can attach the face to the ID until the system learns the face. If a biometric entry does not exist on the individual in question, they are biometrically enrolled into the Red Wolf system, without their knowledge

166. Ibid.

167. Breaking the Silence, 'Military Rule: Testimonies of soldiers from the Civil Administration, Gaza DCL and COGAT', July 2022, https://www.breakingthesilence.org.il/inside/wp-content/uploads/2022/07/Military_rule_testimony_booklet.pdf

^{165.} Breaking the Silence, 'The computer already knows them', 2020, https://www.breakingthesilence.org.il/testimonies/database/820366, shared with Amnesty International, courtesy of Breaking the Silence. Red Wolf testimony, shared with Amnesty International, courtesy of Breaking the Silence.

and consent, which thereby expands its database of Palestinian faces over time. ¹⁶⁸ Red Wolf expands its database of images by adding new face that passes a connected camera. ¹⁶⁹

Testimony given to Breaking the Silence by an Israeli commander stationed in Hebron, and further corroborated independently by two unrelated military operatives also stationed in Hebron, explain how the mass surveillance system works and that soldiers are tasked with training and optimizing the facial recognition algorithm so that over time the system can start recognizing previously unknown faces without human intervention.

"There's something like ten cameras [inside the checkpoint]. Once they arrive and pass through inside, it essentially takes photos, identifies them, to help you as the soldier standing there. It catches the face before [they enter], and it displays the face for you on the computer. If it's someone who's been coming through there a lot, the computer already knows them. It takes photos of everyone who passes there essentially. And you, as a soldier, a commander, standing there, can match the face to the IDs until the system learns [to recognize] the face. It recognizes him, and then he comes, and he's already lit green for me even before he showed me an ID, and so it makes the process shorter for him, in theory." 170

Red Wolf is connected with other larger databases consisting of information on Palestinian individuals. Safaa, a Tel Rumeida resident, told Amnesty International: "they tell [me] who I am without presenting any identification papers or anything. They have my facial fingerprint, so they don't ask me for anything". They have my facial fingerprint, so they don't ask me for anything". Hamad, also a resident of H2, noted that in recent times he had been identified and allowed through the checkpoint without needing to show his identity documents. The same should be a support of the same should be same should be

If the system does not recognize the face of a person entering a turnstile, it may deny them entry. As the Wolf Pack database, as well as the registry of images captured through the controversial Blue Wolf app, appear to be the main sources of up-to-date information available on Palestinians — and given that Red Wolf appear to pull up information of similar characteristics — there's a high likelihood that these systems are connected. The people informed Amnesty International that they suspected passage through the checkpoint to be governed by FRT, with information automatically relayed to soldiers as residents pass through the checkpoint in question. This means decisions about passage could be carried out automatically, arbitrarily, or without room for negotiation of human intervention.

The information that is pulled is used to subsequently decide whether an individual may or may not pass a checkpoint. Palestinians are the only racial group of residents in H2 required to use these checkpoints, and the system relies on databases consisting exclusively of Palestinian individuals data. Jewish Israeli settlers use different roads and are not required to cross such checkpoints.

Similarly, to Blue Wolf, using the system is gamified as well: "The battalion had a competition who put in the most new names. It's a system where, ultimately, you, as a person at the checkpoint, teach it. It takes photos. I can go into the photo after and then put in the ID". 176

168. Red Wolf testimony 820366, shared with Amnesty International, courtesy of Breaking the Silence.

169. Ibid.

170. Ibid.

171. Interview with Safaa, 7 May 2022, Tel Rumeida.

172. Interview with Hamad, 7 May 2022, Tel Rumeida.

173. Breaking the Silence interview conducted on 11 May 2022.

174. Ibid.

175. Considering the definition of "racial group" under international criminal law, which emphasizes identification and the intent of the alleged perpetrators, Jewish Israelis and Palestinians constitute racial groups for the purposes of customary international law, the ICERD, the Apartheid Convention and the Rome Statute. See Amnesty International, *Israel's Apartheid against Palestinians*, (previously cited)

176. Red Wolf testimony 820366, shared with Amnesty International, courtesy of Breaking the Silence.

6.2 IMPACT OF SURVEILLANCE ON EVERYDAY LIFE AND MOVEMENT IN HEBRON CITY

This section explores the impact of surveillance on everyday life and movement in H2, Hebron. It focuses on the impact of surveillance on the social life of Palestinians, the establishment of no-go zones and their impact on every-day life; the lack of possibilities the Palestinians have to avoid the surveillance; the invasiveness of cameras being pointed to the inside of buildings, including homes; the way in which the surveillance cameras stifle protest groups; the psychological fear that Palestinians experience crossing facial recognition-enabled checkpoints, and; the changes in treatment that people experience after their face is scanned with Blue Wolf.



Implicit no-go zone past Checkpoint 56 on Shuhada Street. @ Amnesty International

6.2.1 ERODING SOCIAL LIFE

Shuhada Street in Hebron was formerly a thriving and significant place of business until a boundary was in effect drawn across the main road close to Checkpoint 56 in 2015. A H2 resident, Eyad, told Amnesty International that "the policy that is in practice here by the occupation – by the military presence – has killed all forms of social life". According to Breaking the Silence, Shuhada Street is known in military language as a "sterile road", which means Palestinians are simply not allowed access to it. Pollowing mounting pressure by residents, some restrictions were eased in 2019, according to a report by B'Tselem. According to several human rights organizations, however, these measures,

^{177.} Hebron Apartheid Project. 'Al-Shuhada Street': https://www.hebronapartheid.org/index.php?map=1

^{178.} Interview with Eyad, 7 May 2022, Tel Rumeida.

^{179.} B'Tselem, Forbidden Roads: The Discriminatory West Bank Road Regime, August 2004, https://www.btselem.org/publications/summaries/200408_forbidden_roads

^{180.}B'Tselem, 'Playing the Security Card: Israeli Policy in Hebron as a Means to Effect FOrcible Transfer of Local Palestinians', September 2019, https://www.btselem.org/sites/default/files/publications/201909_playing_the_security_card_eng.pdf

along with many others, such as settler violence and impunity, have left many Palestinians with little choice but to leave the area, while others remain in the only homes they know, resisting the intensifying coercive environment. ¹⁸¹

Safaa, a Palestinian single mother, described to Amnesty International how her residential area, Tel Rumeida, just past Checkpoint 56, felt like a military base. Checkpoint 56 separates Shuhada Street in H2 from Bab al-Zawiyeh in the H1 area of Hebron. Amnesty International has previously reported on the harassment faced by Palestinians at the hands of Israeli security forces and settlers in the area. H2 has an intensified and concentrated presence of military personnel and surveillance equipment and, between 2015 and 2019, Palestinian access was restricted to residents only; Tel Rumeida is still accessible only by residents, and remains one of the most restricted neighbourhoods in the city. In 2019, Checkpoint 56 was further bolstered with new blockades, screening systems and permanent staffing.

6.2.2 RESTRICTING SPACE FOR PALESTINIAN LIFE

According to Ahmed, a former humanitarian worker and lifelong resident of H2, Palestinians dare not travel beyond the line that is red dotted on Figure 4 because of a culmination of the fear of being watched and identified by the recenty added guard post, ¹⁸⁶ and the recurrent experiences of harassment, attacks and detention by Israeli security forces and settlers. ¹⁸⁷ Ahmed told Amnesty International how he perceived Tel Rumeida and other Palestinian areas in H2 to be de facto "no-go zones". He described how Palestinians are fearful and uncomfortable to roam in these areas, a fact now compounded by surveillance. ¹⁸⁸ The chilling consequences of the surveillant power of the Israeli army is especially apparent in areas with high surveillance and control, including Tel Rumeida, where people are not permitted to go to what should be public places near their homes, such as bus stops and pedestrian crossings. These so-called 'no-go zones' are often no more than a few blocks further up on the main road from someone's home. ¹⁸⁹ Standing near just metres away from the bus stop in Tel Rumeida Ahmed explained:

"This is the maximum point where Palestinians can reach. I can't go any further down [the street]... this is my house. I was born here. I have lots of memories actually in that street. Because I used to have a bicycle and go all the way down [the street]. The only reason is just because I have this ID and I didn't choose it. Not my choice. But that is the maximum point". 190

^{181.} United Nations Office for the Coordination of Humanitarian Affairs, 'Dignity denied: Life in the settlement area of Hebron city', February 2020, https://www.ochaopt.org/content/dignity-denied-life-settlement-area-hebron-city

^{182.} Interview with Safaa, 7 May 2022, Tel Rumeida.

^{183.} Amnesty International, 'Destination: Occupation, digital tourism and Israel's illegal settlements in the occupied Palestinian territories', May 2019, $\frac{https://www.amnesty.org/en/latest/campaigns/2019/01/destination-occupation-digital-tourism-israel-illegal-settlements/\#: \sim: text=In%20a%20new%20report%2C%20Destination, with%20their%20own%20corporate%20standards.$

^{184.}B'Tselem, 'List of military checkpoints in the West Bank and Gaza Strip', November 2021, https://www.btselem.org/freedom_of_movement/checkpoints_and_forbidden_roads

^{185.} B'Tselem, 'Palestinians describe life in center of Hebron under impossible terms imposed by military', December 2018, https://www.btselem.org/hebron/20181223_life_in_hebron_city_center

 $^{186.} UNRWA, 'PROTECTING CHILDREN'S RIGHT TO EDUCATION IN HEBRON H2', May 2020, \\ \underline{https://www.unrwa.org/newsroom/features/protecting-children\%E2\%80\%99s-right-education-hebron-h2}$

^{187.}Al-Haq, 'Special focus on Hebron: A microcosm of the Israeli Occupation', November 2015, https://www.alhaq.org/cached_uploads/download/alhaq_files/images/stories/PDF/2012/Special.Focus.on.Hebron.Nov.2015.pdf

^{188.} Interview with Ahmed, 7 May 2022, Tel Rumeida.

^{189.} Interview with Ahmed, 7 May 2022, Tel Rumeida; Testimony 21, Breaking the Silence, 'Military Rule: Testimonies of soldiers from the Civil Administration, Gaza DCL and COGAT', July 2022, https://www.breakingthesilence.org.il/inside/wp-content/uploads/2022/07/Military_rule_testimony_booklet.pdf

^{190.} Interview with Ahmed, 7 May 2022, Tel Rumeida.



Surveillance tower near alternative path around no-go zone in Tel Rumeida © Amnesty International

Ahmed explained that there is a way to bypass the restricted parts of Shuhada Street, which requires hiking behind buildings and up a hilly dirt road. He described this route as especially challenging for older individuals, particularly in the winter. According to OCHA, the detour turns a five-minute walk of 100m to 200m into a walk of around 3km. 191 This makes going to certain parts of the neighbourhood unnecessarily burdensome. As Amnesty International researchers observed during repeated visits to the area, even this path is covered by surveillance towers and under the constant purview of Israeli military personnel. Detours such as this are just one aspect of an environment that is being made more arduous and difficult to move in, contributing to the unbearable conditions faced by Palestinians in the area. Combined with some 20 checkpoints, the increased surveillance, harassment and violence at the hands of settlers and Israeli security forces render everyday life extremely difficult for Palestinians. 192

Media reports and information collected by Amnesty International researchers in addition to interviews with seven Palestinian residents of Hebron have suggested that the Israeli-installed cameras and sensors go further than only monitoring public space and building façades. In some cases, they intrude into the private homes and bedrooms of Palestinian families. ¹⁹³ Hamad, a resident of Tel Rumeida told Amnesty International that he did not feel there was any space for privacy, not just owing to cameras at checkpoints and surveillance towers, but also because cameras in the neighbourhood "turn and capture the inside of [residents'] homes, whether it's through windows or doors". ¹⁹⁴ Palestinian residents of Tel Rumeida respond by covering their windows and doors to block the view of cameras. ¹⁹⁵

Corroborated and published testimonies by Breaking the Silence from 2021 demonstrate how Palestinians are faced with either surveillance or the threat of violence, or both, in the West Bank. One examples describes how Israeli soldiers had pointed weapons at and threatened Palestinians by the Gush Etzion Junction in the West Bank, simply because the soldiers did not have a Blue Wolf-enabled device to hand to identify the individual in question. ¹⁹⁶ In other words, at any given moment,

191. United Nations Office for the Coordination of Humanitarian Affairs, August 2020. '"The soldiers at the checkpoint told me that I cannot leave" - Tightened movement restrictions increase hardship on Palestinians in Hebron': https://www.ochaopt.org/content/soldiers-checkpoint-told-me-i-cannot-leave-tightened-movement-restrictions-increase

192. Amnesty International, 'Destination: Occupation, digital tourism and Israel's illegal settlements in the occupied Palestinian territories', May 2019, <a href="https://www.amnesty.org/en/latest/campaigns/2019/01/destination-occupation-digital-tourism-israel-illegal-settlements/#:~:text=In%20a%20new%20report%2C%20Destination,with%20their%20own%20corporate%20standards.

193. Ziv, A., Forward,. 'Israel uses new surveillance technology to distance itself from the occupation. It's not working', November 2021, https://forward.com/opinion/478846/israel-new-surveillance-technology-occupation-palestinians/

194. Interview with Hamad, 7 May 2022, near Checkpoint 56.

195. Ibid

196. Testimony 21, Breaking the Silence, 'Military Rule: Testimonies of soldiers from the Civil Administration, Gaza DCL and COGAT', July 2022, https://www.breakingthesilence.org.il/inside/wp-content/uploads/2022/07/Military_rule_testimony_booklet.pdf

Safaa explains:

"For them [the Israeli army] it's for military reasons, to monitor those who throw Molotov cocktails, who throw rocks or whatever, but basically, they consider this a military area and they want to surveil everything. They want to monitor Palestinians and whatever they do. That's also why they detect the movement of residents in and outside these areas – who's coming in and who's coming out. It's a military base; they want everything under their eyes". 197

6.2.3 REPRESSING ACTIVISM VIA SURVEILLANCE

On 31 October 2022, Israeli soldiers raided the education centre and offices of Youth Against Settlements and declared it a closed military zone within the closed military zone of Tel Rumeida. For 10 days, only the owner of the building, was allowed to use it. ¹⁹⁸ The closure was reinforced by cameras on the nearby military base and Israeli settlement, also located on Shuhada Street.

A Youth Against Settlements activist has called the constant remote surveillance "dehumanizing". He told Amnesty International on 5 February 2023:

"We don't know how soldiers are using this information, and we don't know what they have access to or what they will use against me. There is no influence we can have on the system. We don't vote for who uses it. We can't go to court to change some kind of regulation. It doesn't take into consideration our culture, our need for privacy." 199

They described an encounter with a soldier who intervened during a tour of solidarity activists that were being guided around Hebron on 11 June 2022. The soldier initially engaged with the participants on the tour, but after he had scanned the activist leading the tour's face on his phone, the solder detained them, bound them with plastic handcuffs, took them into an abandoned house and threatened to kill them. The activist told Amnesty International: "when the soldier, for instance, agrees with the settlers, or a settler gets information from soldiers, then I am afraid for my life. They are interconnected through the surveillance information, which has made the attacks against me much worse." As a result of the surveillance system linked to the military closure of their premises, Palestinian activists of Youth Against Settlements have lost resources that allowed them to exercise their rights to freedom of association, of expression and peaceful assembly and are at increased risk of violence and arbitrary arrest.

6.2.4 EXACERBATING AND ENTRENCHING FEAR AND UNCERTAINTY VIA CHECKPOINT SURVEILLANCE

Eyad, who lives near the Ibrahimi mosque, described: "I have a feeling every time I go towards the checkpoint... that they are not letting me cross". 200 Eyad explained how the situation has evolved during the 13 years he has lived in H2: "While occupation, settlements and military checkpoints have been part of this area throughout these 13 years, it is all getting worse. When I first moved here, I used to cross through a checkpoint as small as a container with two Israeli soldiers. Eyad emphasized that at times soldiers appeared to rely on the facial recognition system to bar certain residents from returning home:

^{197.} Interview with Safaa, 7 May 2022, Tel Rumeida.

^{198.} Facebook user Youth Against Settlements – ناطيت سال ادض بابش, "Israeli occupation forces raided Sumod house", 1 November 2022, https://fb.watch/ivzow6M32A/ (accessed 5 February 2023).

^{199.} Foreign Policy, "How the Occupation Fuels Tel Aviv's Booming Al Sector", 21 February 2022, previously cited, https://foreignpolicy.com/2022/02/21/palestine-israel-ai-surveillance-tech-hebron-occupation-privacy/ (accessed 5 February 2023).

^{200.} B'TSelem, 'Israeli soldiers attack and detain young Palestinian man transporting goods through checkpoint in downtown Hebron, as well as neighbors who come to his aid', November 2022, https://www.btselem.org/hebron/20221117_soldiers_attack_and_detain_palestinians_at_checkpoint_in_downtown_hebron; United Nationa Office for the Coordination of Humanitarian Affairs, '"The soldiers at the checkpoint told me that I cannot leave" - Tightened movement restrictions increase hardship on Palestinians in Hebron', August 2020, https://www.ochaopt.org/content/soldiers-checkpoint-told-me-i-cannot-leave-tightened-movement-restrictions-increase

"They [Israeli soldiers] can tell you simply when you're trying to cross the checkpoint, that you're not registered, even though you are going to your house. But they can tell you that your name is not in the database as simple as that and then you're not allowed to pass through [to] your house". 201



Figure 6: Checkpoint 56 from 1994-2015. © Hebron Apartheid Project

Two Palestinian activists explained how, in the past when crossing through Checkpoint 56, Palestinian residents would rely on Israeli soldiers being disinterested, only superficially recognizing them and possibly displaying some degree of lenience, in order to access their basic rights and services. ²⁰² Today residents report never being certain if they will encounter a human or FRT. This leads to a heightened sense of precarity and unease, which figure in calculations about what activities to undertake in everyday life.

^{201.} Interview with Eyad, 7 May 2022, Tel Rumeida.

^{202.} As we learn from Ahmed and Hamad's interviews.

6.2.5 COERCING BIOMETRIC REGISTRATION

Amnesty International was informed by several humanitarian workers²⁰³ and residents of H2 that military personnel began summoning residents to Checkpoint 56 near Shuhada Street for biometric registration in 2019, but not before all non-residents – including family members staying with residents – were expelled from the area. Residents of H2 were summoned on multiple occasions and several pictures were taken of each individual, purportedly to create a biometric record for the facial recognition system used at the checkpoints. Ahmed described how this was done despite such records already existing because of the requirement to register for a physical identity card.²⁰⁴ Those who refused saw their ability to access their homes in H2 rescinded. Later, they were automatically registered without knowledge about enrolment in the facial recognition registry. Palestinian residents living in some neighborhoods of H2 were therefore coerced into biometric registration in order to leave and return to their homes. Palestinians in H2 are faced with little choice but to comply with the Israeli authorities' insistence on constantly gathering data and maintaining total informational control over Palestinians. As a result, Palestinians are left literally and figuratively staring down the barrel of a gun.

6.3 ENTRENCHING THE PANOPTICON IN EAST JERUSALEM

This section details the omnipresent surveillance infrastructure in East Jerusalem, primarily focusing on the Damascus Gate entrance to the Old City and the neighbourhood Silwan. It covers the background to the roll-out of surveillance and describes the physical surveillance infrastructure that is comprised of various cameras and sensors, as well as the Mabat 2000 facial recognition system and the link between surveillance hardware and facial recognition. Next, it discusses the experiences of people subjected to surveillance and facial recognition.

6.3.1 INFRASTRUCTURES OF AN ILLEGAL ANNEXATION

As of July 2021, there were some 358,800 Palestinians living in occupied East Jerusalem, alongside some 225,178 Israeli settlers living in 13 settlements – all of which are unlawful under international law.²⁰⁵ These settlements include former Palestinian homes that have been taken over by settlers.²⁰⁶ Following the illegal annexation of East Jerusalem to Israel, security and law enforcement powers were transferred to civil authorities,²⁰⁷ rendering the Israel Police, overseen by the Ministry of Public Security (now known as the Ministry of National Security), the primary body responsible for control and implementation of Israeli law in occupied East Jerusalem. The Ministry of National Security is also the authority responsible for deploying surveillance technologies within Jerusalem, which includes the Mabat 2000 system, that connects and enables facial recognition surveillance across the Old City in occupied East Jerusalem.

^{203.} The organisation and workers have opted to remain anonymous for security reasons [FYI, Amnesty reviewers]

^{204.} Government of Israel. 'Pay for a biometric ID card for Palestinians who are residents of the Palestinian territories': https://www.gov.il/en/service/smart-card-fees

^{205.} Peace Now, Jerusalem demographic data, December 2019, https://peacenow.org.il/en/settlements-watch/settlements-data/jerusalem; Immediately after its occupation of the West Bank and Gaza Strip, Israel unilaterally annexed East Jerusalem in violation of international law, adding Palestinian parts of the city as well as surrounding villages to the Israeli Jerusalem Municipality in a move designed to include as much land as possible while minimizing the number of Palestinians living there. Since then, successive Israeli governments have set demographic targets to maintain a Jewish majority in the city and have publicly acknowledged that the denial of Palestinians' social and economic rights is an intentional strategy to force them to leave the city.

^{206.}Office of the European Union Representative to the West Bank and Gaza Strip, UNRWA, '2021 Report on Israeli settlements in the occupied West Bank, including East Jerusalem Reporting period -January - December 2021', December 2021, https://www.eeas.europa.eu/sites/default/files/documents/EU%20Settlement%20Report%202021.pdf

^{207.} Volinz, L., 'Governance through pluralization: Jerusalem's modular security provision', December 2018, Security Dialogue, Issue 6, Voume 49.

In 2018 the Israeli authorities installed a permanent checkpoint at the Damascus Gate entrance to the Old City of Jerusalem, further entrenching the illegal annexation of the city.²⁰⁸ At Damascus Gate, extensive flood lighting and four towering surveillance posts enclose the square.²⁰⁹ Traders, tourists, worshippers and residents pass through the gates in a steady flow. The ancient architecture of the area stands in stark juxtaposition to the high-tech infrastructure at the location. These developments give Israeli police and security forces an unprecedented overview of movement flowing in and out of the Old City.²¹⁰ Who Profits reports that private security companies, contracted by the Israeli Ministry of Housing and Construction for an amount of at least 100 million NIS as of 2017 (nearly \$28 million USD), further consolidate this control through the provision of security for settlers including via the installation, maintenance and safeguarding of a network of surveillance cameras which integrates into the Mabat 2000 surveillance system (see below).²¹¹

This is significant not least due to the reliance on the location by Palestinians for assembly and protest, and the main site of entry into the Old City, especially for Muslim communities wishing to visit Al-Aqsa mosque. The surveillance arm of the Israeli authorities works hand-in-hand with restrictions on movement to close in on every aspect of Palestinian life in East Jerusalem. Moreover, these developments introduce a further risk of identification, and by extension, targeted harassment and risk of arrest, of Palestinians who engage in assembly and protest, potentially compromising their permits as well.

6.3.2 DAMASCUS GATE: TARGETING SITES OF SOCIAL AND CULTURAL SIGNIFICANCE FOR PALESTINIANS

Since the Mabat 2000 programme was first rolled out at the turn of the millennium, Israeli state and settler-controlled surveillance infrastructure has increased in the Old City. Since 2019, Israeli defence investments in Al-driven surveillance technologies, purporting to have extensive computer vision capabilities, have further changed the landscape across occupied East Jerusalem, especially in areas of particular significance to Palestinian social, cultural, economic or religious life, or those that are targeted for home and land takeovers by settlers and settler organizations. One such area is Damascus Gate where Palestinians are being watched and assessed at all times.

For Palestinians in Jerusalem, the steps of Damascus Gate are their gateway into the Old City and one of the few public spaces where they can spend time together, reclaim a sense of community and start protests. From demonstrations in support of prisoners on hunger strike to protests against repeated Israeli offensives on the occupied Gaza Strip, the steps of Damascus Gate bore witness to a powerful youth-led movement that was particularly active between 2011 and 2017. Despite varying in terms of their size and demands, the protests often followed a consistent script: once a Palestinian flag is raised or the singing and chanting gets louder or protesters try to march from Damascus Gate into neighbouring streets, Israeli forces, undercover agents and border police would swiftly crack down on the protesters with arbitrary force. This regularly included chasing protesters with horses, firing stun grenades, arbitrary arrest and administering severe beatings.

The youth-led movement reached its height during a two-week sit-in during July 2017 in Lion's Gate/Bab al-Asbat at the entrance to Al-Aqsa mosque compound. The protest sit-in erupted following Israel's installment of metal detectors at the entrances to Al-Aqsa mosque on 16 July 2017.²¹² Israel's

^{208.} Abu Sneineh, M., Middle East Eye, "Pushing out Palestinians': Israel installs concrete checkpoints at Old City gate', February 2018, https://www.middleeasteye.net/news/pushing-out-palestinians-israel-installs-concrete-checkpoints-old-city-gate

^{209.} Interview with Nadera Shalhoub-Kevorkian, 10 May 2022, Armenian quarter, Old City of East Jerusalem

^{210.} Interview with Ariel Caine, 29 August 2022, London, United Kingdom.

^{211.} Who Profits, "Big Brother" in Jerusalem's Old City: Israel's Militarized Visual Surveillance System in Occupied East Jerusalem', November 2018, whoprofits.org/wp-content/uploads/2018/11/surveil-final.pdf

^{212.} Middle East Monitor, 'Remember Israel's move to install metal detectors at al-Aqsa', 16 July 2018, https://www.middleeastmonitor.com/20180716-remembering-israels-move-to-install-metal-detectors-at-al-aqsa/

public security ministry adopted this measure following the killing of two Israeli police officers two days earlier. Palestinian worshippers refused to enter Al-Aqsa through the metal detectors and congregated in the yard in an act of civil disobedience. The popular persistent pressure forced Israel to remove the metal detectors. However, the detectors were replaced with smart cameras on 25 July 2017, a move which many Palestinians in Jerusalem strongly opposed. Recalling the protest, one protester told Amnesty International: "Cameras for us played exactly the same role as the metal detectors, although less visible. We realized that their aim was to control us." Only when both the metal detectors and the newly installed cameras were removed and all gates were opened did Palestinians end their sit-in on 27 July 2017. Recognizing the role that Damascus Gate played as a springboard for protests, Israel was keen to transform the space, gradually but steadily increasing the number of surveillance cameras and militarizing the area.

6.3.3 SILWAN: TIGHTENING THE GRIP ON PALESTINIAN NEIGHBOURHOODS

In Silwan, a Palestinian neighbourhood in occupied East Jerusalem located on the southern outskirts of the Old City, Palestinian communities are slowly being hollowed out by the presence of military, surveillance and the encroachment of Israeli settlers and settler organizations. During the 1947-49 war (known to Palestinians as the Nakba, or catastrophe) more than 800,000 Palestinians were displaced from their homes. This, and a second wave of mass Palestinian displacement as a result of the 1967 Israel-Arab war, led to the growth of Silwan's Palestinian population. Silwan is now home to approximately 40,000 to 45,000 Palestinians. How home is one of 28 surrounding Palestinian villages that were incorporated into the Israeli Jerusalem Municipality in 1967, and unilaterally annexed by Israel, in direct violation of international law, and with the aim of ensuring a Jewish demographic majority by including a maximum amount of land for Jewish settlement while minimizing the number of Palestinian residents.

In addition to the Israeli state's allocation of confiscated Palestinian land for advancing Jewish settlement in Jerusalem, Jewish settler organizations such as Ateret Cohanim and Elad have relied on discriminatory Israeli laws, such as the 1950 Absentees' Property Law and the 1970 Legal and Administrative Matters Law to devise a legal scheme to file eviction cases against Palestinians and dispossess them of their properties in occupied East Jerusalem, allowing Jewish settlers to take over Palestinians' homes and further expand Jewish settlements in this part of the OPT. Such takeovers have taken place with the full backing of Israeli state institutions with the intention of Judaizing occupied East Jerusalem. Much of the settlement expansion in the neighbourhood is related to plans to expand the City of David, a popular Israeli tourist attraction and archaeological site, located in Silwan, Wadi Hilweh neighbourhood, and managed with the support of the Israeli government by Elad.

^{213.} Interview with journalist, 5 February 2023.

^{214.}Al-Haq, 'Submission to the UN Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression', February 2019, https://www.alhaq.org/cached_uploads/download/alhaq_files/images/stories/PDF/Submission_to_the_UN_Special_Rapporteur_on_the_Promotion_and_Protection_of_the_Right_to_Freedom_of_Opinion_and_Expression.pdf; Caine, A., 'The Ground of Palestine', 2021, Disegno - the Quarterly Journal of Design, issue 30.

^{215.} The 1948 destruction and displacement of Palestinian society at large, leading to the exodus of some 700,000 Palestinians.

^{216.} Amnesty International, 'Destination: Occupation, digital tourism and Israel's illegal settlements in the occupied Palestinian territories', May 2019, <a href="https://www.amnesty.org/en/latest/campaigns/2019/01/destination-occupation-digital-tourism-israel-illegal-settlements/#:~:text=In%20a%20new%20report%2C%20Destination,with%20their%20own%20corporate%20standards.

^{217.} United Nations, Committee on the Exercise of the Inalienable Rights of the Palestinian People, 'The Status of Jerusalem', 1997, https://www.un.org/unispal/wp-content/uploads/2016/07/The-Status-of-Jerusalem-Engish-199708.pdf; Amnesty International, 'Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity', February 2022, https://www.amnesty.org/en/documents/mde15/5141/2022/en/, p.77;

^{218.} Amnesty International, 'Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity', February 2022, https://www.amnesty.org/en/documents/mde15/5141/2022/en/

In 2009, the Israeli settler organization Elad,²¹⁹ in cooperation with Israel's Ministry of Housing and the Jerusalem Municipality, initiated an effort to expand excavation efforts of the City of David archaeological site. The plans came at the expense of some 70% of the land of Silwan, including entire residential areas, which according to Al-Haq, were labelled as "open areas". Al-Haq reported that the plans "called for the destruction of 88 Palestinian houses, inhabited by more than 1,500 Palestinians".²²⁰

In 2009, the Israeli Supreme Court rejected a petition by Palestinian residents to halt the City of David tunnelling project denying that significant damage would be caused to residential homes.²²¹ The Court argued that there was insufficient proof of the "correlation between the tunnelling... and damage to Palestinian property",²²² and that any existing damage was "acceptable in light of the significance of the archaeological discoveries to Israel's cultural heritage".²²³ To add insult to injury, in addition to the violence and evictions, due to the damage to their homes, settlers violence, and takeover of Palestinian properties,²²⁴ residents of Silwan informed Amnesty International that an increasing number of surveillance devices had been placed around Silwan by Israeli authorities, private security companies and by Israeli settlers.

The London-based research group Forensic Architecture also reported on this "biblical archaeology" project, and described how vibrations from excavations generated a vast perimeter of damage, including "fractures in roads and water and sewage systems, crawling up structural foundations and domestic walls". ²²⁵ In Silwan, efforts to excavate underground caused not only devastating damage above ground, ²²⁶ but also led to the increasing deployment of surveillance systems in Silwan, as described below. ²²⁷ These developments came as the Israeli government and Elad, ²²⁸ which has a stated aim of Judaizing occupied East Jerusalem, ²²⁹ have been using archaeology and tourism as a cover for forcibly transferring the Palestinian residents of Silwan and installing Jewish settlers in the area.

According to March 2023 estimates by OCHA, as of December 2020, there were 218 Palestinian families, comprising 970 people, including 424 children, facing eviction cases, mainly in the Old City

226. Ibid.

^{219.} Elad were registerd in 1986 and started first excavations in the late 1980s: https://imeu.org/article/elad-the-jewish-national-fund-the-us-taxpayer-subsidized-judaization-of-sil

^{220.}Al-Haq, '88 Palestinian Houses to be demolished for Israeli Park', 2012, https://www.alhaq.org/monitoring-documentation/6931.html

 $^{221.} Al \ Jazeera, \ 'lsraeli \ settlers \ take \ over \ home \ in \ Jerusalem's \ Silwan', \ October \ 2021, \ \underline{https://www.aljazeera.com/news/2021/10/7/settlers-take-over-home-in-jerusalems-silwan}$

 $^{222.} Supreme Court decision: \ https://supremedecisions.court.gov.il/Home/Download?path=HebrewVerdicts/08/080/013/b07&fileName=08013080_b07.txt&type=4_$

^{223.} Supreme Court Ruling: <a href="https://www.ruling.co.il/%D7%91%D7%92%22%D7%A5-1308-08-%D7%9E%D7%97%D7%9E%D7%93-%D7%A2%D7%98%D7%90%D7%9C%D7%94-%D7%A1%D7%99%D7%90%D7%9D-%D7%A0.-%D7%A8%D7%A9%D-7%95%D7%AA-%D7%94%D7%A2%D7%AA%D7%99%D7%A7%D7%95%D7%AA_eba87e41-d9b1-dc5c-1ed5-19bde6ee025c; Caine, A., Journal of Visual Culture, 'Silwan and the City of David', August 2021

^{224.} The Israeli Committee Against House Demolitions, 'Israel's Demolition of Palestinian Homes: A Fact Sheet', April 2021, https://icahd.org/2021/04/20/the-demolition-of-palestinian-homes-by-israel-a-fact-sheet/; Interview with Habib, 8 May 2022, Silwan.

 $^{225.} Forensic \ Architecture, 'Forensis: The \ Architecture of \ Public \ Truth', \ 2014, \ \underline{https://content.forensic-architecture.org/wp-content/uploads/2019/05/Forensis-interior-FINAL.pdf}$

^{227.} Camera survey shared with Amnesty by researchers from the Post-Visual Security project at Tampere University, https://www.tuni.fi/en/research/post-visual-security.

^{228.} The Israeli human rights organization Ir Amim says that it effectively operates "as a direct executive arm of the Government of Israel and enjoys comprehensive and deep backing by the Israeli administration". Ir Amin, Shady Dealings in Silwan, May 2009, http://www.ir-amim.org.il/en/report/shady-dealings-silwan, p. 11. See also Nir Hasson, "Full Haaretz Expose / How the State Helped Right-wing Groups Settle East Jerusalem", Haaretz, 7 November 2010, www.haaretz.com/1.5136031; Yarden Skop and Nir Hasson, "Israel to Give Highest Honor to Leader of Group That Settles Jews in Arab Jerusalem", Haaretz, 16 March 2017, https://www.haaretz.com/israel-news/.premium-israelto-give-highest-honor-to-leader-of-group-that-settles-jews-in-arab-jerusalem-1.5449825; and Emek Shaveh, "Elad's Settlement in Silwan", 10 September 2013, alt-arch.org/en/settlers/

^{229.} Greenberg, J., The New York Times, 'Settlers Move Into 4 Homes in East Jerusalem', June 1998, www.nytimes.com/1998/06/09/world/settlers-move-into-4-homes-in-east-jerusalem.html

and in neighbourhoods including Silwan. Since 2009, a total of 1,800 structures were demolished across occupied East Jerusalem, forcibly transferring over 3,400 Palestinians.²³⁰ Jewish Israeli settlers live in heavily protected compounds, protected by Israeli private companies and security forces. There are restrictions on movement, particularly during Jewish holidays, (often violent) search operations of Palestinian homes and arrests of Palestinian residents including children, in addition to heightened surveillance.²³¹ This, in addition to a lack of adequate essential services, has created a coercive environment aimed at pushing Palestinian residents out of the neighbourhood, and occupied East Jerusalem at large.

6.3.4 EXPANDING ISRAELI CONTROL VIA MABAT 2000

Shortly before 2000, Israeli police established Mabat 2000, a visual surveillance programme in the Old City, ²³² with the aim of mounting CCTV cameras in as many streets and alleyways as possible. At the time, Mabat 2000 was reported to largely work with the hardware vendors VideoTec, Dahua Technology, Sony Corporation and Evron Systems. ²³³ When the Israeli government approved resolution no.1775 in June 2014, known as the Plan for Promoting Personal Safety and Socio-Economic Development in Jerusalem, a commitment was made to increase the number of CCTV cameras towards the objective of enhancing security; ²³⁴ a commitment which saw 48.9 million Israeli New Shekels (NIS, equal to 13.6 million USD) earmarked for CCTV equipment in Jerusalem in 2015. ²³⁵

In a statement made in 2015, Doron Turgeman, the current Head of the David (City of) Police District, claimed that the system had a 95% identification rate.²³⁶ In 2017, plans were put in motion by Israeli authorities to upgrade the system to support facial and object recognition, watch-listing and predictive tools.²³⁷ In 2018, Who Profits reported that the Israeli government had allocated an additional 400 million NIS (US\$114 mil) towards the expansion of the Mabat 2000 programme,²³⁸ to connect CCTV devices across occupied East Jerusalem to a centralised Command Center.²³⁹ In 2020, the Haaretz newspaper reported that Jerusalem municipality had confirmed the deployment of 1,000 cameras, as well as video analysis technology to "identify unusual activity in public areas in order to manage public space and transportation".²⁴⁰ The municipality stated that some of these cameras were able to carry out object recognition, and that 100 of the cameras were "connected to servers that then can

230. UNOCHA Eviction Data from December 2020, shared with Amnesty International

231. United Nations Office for the Coordination of Humanitarian Affairs, 'Humanitarian Impact of settlements in palestinian neighbourhoods of East Jerusalem: the coercive environment', July 2018, https://www.ochaopt.org/content/humanitarian-impact-settlements-palestinian-neighbourhoods-east-jerusalem-coercive

232. Ibid.

233. Ibid.

234. article 5. https://www.gov.il/he/departments/policies/2014_dec1775

235. Mona, S., Middle East Institute, 'Nowhere to hide: The impact of Israel's digital surveillance regime on the Palestinians', April 2022, https://www.mei.edu/publications/nowhere-hide-impact-israels-digital-surveillance-regime-palestinians

236. Yanovsky, R., Ynet, 'Jerusalem's Mabat 2000: Catching terrorists in the act', November 2018, https://www.ynetnews.com/ articles/0,7340,L-4727621,00.html

237. Who Profits, "Big Brother" in Jerusalem's Old City: Israel's Militarized Visual Surveillance System in Occupied East Jerusalem', November 2018, https://www.whoprofits.org/flash-report/big-brother-in-jerusalems-old-city/; Al-Haq, 'Special focus on Hebron: A microcosm of the Israeli Occupation', November 2015, https://www.alhaq.org/cached_uploads/download/alhaq_files/images/stories/PDF/2012/Special.Focus.on.Hebron.Nov.2015.pdf; Al-Haq, 'Submission to the UN Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression. <a href="https://www.alhaq.org/cached_uploads/download/alhaq_files/images/stories/PDF/Submission to the UN Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression.pdf; watchlisting tools allow the set up of automated alerts on particular individuals walking within the perimeter of sites of interest

 $238. Government of Israel, 'State Budget Proposal for Fiscal Years 2017 and 2018 [Jerusalem]', October 2016, \\ \underline{https://www.gov.il/BlobFolder/reports/state-budget-proposal_2017-2018/en/en_files_StateBudgetProposal_2017-2018.pdf}$

239. Who Profits, "Big Brother" in Jerusalem's Old City: Israel's Militarized Visual Surveillance System in Occupied East Jerusalem', November 2018, https://www.gov.il/BlobFolder/reports/police_annual_report_under_the_freedom_of_information_law_2017/he/annual_report_under_the_freedom_of_information_law_2017.pdf

240. Mona, S., Middle East Institute, 'Nowhere to hide: The impact of Israel's digital surveillance regime on the Palestinians', April 2022, https://www.mei.edu/publications/nowhere-hide-impact-israels-digital-surveillance-regime-palestinians

analyse data".²⁴¹ In a report updated in March 2022, Who Profits described how 400 CCTV cameras placed across the Old City of Jerusalem were broadcasting live-feeds of the movements of residents to the police 24 hours a day and were being operated from a central police-run Command and Control centre.²⁴² Media reports from November²⁴³ and December 2022 mention the continued operation of the Mabat 2000 system. Given the networked configuration of Mabat 2000 as software capable of facial recognition, any camera connected to it with high enough resolution to capture faces, would potentially bolster the reach of its facial recognition capabilities.

A year on from the protests and subsequent police crackdown at the Al-Aqsa mosque in May 2021, between 3 April and 1 May 2022, manifold restrictions were put in place by the security forces to control access by Muslim worshippers to the Al-Aqsa mosque esplanade during and after the month of Ramadan. These restrictions led to renewed Palestinian protests and violent suppression. The entrances to the Old City that lead to the esplanade saw increased, semi-permanent checkpoints. Israeli police used excessive force, intimidation and harassment routinely while checking Palestinian identity cards and bags.²⁴⁴ Between April and May 2022, dozens of videos emerged on social media sites including Twitter, Facebook, Telegram and YouTube which appeared to show a variety of techniques through which protesters were intercepted and repressed by Israeli security forces in East Jerusalem. Amnesty International's Digital Verification Corps' open-source investigation into technology-aided detentions by Israeli security forces during the period of April-May 2022, for instance, verified incidents in which individuals were detained as well as registered, identified, and/or recorded by Israeli security forces using technology such as tablets, helmet cameras and body cameras.²⁴⁵

Amnesty International's research during the in-person walking tours (See section 3 of this report) estimates the presence of one to two CCTV cameras for every five metres walked.²⁴⁶ In greater frequency and often in addition to more overt structures, several smaller and newer-looking cameras were often clustered together, at times with other sensors, on surveillance towers.²⁴⁷ In addition to these, numerous cameras from the same manufacturers as those present on surveillance towers were mounted on the walls of residential buildings and shops. These cameras were configured to either look down toward squares or marketplaces predominantly traded in by Palestinians, and were hanging from buildings predominantly occupied by settlers.

From Sheikh Jarrah to Damascus Gate, a distance of approximately two kilometres, the Israeli authorities have installed blanket camera surveillance as well as towering surveillance poles with additional surveillance equipment.²⁴⁸ While the infrastructure is at its most visible at Damascus Gate, it is diffused throughout occupied East Jerusalem, in particular inside the Old City, where new surveillance technologies compound old patterns of harassment, dispossession, segregation and denial of rights.²⁴⁹

241. Ibid.

242. Who Profits, 'C.Mer Group profile', 2022, https://www.whoprofits.org/company/c-mer-industries/. The cameras are also alleged to 'have the ability to also synchronize with other cameras deployed in other parts of occupied East Jerusalem.'

243. Ynet, 'Attack in the Old City: a terrorist stabbed and killed, 3 policemen were lightly to moderately injured', November 2022, https://www.ynet.co.il/news/article/sj11ssywss;; Fried, S., Makorrishon, 'Tiktok terror: The police are fighting a phenomenon in which Arabs humiliate Jews and upload them to the Internet', December 2022, https://www.makorrishon.co.il/news/549801/

244. Amnesty International, 'Israel/OPT: Continuing patterns of unlawful killings and other crimes further entrench apartheid', May 2022, https://www.amnesty.org/en/documents/mde15/5589/2022/en/

245.E.g. one video shared on social media and verified by Amnesty shows three officers accosting a Palestinian man, with one of them restraining him forcefully, and another officer with a tablet asking the Palestinian man to remove his cap as she operates a tablet device. Captured 11 May, Al-Wad street, Jerusalem

246. Captured by Amnesty researchers on GoPro 360 video footage; in-person observations by Amnesty researchers in East Jerusalem in May 2022.

247. Interview with Nadera Shalhoub-Kevorkian, 10 May 2022, Armenian quarter, Old City of East Jerusalem Interview with Ariel Caine, 29 August 2022, London, United Kingdom.

248. Captured by Amnesty researchers on GoPro 360 video footage; in-person observations by Amnesty researchers in East Jerusalem in May 2022.

249. Amnesty International, 'Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity', February 2022, https://www.amnesty.org/en/documents/mde15/5141/2022/en/

AUTOMATED APARTHEID



♠ ↑Surveillance pole near Damascus Gate.♠ Amnesty International



(๑) ↑
HIKVISION P/T/Z Cam mounted
above Grundig bullet cam. © Amnesty
International



6.3.5 SETTLER-SURVEILLANCE DEVELOPMENTS IN SILWAN

In Silwan, Palestinian communities are organized in almost concentric circles. Towering surveillance poles take the centre-stage, while Palestinian homes form the immediate inner circle, rendering them hyper-visible. The outer ring consists of former Palestinian homes, now illegally occupied by Israeli settlers, identifiable by a mixture of barbed wire, Israeli flags and extensive surveillance devices, including smart cameras and ambient sound detection devices mounted on fencing, looking down at the inner Palestinian circle. In this way, and as settlement activity has increased, Palestinians in Silwan are increasingly watched from every angle, now living under the conditions of what might be best described as a double panopticon; from the centre looking out, and from the margins looking in.²⁵⁰

Residents of Silwan informed Amnesty International that an increasing number of surveillance devices had been placed around Silwan by Israeli authorities, private security companies and by Israeli settlers. The latter were reported to have built homes on top of¬ now-damaged Palestinians residences, ²⁵¹ from which the occupants had been driven out. ²⁵²

Dr Ariel Caine, a research partner from the Post-Visual Security project at Tampere University who has been tracking the excavations along with the increase in surveillance in Silwan, told Amnesty International that surveillance in the area has intensified in tandem with the increase in number of settlers and settler projects.²⁵³ He estimates that between 2008 when Peace Now conducted a survey of cameras, and December 2022, the number of cameras within Wadi Hilweh rose from 60 to 243 cameras: "the spread of these cameras follows the expansion of the settlement project as well as following all routes and in and out of the City of David Settlement within Wadi Hilweh, Silwan", Caine told Amnesty.²⁵⁴ Dr Caine and the Post-Visual Security Project at Tampere University and

^{250.} That is to say, a circular prison with cells arranged around a central wall, from which prisoners can be observed at all times.

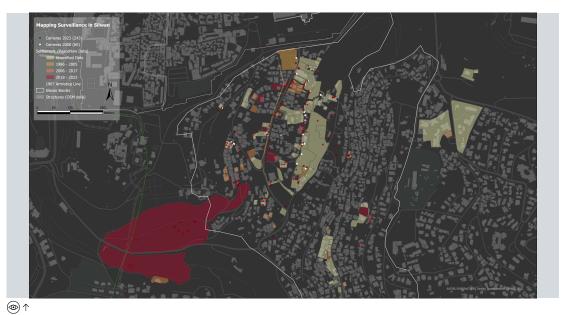
 $^{251.} Al-Haq, 'House Demolitions and Forced Evictions in Silwan: Israel's Transfer of Palestinians from Jerusalem', 2020, <math display="block"> \underline{ https://www.alhaq. org/cached_uploads/download/2021/08/17/silwan-webversion-1-page-view-1629184473.pdf }$

^{252.} The Israeli Committee Against House Demolitions, 'Israel's Demolition of Palestinian Homes: A Fact Sheet', April 2021, https://icahd.org/2021/04/20/the-demolition-of-palestinian-homes-by-israel-a-fact-sheet/; Interview with Habib, 8 May 2022, Silwan.

^{253.} Interview with Ariel Caine; Caine, A., 'The Ground of Palestine', 2021, Disegno - the Quarterly Journal of Design, issue 30.

^{254.} Data shared with Amnesty, courtesy of Ariel Caine.

Palestinian photojournalist Faiz Abu Rmeleh, generated a map for Amnesty International based on their survey, demonstrating the intensification of surveillance over time, comparing devices present in 2008, prior to the court petition by residents of Silwan, and again in 2022, over a decade following the petition.²⁵⁵ This data demonstrates a clear increase in surveillance nodes, just as excavation sites have expanded. The combination of settlement activity and the increase in surveillance equipment erected by Israeli settlers and security forces are part of an intentional strategy to create a coercive and hostile environment to minimize Palestinian presence in areas of strategic importance in occupied East Jerusalem, such as Silwan, in order to establish and consolidate Jewish domination and control over these areas.²⁵⁶



Surveillance deployments in Silwan over time (courtesy of Dr Ariel Caine). @ Amnesty International

The Wadi Hilweh Information Centre has been providing legal aid for children from Silwan arrested by Israeli forces for taking part in protest. In retaliation for their work its director, Jawad Siyam²⁵⁷ and other staff members have been targeted for surveillance since the centre's founding in 2009.²⁵⁸ Jawad Siyam described how he was targeted by camera infrastructure in particular:

"In Wadi Hilweh alone, there are over 500 surveillance cameras, either installed by Israeli police or by the private guards of illegal settlements. The settlers have also installed surveillance cameras exactly next to my house and even though I demanded their removal, through the Association of Civil Rights' attorney Nisrine Alayan, they have remained there for over 13 years, directed into my home. I know that friends have become wary of visiting me, of even being seen talking to me because they know that the cameras chase them. [...] Whether the cameras are

 $^{255.} Supreme Court decision: \ https://supremedecisions.court.gov.il/Home/Download?path=HebrewVerdicts/08/080/013/b07& fileName=08013080_b07.txt&type=4$

^{256.} Amnesty International, 'Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity', February 2022, https://www.amnesty.org/en/documents/mde15/5141/2022/en/,

^{257.} Given on 3 February 2023 to Amnesty International researchers

^{258.} The Wadi Hilweh Information Centre was founded by a group of Palestinian citizen journalists and activists from Silwan in 2009 and is located in the neighbourhood after which it was called. Its initial aim was to tell the stories of the residents and offer a counter-narrative to the state-backed El-Ad settler group, whose "City of David" settlement and archaeological site seeks to forcibly displace Palestinians from the neighbourhood and erase the Palestinian identity of Silwan through ideologically-motivated excavations and tourism.

installed by the police or by the settler guards, Israeli police have access to them, and when settlers filed a case against me alleging that I had assaulted them, the court referred to video recordings extracted from the cameras back in 2011. Of course, the use of these cameras is selective: they are only used to incriminate Palestinians. For instance, if a settler or a police officer attacks a Palestinian youth, and the youth defends himself or shouts back, only footage of the youth defending themselves would be used framing Palestinians as the assailants. There were cases following killings of Palestinian youth by settler guards in which we demanded access to footage of surveillance cameras but they were never shared. So these surveillance cameras are not there to make the place more secure, they are there to scare Palestinians and protect settlers."

As recently as 31 March 2023, Time of Israel reports that a 26-year-old Palestinian man, Mohammed Elasibi, was killed near Chain Gate by Israeli security forces, with the police claiming that the area was not within the domain covered by security cameras, nor by body-worn cameras. This comes in the face of reporting by former senior police officials that a lack of recording of the incident, given that the road leading to and from Chain Gate is "flooded with cameras", in addition to body cameras worn by the officers, would have been unlikely. 1600

6.3.6 CAMERAS AND THEIR CORPORATE SUPPLIERS IN EAST JERUSALEM

TKH Security



Grundig bullet camera mounted below a HIKVISION PTZ camera in the Armenian quarter of the Old City, East Jerusalem, on 10 May 2022.

© Amnesty International

Amnesty International researchers carried out field observations across the Old City of occupied East Jerusalem in April 2021, where several TKH Security CCTV products were observed. For example, Amnesty identified a bullet camera branded with TKH Security, situated on infrastructure operated by Israeli police near Damascus Gate along the Old City wall in occupied East Jerusalem (at coordinates 31.782746, 35.232589).²⁶¹

In a subsequent research trip to East Jerusalem by Amnesty researchers in May 2022, Grundig and TKH Security branded CCTV products were observed in the Old City. According to product pictures and specifications posted on TKH Security's website, ²⁶² the cameras in question matched the design of the following products:

- TKH BL860 IP bullet camera this is a networked camera with infrared and night-vision capabilities, that is particularly suitable for license plate reading, ²⁶³ and;
- The SIQURA BL980 camera which catches 4k resolution footage.²⁶⁴

259. Times of Israel, 'Ex-police officials: 'Hard to believe' disputed deadly Jerusalem shooting not on CCTV', 1 April 2023, https://www.timesofisrael.com/ex-police-officials-hard-to-believe-disputed-deadly-jerusalem-shooting-not-on-cctv/

260. Ibid.

261. Originally identified at 31.782746, 35.232589

262.https://catalog.tkhsecurity.com/product/fd1104fr/

263. https://tkhsecurity.com/license-plate-reading-lpr-made-easier-the-tkh-bl860-ip-bullet-camera/

264. https://catalog.tkhsecurity.com/product/bl980/

Through its own observations, Amnesty also identified Grundig-branded products around the Old City in occupied East Jerusalem in May 2022, for instance in the Armenian quarter (see for instance figure 12), near the Fountain Bazaar by Al Souq on Suq Aftemos Muristan, and on a surveillance tower by the Sultan Sulayman St. crossing leading to Damascus Gate.



TKH Security bullet camera at Damascus Gate (left) compared to TKH Security product from TKH marketing (right).

Amnesty International

TKH Security Solutions is an electronics company incorporated in The Netherlands. It is owned by TKH Group, also headquartered in The Netherlands. TKH Security consists of seven companies (Aasset Security, Flexposure, Keyprocessor, Park Assist and ParkEyes, Siqura, VDG Security) that merged between July 2019 and January 2021, providing a range of security technology services, including security management, video surveillance, parking facility management, parking guidance, and asset and site management. ²⁶⁵ TKH Security products also include Grundig products (which according to TKH Group's reporting, wholly owns Grundig Security [ASP AG]). ²⁶⁶

According to TKH Security's website, on 1 July 2017, Mal-Tech Technological Solutions (Mal-Tech) became the official distributor of TKH Security's products for the Israeli market.²⁶⁷ According to the company, "TKH Security Solutions has not done any business with Mal-Tech in the past few years."²⁶⁸ It is unclear when Mal-Tech stopped distributing TKH Security's products in Israel. However, Mal-Tech has a track record of supplying security technology products to the Israeli government, army, police and Ministry of Defense, according to Who Profits and Mal-Tech's own company listing.²⁶⁹ Mal-Tech did not respond to Amnesty International's letters.

Amnesty International is concerned about the high risk of TKH Security's CCTV products in the Old City being used together with the Mabat 2000 system — a system that, as explored in Section 6.3.1 of this report, connects networked surveillance cameras in the Old City of occupied East Jerusalem, and includes facial recognition.²⁷⁰ A central Command and Control centre operated by Israeli police uses

^{265.} https://tkhsecurity.com/about-us/history/

^{266.}TKH Group, Annual Report, 2016, https://www.tkhgroup.com/media/documents/Annual_Report_2016.pdf

^{267.}TKH Security, 'Mal-Tech Value-Added Distributor of TKH Security Solutions in Israel', July 2017, https://tkhsecurity.com/mal-tech-value-added-distributor-of-tkh-security-solutions-in-israel/

^{268.} From letter issued by TKH Security on 3 February 2023, in response to research letter issued by Amnesty International.

^{269.} Who Profits, Videotec - Video Security products, profile', 2018, https://www.whoprofits.org/company/6171-2/; Apollo.io, Mal-Tech company listing: https://www.apollo.io/companies/MAL-TECH-Technological-Solutions/5da152ab6a35ec00013ff0f3?chart=count

^{270.} Who Profits, 'C.Mer Group profile', 2022, https://whoprofits.org/company/c-mer-industries; The network of surveillance cameras also include object and anomaly detection. Shtaya, M., Middle East Institute, 'Nowhere to hide: The impact of Israel's digital surveillance regime on the Palestinians', April 2022, https://www.mei.edu/publications/nowhere-hide-impact-israels-digital-surveillance-regime-palestinians

the system—and the at least 1,000 cameras that it's connected to— to watch movements of residents in the Old City in East Jerusalem 24 hours a day, seven days a week.²⁷¹

Hikvision

In a research trip to the Old City in East Jerusalem by Amnesty researchers in May 2022, dozens of Hikvision CCTV products were spotted. Research partners from the Post-Visual Security project at Tampere University also provided Amnesty data that confirmed the presence of at least 37 Hikvision devices in and around security infrastructure and illegal settlements in Silwan (see Annex I for non-exhaustive list of geo-tagged Hikvision cameras in Silwan). This data was collected through identification, cartographic positioning and counting of CCTV cameras in Wadi Hilwe and Wadi al-Rababa areas of Silwan, undertaken through recurring on-the-ground surveys along the main roads and small alleyways between 2021 to early 2023. During these surveys, research partners from Tampere systematically walked through the site and once a camera was identified a close-up image of it was taken along with a wide-angle image of the camera and its surroundings. The data represents a mixture of cameras operated by Israeli police and by private settlers, and shows how the company's products are directly linked to the increasingly coercive environment in which Palestinians live in the OPT.²⁷²

Devices Amnesty International found mounted to military infrastructures and residential areas in and around the Old City of East Jerusalem, in particular Damascus Gate, the Armenian quarter, the Muslim quarter, and Silwan, match the marketing images associated with the following models of Hikvision products, according to product pictures and specifications posted on Hikvision's website:

- 4MP DeepinView Moto Varifocal Bullet Camera,²⁷³
- 2MP DeepinView ANPR Moto Varifocal Bullet Camera,²⁷⁴
- 4MP DeepinView ANPR Moto Varifocal Bullet Camera, 275
- 4k DeepinView Moto Varifocal Bullet Camera,²⁷⁶
- 2MP DeepinView Moto Varifocal Bullet Camera,²⁷⁷
- 12MP DeepinView Moto Varifocal Bullet Camera,²⁷⁸
- and the 8 MP AcuSense Fixed Turret Network Camera model of Hikvision cameras.

Many of these models, including the 8 MP AcuSense model, are of high-enough resolution to enable human and vehicle classification and come with the feature out-of-the-box according to Hikvision's own marketing materials, and could plug into external facial recognition software.²⁸⁰

^{271.} Who Profits, 'C.Mer Group profile', 2022, https://whoprofits.org/company/c-mer-industries/. The cameras are also alleged to 'have the ability to also synchronize with other cameras deployed in other parts of occupied East Jerusalem.'

^{272.} Debevoise & Plimpton, 'Practical Definitions of Cause, Contribute, and Directly Linked to Inform Business Respect for Human Rights', February 2017, https://media.business-humanrights.org/media/documents/files/documents/Debevoise-Enodo-Practical-Meaning-of-Involvement-Draft-2017-02-09.pdf

^{273.} https://www.hikvision.com/uk/products/IP-Products/Network-Cameras/DeepinView-Series/ids-2cd7a46g0-izhs-y--r-/

^{274.} https://www.hikvision.com/en/products/IP-Products/Network-Cameras/DeepinView-Series/ids-2cd7a26g0-p-izhs-y-/

^{275.} https://www.hikvision.com/en/products/IP-Products/Network-Cameras/DeepinView-Series/ids-2cd7a46g0-p-izhs-y-/

 $^{276. \}underline{https://www.hikvision.com/uk/products/IP-Products/Network-Cameras/DeepinView-Series/ids-2cd7a86g0-izhs-y--r-/button-com/uk/products/IP-Products/Network-Cameras/DeepinView-Series/ids-2cd7a86g0-izhs-y--r-/button-com/uk/products/IP-Products/Network-Cameras/DeepinView-Series/ids-2cd7a86g0-izhs-y--r-/button-com/uk/products/IP-Products/Network-Cameras/DeepinView-Series/ids-2cd7a86g0-izhs-y--r-/button-com/uk/products/IP-Products/Network-Cameras/DeepinView-Series/ids-2cd7a86g0-izhs-y--r-/button-com/uk/products/IP-Products/Network-Cameras/DeepinView-Series/ids-2cd7a86g0-izhs-y--r-/button-com/uk/products/IP-Products/Network-Cameras/DeepinView-Series/ids-2cd7a86g0-izhs-y--r-/button-com/uk/products/IP-Products/Network-Cameras/DeepinView-Series/ids-2cd7a86g0-izhs-y--r-/button-com/uk/products/IP-Products/Network-Cameras/DeepinView-Series/ids-2cd7a86g0-izhs-y--r-/button-com/uk/products/IP-Products/Network-Cameras/DeepinView-Series/ids-2cd7a86g0-izhs-y--r-/button-com/uk/products/IP-Products/Network-Cameras/DeepinView-Series/IP-Products/Network-Cameras/DeepinView-Series/IP-Products/Network-Cameras/DeepinView-Series/IP-Products/Network-Cameras/DeepinView-Series/IP-Products/Network-Cameras/DeepinView-Series/IP-Products/Network-Cameras/DeepinView-Series/IP-Products/Network-Cameras/DeepinView-Series/IP-Products/Network-Cameras/DeepinView-Series/IP-Products/Network-Cameras/DeepinView-Series/IP-Products/Network-Cameras/DeepinView-Series/IP-Products/Network-Cameras/DeepinView-Series/IP-Products/Network-Cameras/DeepinView-Series/Network-Cameras/DeepinView-Series/Network-Cameras/DeepinView-Series/Network-Cameras/DeepinView-Series/Network-Cameras/DeepinView-Series/Network-Cameras/DeepinView-Series/Network-Cameras/DeepinView-Series/Network-Cameras/DeepinView-Series/Network-Cameras/DeepinView-Series/Network-Cameras/DeepinView-Series/Network-Cameras/DeepinView-Series/Network-Cameras/DeepinView-Series/Network-Cameras/DeepinView-Series/Network-Cameras/DeepinView-Series/Network-Cameras/DeepinView-Series/Network-Cameras/DeepinView-Seri$

^{278.} https://www.hikvision.com/uk/products/IP-Products/Network-Cameras/DeepinView-Series/ids-2cd7ac5g0-izhs-y--r-/

^{279.} https://www.hikvision.com/uk/products/IP-Products/Network-Cameras/Pro-Series-EasyIP-/ds-2cd2383g2-i-u-/

^{280.} https://www.hikvision.com/content/dam/hikvision/en/brochures-download/product-brochures/ip-product/network-video-recorders/DeepinMind%20SERIES%20NVR%20Brochure.pdf; https://www.hikvision.com/uk/products/IP-Products/Network-Cameras/Pro-Series-EasyIP-/ds-2cd2383g2-i-u-/

Figure 14 pictures Hikvision product deployments in the Old City, East Jerusalem, captured by Amnesty International. The bottom left photo shows a Hikvision device mounted to a surveillance tower, and the top-left image shows a Hikvision device by an Israeli settler home; both models match the marketing images associated with the afore-mentioned list of models.

Pictured in the top-right and bottom-right photos, these devices – mounted against walls of settler-occupied residences in the Old City – are consistent with the images of the 8 MP AcuSense Fixed Turret Network Camera model of Hikvision cameras, ²⁸¹ which are of sufficiently high resolution to enable human and vehicle classification out-of-the-box, according to Hikvision's own marketing materials.



Hikvision product deployments in the Old City, East Jerusalem. © Amnesty International

Hangzhou Hikvision Digital Technology Co. (Hikvision) is a company headquartered in China that develops machine perception, AI, and big data systems to deliver intelligence to their clients. Hikvision products are distributed through its Israeli distributor, HVI Security Solutions Ltd., who claims to be Hikvision's official representation in Israel, and purport to be Israel's largest video surveillance importer, with over 40% market share. According to HVI Security Solutions, its products have been deployed by police and security forces all over Israel. 283

According to the company's marketing materials, Hikvision's DeepinMind/DeepinView technologies also deploy deep learning methods to enable "intelligent" out-of-the-box facial recognition capabilities, claiming an ever-improving accuracy rate of 90%, through continued learning.²⁸⁴ The technology also allows for "multi target-type" detection, allowing for "simultaneous detection of persons, faces,

 $^{281. \}underline{\text{https://www.hikvision.com/uk/products/IP-Products/Network-Cameras/Pro-Series-EasyIP-/ds-2cd2383g2-i-u-/2001} \\$

^{282.} https://hviil.co.il/

^{283.} https://hviil.co.il/about/

 $^{284. \\} https://www.hikvision.com/content/dam/hikvision/en/brochures-download/product-brochures/ip-product/network-video-recorders/DeepinMind%20SERIES%20NVR%20Brochure.pdf$

and vehicles, along with their features".²⁸⁵ Big Brother Watch, a British civil liberties and privacy campaigning organization, reported in February 2022 that a now taken-down video from February 2019, published by Hikvision, also demonstrated that DeepinMind/DeepinView's capabilities include "gender and age recognition".²⁸⁶

Given the identification of cameras branded Hikvision in the Old City of occupied East Jerusalem, an area the Mabat 2000 system covers, Amnesty International is concerned that Hikvision's CCTV products listed above, are potentially being used together with facial recognition tools (FRT).

The increasing presence of these cameras in tandem with illegal settlement activity and demolitions in Silwan presents even greater risks to the Palestinians living under apartheid.

6.4 IMPACT OF SURVEILLANCE ON LIFE AND DISSENT IN EAST JERUSALEM

This section explores the impact of the surveillance tools and techniques as described in the previous section, on everyday life, movement, and protest in East Jerusalem. It describes Palestinians' feeling and experience of being constantly watched, the intimidation that follows, and the resistance communities engage in, despite the greater risk posed to engaging in political activities such as protests.

6.4.1 "ACT NORMAL": DIGITAL REPRESSION IN EAST JERUSALEM

Neda, a recent graduate based in occupied East Jerusalem, told Amnesty International that Damascus Gate has changed radically in the last three or four years, and that what feels like a deliberate intensification of surveillance has taken place in the Old City:

"I used to go there like every afternoon, drink a coffee, drink tea, and enjoy it... after all the things that happened like last year,²⁸⁷ it just all seemed like it's not safe for me anymore. Like, I feel like going there for me... It takes a lot, you know? [Almost] as if I'm going to protest like – seriously! – there, I feel like I'm being watched the whole time."²⁸⁸

Various people whom Amnesty interviewed indicated that the sense of repression was especially exacerbated in Sheikh Jarrah and Silwan in the immediate aftermath of the crackdown on protests in May 2021. Replace Neda is one of six young people who told Amnesty International that they felt their everyday activities in Jerusalem had been increasingly interrupted. Neda was especially concerned about the felt imperative to "act normal", since May 2021, in part given the intensity of surveillance. I'm being watched the whole time. Like I went [to Damascus Gate] maybe three, four times. And just like I acted very normal, you know, like when a policeman is walking next to you and you're like 'no. no, nothing to see here', even when you didn't do anything anyway".

While Neda remains enamored with Damascus Gate, she is extremely concerned about the number of her friends who have been arrested for simply roaming in the area – "because being there for anyone is like you're an activist... Like just being there, just sitting there, you will be considered an activist".²⁹¹

 $285. \underline{\text{https://www.hikvision.com/uk/products/IP-Products/Network-Cameras/DeepinView-Series/}}\\$

286. Big Brother Watch, 'Who's Watching You? The dominacne of Chinese-state owned CCTV in the UK', February 2022, https://bigbrotherwatch.org.uk/wp-content/uploads/2022/02/Whos-Watching-You_The-dominance-of-Chinese-state-owned-CCTV-in-the-UK.pdf

287.2021 evictions and prohibition of Ramadan celebrations in Sheikh Jarrah and at Damascus Gate, respectively.

288. Interview with Neda, 9 May 2022, East Jerusalem.

289. Goodfriend, S., 7amleh, 'The Expansion of Digital Surveillance in Jerusalem and Impact on Palestinian Rights', Fall 2021, https://7amleh.org/storage/Digital%20Surveillance%20Jerusalem_7.11.pdf

290. Interview with Neda, 9 May 2022, East Jerusalem.

291. Ibid.

Indeed, media reports from November 2022 purport that Mabat 2000 was even used to identify a 20-year-old Palestinian engineering student as a "suspect", even before he arrived in the Muslim quarter of the Old City. While Neda doesn't avoid the area, she explains that, in the year prior to her interview in May 2023: "It takes lots of effort for me to go there".

A Palestinian journalist told Amnesty International on 5 February 2023:

"The only space where there are no cameras here is inside the police cabin [at Damascus Gate] where, once the officers spot you and point at you, if they decide they are bored or they don't like you for whatever reason, they can simply stop you, order you in, provoke you and beat you up for no reason. Most Palestinians do not file complaints before Mahash [the internal police investigation unit] because they don't trust the system but even those who do, they have no proof. It is their word against the word of the police."

Sara, Palestinian woman based in Ein al-Luza in Silwan, told Amnesty International that her brother had been approached by a district commander of the police, unknown to him, who asked him, addressing him with full name "where are you going, Mahmoud?" She said the officer used his name to "hint [that they] know who we are!" 294

For Neda (see above), the camera infrastructure across the city, along with news coverage about surveillance, provides a constant, unsettling reminder that the Israeli authorities are always watching: "it gives me a really bad feeling everywhere in the streets... every time I see a camera I feel anxious [and] I don't like it. Like you are always being treated as if you are a target for something. At the checkpoint... at the streets". 295

In Silwan, Amnesty International gathered similar reports to Hebron of cameras pointing at Palestinian homes.²⁹⁶ The Director of the Wadi Hilweh Information Centre, Jawad Siyam, spoke of the feeling of having no privacy as a result of the practice:

"Not only in Wadi Hilweh, there are surveillance cameras directed into people's homes all over Silwan, which has forced people to cover their windows with black blinds, some never open their windows because they don't want to be seen or exposed. These cameras violate our privacy; they follow our every move, but because they are so omnipresent and there is no way to get rid of them, we learned to coexist with them. Coexisting with them does not mean accepting their presence but it means recognizing that they are there and yet somehow try to live our everyday life, despite their presence." 297

6.4.2 SURVEILLANCE AND PROTEST

In February 2018, Israeli forces set up a watchtower checkpoint on the steps of Damascus Gate to suppress the potential of Damascus Gate as a site of public protests and gathering.²⁹⁸ A Palestinian journalist told Amnesty International on 5 February 2023:

292. Yanovsky, R., Ynet, 'Jerusalem's Mabat 2000: Catching terrorists in the act', November 2018, https://www.ynetnews.com/articles/0,7340,L-4727621,00.html

293. Interview with Journalist, 5 February 2023, East Jerusalem

294. Interview with Sara, 19 July 2022, East Jerusalem.

295. Interview with Neda, 9 May 2022, East Jerusalem.

296. Interview with Nadera Shalhoub-Kevorkian, 10 May 2022, Armenian quarter, Old City of East Jerusalem; Chapter 3, 'Israel in the Bedrooms: Citizenship and Entry Law', in Shalhoub-Kevorkian, N., May 2015. 'Security Theology, Surveillance and the Politics of Fear', Cambridge University Press.

297. Given on 3 February 2023 to Amnesty International researchers

298. Abu Sneineh, M., Middle East Eye, 'Israel installs checkpoint at entrance to Damascus Gate', February 2018, https://www.middleeasteye.net/news/israel-installs-checkpoint-entrance-damascus-gate#:~:text=Israel%20completed%20the%20installation%20of,Palestinian%20residents%20of%20the%20city.

"With the exception of the 2021 April-May uprising... there is no doubt that the number of protests on the steps [of Damascus Gate] has significantly gone down since the erection of the checkpoint and the watchtower. Those who demonstrate know that, even if they don't get detained on the spot, their faces will be captured by the cameras and they can be arrested later or banned from entering Al-Aqsa for instance"

"Israel uses technology as a means of controlling us, of deterring us not only from protesting but also from living our normal life. Even if you are doing nothing political, when you see all these cameras and the checkpoint, you do not feel safe. You feel that this space which has always been your favourite place in all of Jerusalem no longer belongs to you to the point that the Israeli municipality even changed the name of the area and renamed it after two Israeli soldiers. Parents warn their children against going to Damascus Gate, against doing anything that may arouse suspicion. Sometimes simply sitting on the steps may be enough for you to get into trouble." 299

He describes that "Palestinians look at these cameras and treat them as yet another soldier chasing them from above and to resist it, whenever there are protests you see that one of the first things that youth do is to smash surveillance cameras. They know that Israeli forces will re-install new ones, more developed cameras, but [this is] their own way of expressing their rejection of being surveilled and monitored non-stop."

In spite of the surveillance and police repression, Jawad explains that young people continue to protest forcible transfer in Silwan. He speaks, however, to fears of being identified for protesting too close to the City of David settlements. According to Jawad:

"The youth have continued to protest forcible transfer in Silwan despite the cameras and despite police repression, but we know for a fact that the police might avoid conducting arrests during the protest itself, only to come back a few days later and launch violent arrest raids, especially night raids, because they could identify the faces of protesters. Of course this has made some people fear participating in protests, especially protests close to the "City of David" settlement, but sometimes merely being in the vicinity of protests or confrontations will lead to people being summoned for interrogation by the police and being asked to inform on throw rocks. The constant surveillance, the heavy police presence, and the settler security guards who regularly harass us,... these have one aim to make life in Silwan unbearable. Okay, we cannot take over your home, your home has not been demolished or taken over by settlers yet, fine, we have another tactic to drive you out, by making you feel trapped, traced, that you even have to count your footsteps. This is the message that surveillance by police and settler sends."

Sara, who was born and continues to live in Ein al-Luza neighbourhood in Silwan, told Amnesty International about the changing landscape in Silwan:

"[T]he [Israeli] occupation forces set [surveillance] cameras all the way down the street. For example, cameras used to be mounted to the pole at the junction where you got off the bus, but [Palestinian] young men burned them down because they used to detect them during the clashes [with the Israeli occupation forces]".³⁰⁰

Sara emphasized how the invasive nature of the camera surveillance, which she describes as having increased since the crackdowns on the Sheikh Jarrah protests, was making it difficult to go about daily life even inside their own homes. She explained that the camera pole in Bir Ayub, near Ein al-Luza, which activists had attempted to dismantle and burn down on 28 July 2021,³⁰¹ is the "root cause of all

^{299.} Interview with Journalist, 5 February 2023, East Jerusalem

^{300.} Interview with Sara, 19 July 2022, East Jerusalem.

^{301.} Yemen press Agency, 'Palestinian youths burn pole mounted surveillance cameras in Silwan', July 2021, https://en.ypagency.net/230279/

the confrontations", noting that there had been a recent expansion of surveillance cameras, including surveillance towers in particular. She explained how the Bir Ayub tower had made it difficult for Palestinian families to have privacy in their own homes:

"You must've heard of the [surveillance] camera pole of Bir Ayub... the surveillance cameras there were also burned down. When the cameras were set up, if we stood by the window, we could be detected as if the cameras were just in our house. With cameras watching our every move, we were put in a terrible position. We couldn't feel at home in our own house and had to be fully dressed all the time... Exactly, I couldn't stay in my home clothes if I needed to peek out the window to see what was going on. I had to count to 10 before uttering a word or making a move. Say, I needed to warn the youth – because our home overlooks a clash point: we live in the middle of the action, and all the confrontations are happening just outside our door. We are always subject to Israeli military break-ins. The cameras would pick you up if you dared to get close to the window. After the cameras had been burned down, though, life became way easier."

Sara describes how the community sounded the alarm on the increasingly invasive nature of Israeli surveillance in Silwan when they started to see a pattern in the Israeli security forces' use of surveillance as a harassment tactic. For example, officers would regurgitate personal information related to, for example, a detained individual's job and daily activities, including their movement. "The Israeli occupation forces told my brothers the exact time they left the house. Similarly, once my cousin left home, they contacted him and asked where he was going before coming to [arrest] him at half past two in the morning. I mean, they literally follow our every step."



Surveillance tower in the centre of the Bir Ayoub neighbourhood in Silwan. © Amnesty International

Amnesty International researchers were able to observe the burnt surveillance pole during a visit to Bir Ayoub in May 2022. According to media reports, the incident took place on 28 July 2021.303 Speaking to a witness and tour guide in Silwan, Amnesty International researchers were told about the impact of this surveillance on the daily lives of the neighbourhood's residents. Pointing to burn marks at the bottom of the surveillance poles, he explained that these were caused by Palestinian residents' attempts to remove the poles in protest at their constant surveillance and breach of privacy: "Several people were arrested for being responsible for this action, [they] feel that their life is controlled and watched all the time by the Israeli intelligence and security".304 He explained that the cameras – even smaller ones operated from settlers' homes – are sometimes pointed towards Palestinian homes "which means no more privacy for the person being watched".305

302. Interview with Sara, 19 July 2022, East Jerusalem.

303. Yemen press Agency, 'Palestinian youths burn pole mounted surveillance cameras in Silwan', July 2021. https://en.ypagency.net/230279/

304. Interview with Habib, 8 May 2022, Silwan.

305. Ibid.

6.5 SUMMARY OF MAIN FINDINGS ON FACIAL RECOGNITION SURVEILLANCE IN HEBRON AND EAST JERUSALEM

Palestinians in the occupied West Bank, including East Jerusalem, live under a harsh military occupation. Those in the rest of the occupied West Bank are subject to draconian military orders. They are subject to remote biometric registration in at least three ways:³⁰⁶

- Upon arrest and detention: Human rights defenders and activists have reported officials taking images of their irises and faces, along with their fingerprints upon detention.
 According to B'tselem and Breaking the Silence, these biometric registrations aid in further populating the Wolf Pack database.³⁰⁷
- Through direct solicitation: Biometric registration is part and parcel of the permit regime. Additionally, testimonies from Israeli soldiers collected by Breaking the Silence and provided to Amnesty International, footage from B'tselem, as well as media reports have shown that biometric capture is also carried out by soldiers using the Blue Wolf app and furthermore takes place if Palestinians are unknown to the Red Wolf system at checkpoints.
- Through persistent surveillance such as in the the streets and homes of Palestinians in H2 and occupied East Jerusalem. In Hebron, Red Wolf persistently captures the faces of Palestinians who walk near checkpoints, registering them for future identification, in addition to the existing CCTV surveillance infrastructure in the streets. In the Old City of occupied East Jerusalem, the Mabat 2000 system connects CCTV cameras across the city to the Israeli police, giving them unprecedented powers of facial recognition surveillance. In both areas, the supporting infrastructure includes cameras in the streets surrounding checkpoints, cameras installed on settler buildings, internal checkpoints and military towers, with cameras at times believed to be pointing directly into Palestinian homes.

The constant surveillance Palestinians face means they not only live in a state of insecurity, but they are also at risk of arbitrary arrests, interrogation, and detention. This sense of repression was especially exacerbated in Hebron, as well as in the Sheikh Jarrah and Silwan neighbourhoods of occupied East Jerusalem, in the immediate aftermath of the crackdown on protests in May 2021. Checkpoints in the city of Hebron employ facial recognition technology (FRT) to record the biometric data of people who move around the city. Notably, the technology records individuals' information on the surveillance system even if they have not knowingly or consensually registered with it. In occupied East Jerusalem, Israeli police has expanded its city-wide surveillance system across the Old City. There, an evergrowing network of cameras supports a vast facial recognition system, Mabat 2000. The system enables Israeli authorities to identify protesters and keep Palestinians under constant observation, even as they go about their ordinary daily activities. Such systems have expanded alongside illegal Israeli settlements, which have encroached upon Palestinian neighbourhoods in the Old City and other areas of occupied East Jerusalem.

This has led to Palestinians having an omnipresent feeling of being watched and having no privacy. The surveillance reaches potentially as far as into Palestinians' homes, as several testimonies describe the cameras being positioned to point at windows and doors. The sprawling surveillance network leaves little if any space for Palestinians to feel safe in everything from going about ordinary everyday.

^{306.} Based on activist testimonies gathered from activists in Silwan, East Jerusalem and Hebron; whistleblower testimonies from former Israeli army soldiers; and expert testimonies from academic researchers looking at surveillance in the OPT.

^{307.} Breaking the Silence, 'The military wants to enter the people into its system for control', 2020, https://www.breakingthesilence.org.il/ testimonies/database/424318, courtesy of Breaking the Silence; Breaking the Silence interviews conducted on 11 May 2022.

activities, to maintaining a social life and participating in protest. Palestinians in Hebron also have no choice but to give up their biometric data in in order to be able to move around their own city. The fear of violence and uncertainty is evident in Palestinian fears of crossing checkpoints in Hebron, which is further exacerbated and entrenched by the dehumanizing experience of having basic freedoms governed by facial recognition whether through Blue Wolf, Red Wolf or Mabat 2000. Out of fear of being watched, identified and potentially harassed, some areas of Hebron have become de-facto no-go zones, enforced by surveillance infrastructure.

These technologies also contribute to the chilling effect around protests and assemblies in the OPT. The fear of violence from Israeli security forces, during an assembly or protest, is being extended beyond contexts of protests, as Palestinians must now contend with the possibility that a facial recognition system can be used to identify and track them down for having participated in or being in the vicinity of a protest.

7. HUMAN RIGHTS CONSEQUENCES OF BIOMETRIC SURVEILLANCE UNDER CONDITIONS OF APARTHEID

This chapter assesses the findings of surveillance and facial recognition in Hebron and East Jerusalem as documented in Chapter 6 against the international human rights standards that have been discussed in Chapter 4, including: the right to privacy under international law, and the limited circumstances and manner in which this right may lawfully be restricted (the legality, necessity and proportionality tests); the right to equality and non-discrimination, as well as the rights to freedom of expression, association and peaceful assembly under the ICCPR; the right to freedom of movement under ICCPR and the Apartheid Convention, and; finally, business and human rights standards under the UN Guiding Principles and the OECD Guidelines.

7.1 FREEDOM OF MOVEMENT

The Red Wolf system features automated biometric registration, and interacts, pulls data from, and feeds information back into the Wolf Pack and Blue Wolf image and informational registries consisting exclusively of Palestinians, subsequently determining the ability of Palestinians to enter or exit their neighbourhoods. At checkpoints in Hebron, Red Wolf is used to restrict the movement of Palestinians in the area. Severe, long-term and sweeping violations of freedom of movement are among the key strategies through which Israel fragments, dispossesses and controls Palestinians and their land. As Amnesty International has also described previously, 308 Israeli authorities justify on security grounds many of their hostile policies, including surveillance and restrictions on movement. However, these restrictions are unjustifiable and discriminatory.

The restrictions are imposed on the basis of Palestinian ethnicity; Jewish Israelis are not restricted in similar ways. The restrictions cannot be justified by the provision, under international humanitarian law,

308. Amnesty International, 'Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity', February 2022, https://www.amnesty.org/en/documents/mde15/5141/2022/en/

that an occupying power may (and in some cases must) treat the nationals of the occupied territory differently than its own. Such differential treatment is prohibited when it is intended to maintain a system of apartheid, contributes to war crimes or other violations of peremptory norms of international law.³⁰⁹ The checkpoints and restrictions affect Palestinians exclusively, including but not limited to their ability to access healthcare, work, education, family life and freedom of peaceful assembly. This renders travel inside the OPT difficult, time-consuming and subordinated to unlawful aims of Israeli authorities that favour Jewish settlements and their associated infrastructure.³¹⁰

Israeli authorities have pursued policies that deliberately discriminate against Palestinians over a prolonged period and in a particularly cruel manner which has no reasonable basis in security, but which can be explained much more readily as consequent to an intent to oppress and dominate the Palestinian people and exploit their resources. ³¹¹ Given the centrality of freedom of movement to the realization of almost every basic right for Palestinians in the OPT, ³¹² checkpoints in the OPT have become a particularly fraught space when it comes to the realization of the rights of Palestinians. ³¹³ The restriction on movement with the use of FRT at checkpoints is not temporary or limited, but systematic and discriminatory. Red Wolf and the checkpoints it serves therefore constitute an unjustifiable and disproportionate restriction on the freedom of movement.

7.2 RIGHT TO EQUALITY AND NON-DISCRIMINATION

Arbitrary security procedures, which include surveillance and facial recognition in the OPT, discriminately apply only to Palestinians in the West Bank and Gaza Strip. Intrusive surveillance and facial recognition in the OPT do not apply to Israeli citizens, including settlers, or most foreign nationals, ³¹⁴ who generally can move freely between the West Bank and Israel. Given the broad targeting of Palestinians as a distinct racial group, and the reliance on databases consisting exclusively of Palestinian data, such as Wolf Pack, and the registries underpinning Blue Wolf and Red Wolf, the use of these technologies violates the right to equality and non-discrimination. Facial recognition threatens the rights of racialized communities, who are at greater risk of false identification and arbitrary arrests. But even when it correctly identifies someone, facial recognition threatens to intensify existing forms of discriminatory policing when it is used to prevent people accessing fundamental rights and essential goods and services.

7.3 RIGHT TO PRIVACY

The systems covered in this report, in combination with supporting hardware infrastructure, can be considered tools of mass surveillance, and are therefore incompatible with the right to privacy. Arbitrary interference with the right to privacy ensuing from the development, use, sale and export

309. See Section 4.7 of Amnesty's Amnesty International, 'Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity', February 2022.

310. Ibid.

311. Amnesty International, 'Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity', February 2022. https://www.amnesty.org/en/documents/mde15/5141/2022/en/.

 $312.B'Tselem, 'Ground to a Halt: Denial of Palestinians' Freedom of Movement in the West Bank', August 2007, \underline{btselem.org/download/200708_ground_to_a_halt_eng.pdf}$

313. Under international humanitarian law, the occupying power has a duty to ensure the needs of the occupied population are met: "The authority of the legitimate power having in fact passed into the hands of the occupant, the latter shall take all the measures in his power to restore, and ensure, as far as possible, public order and safety, while respecting, unless absolutely prevented, the laws in force in the country".

314. with the exclusion of some spouses of Palestinian residents who are refused family unification and residence status, and as a result face arrests at checkpoints because of lack of documentation.

of facial recognition technologies for identification is a human rights violation both in peacetime and in situations of armed conflict including military occupation. Additionally, the use of FRT for mass as well as targeted and discriminatory surveillance in situations of military occupation is contrary to the provisions of international humanitarian law for the protection of the occupied population. The surveillance infrastructure in Hebron and occupied East Jerusalem results in unfettered use of surveillance in public spaces, 315 and therefore fails to meet the necessity and proportionality tests.

7.4 RIGHTS TO FREEDOM OF EXPRESSION, ASSOCIATION AND PEACEFUL ASSEMBLY

From the findings of this report it becomes clear that by self-policing in the face of surveillance, Palestinians may also choose to refrain from exercising their right to freedom of peaceful assembly in order to avoid repercussions. In Silwan and the Old City of occupied East Jerusalem, an ever-increasing network of cameras are reported to power a vast facial recognition system, enabling Israeli authorities to keep Palestinians under constant observation, even as they go about everyday activities. Almost all of those interviewed for this research were deeply aware of the existence of the cameras and how they are being used, and adjust their daily routines accordingly. Nevertheless, it was also relayed that, despite the surveillance, people still tried to live their lives and do their jobs, albeit with heightened unease.

The use of facial recognition technology may therefore foreseeably deter people from expressing legitimate concerns and grievances, including by participating in protests, for fear of being identified automatically and from a distance and subjected to arrest, detention or reprisals.

7.5 AUTOMATED APARTHEID

The continued expansion of surveillance in occupied East Jerusalem, an illegally annexed city, by the state of Israel further violates the human rights of Palestinians, and facilitates the expansion of illegal settlements, through the digital cementation of its domain of control. This vast expansion of surveillance is illegitimate, stemming from the illegality of the annexation as well as of the settlements, and is especially exacerbated owing to the incompatibility of the technologies deployed with international human rights law and standards as described in Section 7.1 to 7.4 of this report.

Further, Palestinians in Hebron are kept under surveillance under the rationale of "security" for settlers in H2. The presence of settlers in Hebron remains illegal, rendering the security justification illegitimate and the interference in Palestinians' rights to privacy and freedom of movement cannot be justified. The deployment of remote biometric surveillance tools that restrict freedom of movement in the context of a prolonged military occupation, illegal settlement and annexation entrenches the segregation and fragmentation of the Palestinian people, and ultimately helps maintain and strengthen Israel's cruel system of apartheid in the OPT. These tools contribute to the commission of prohibited acts constituting the crime against humanity of apartheid, as well as to war crimes.

315. ICRC, Commentary to Article 27 of the Fourth Geneva Convention http://www.icrc.org/ihl.nsf/COM/380-600032?OpenDocument.

316. Amnesty International, 'Israel/OPT: 10 things you need to know about "annexation", July 2022, https://www.amnesty.org/en/latest/news/2020/07/israelopt-10-things-you-need-to-know-about-annexation/

7.6 HUMAN RIGHTS RESPONSIBILITIES OF TKH SECURITY AND HIKVISION

As explained in section 4.10 of this report, companies have a responsibility to respect human rights, meaning "that they should avoid infringing on the human rights of others and should address adverse human rights impacts with which they are involved" under the UN Guiding Principles.³¹⁷

The fact that Israel controls every aspect of Palestinians' lives under occupation and that Palestinians' ability to challenge their oppression is extremely limited, means that facial recognition technologies deployed in the context of a prolonged military occupation and apartheid compound the risk to the rights to privacy and to equality and non-discrimination, beyond these technologies' inherent incompatibilities with human rights. This report has established that Israel's use of FRT violates a range of basic rights including the rights to equality and non-discrimination, freedom of peaceful assembly, freedom of expression and freedom of movement. As a technology that is critical in governing who can and cannot exercise their freedom of movement, products that service facial recognition requirements in the OPT carry the risk of supporting and benefiting from Israel's system of apartheid and contributing to the commission of this crime against humanity as well as to war crimes.

TKH Security and Hikvision must adopt adequate procedures and codes of conduct in accordance with international standards to ensure that their own activities in Israel and the OPT are not contributing to or benefiting from the system of apartheid. These companies must also address adverse human rights impact when it occurs and cease relevant activities if it cannot be prevented. TKH Security and Hikvision must also respect international humanitarian law applicable in situations of military occupation which prohibits the transfer of the civilians of the occupying power into the occupied territory and the unlawful appropriation and destruction of property of the occupied population, a course of conduct which constitutes war crimes.

Even in the absence of the Mabat 2000 facial recognition system, the out-of-the-box facial recognition capabilities of Hikvision products, utilised in the context of illegal annexation, settlement and demolitions, means that the company is at risk of enabling the further entrenchment of apartheid. Businesses whose activities and equipment contribute to the maintenance, development and expansion of settlements may expose themselves, or their individual directors and managers, to the risk of prosecution for complicity in war crimes. Where surveillance products are not considered dualuse, and companies are supplying fully-fledged facial recognition products, they must immediately cease development, sales, and export of these products to remain in line with international human rights standards.³¹⁸

Amnesty International wrote to TKH Security and Hikvision and asked the companies what human rights due diligence procedures they had undertaken to prevent their products being used by Israeli forces to commit violations in Israel and the Occupied Palestinian Territories (OPT). In the letters, ³¹⁹ Amnesty International shared its concerns that the companies' hardware identified in East Jerusalem could be used for facial recognition and that the technology has been subject to much public and legal outcry based on its incompatibility with human rights. Amnesty International also asked the companies how the particular context of apartheid might have shaped the companies' human rights due diligence

 $^{317.} Foundational\ Principle\ 11\ of\ the\ UNGP: \underline{https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf$

^{318.} Amnesty International, 'Open letter calling for a global ban on biometric recognition technologies that enable mass and discriminatory surveillance', 7 June 2021, https://www.amnesty.org/en/documents/doc10/4254/2021/en/

^{319.} Letter to TKH Security Solutions initially issued on 25 January 2023; letter to Hikvision issued on 24 February 2023

considerations. While Amnesty International has yet to receive a response from Hikvision at the time of publication, TKH Security's response did not provide any detail on its human rights due diligence process.

Amnesty International also contacted the distributors of TKH Security and Hikvision, respectively, namely Mal-Tech and HVI Security Ltd., to inquire about their relationship with Israeli security forces and any human rights due diligence process undertaken. Amnesty International has not at the date of publication of this report received a response from either of these distributors.

Amnesty International considers that TKH Security and Hikvision failed to conduct adequate human rights due diligence about their business operations in the OPT, in particular occupied East Jerusalem. According to the information available to Amnesty International at the time of publishing this report, TKH Security and Hikvision have not to date carried out a public, transparent and ongoing human rights impact assessment to demonstrate an awareness of the adverse human rights impacts that their business may enable, or to which their products might be linked, to ensure that they do not entrench, support or perpetuate discrimination against Palestinians or crimes against humanity. Appropriate human rights due diligence, especially considering the widely-documented context of apartheid in the OPT, would have indicated that any deployment of their surveillance products by either Israeli security forces and or settlers, would likely lead to the violation of the rights of Palestinians. TKH Security and Hikvision must now formulate public plans and commitments to ensure their products are not used to maintain apartheid, or risk being held complicit in the perpetuation of the system. They must also ensure their products are not used to commit war crimes or crimes against humanity

On 24 February 2023 Amnesty sent a letter with questions to Hikvision, asking about the relationship of Hikvision with Israeli security forces. Amnesty has not received a reply before the publication of this report. On 25 January 2023, Amnesty also sent a letter with questions to TKH Security Solutions, asking about the relationship of TKH Security with Israeli security forces.

The company's CEO responded by stating:

"TKH Security Solutions works with over 500+ distributors, of which Mal-Tech was one; TKH Security Solutions has not done any business with Mal-Tech in the past few years, nor do we have access to the devices you specified in your letter, nor the data. Also, TKH Security Solutions does not have a direct business relationship with the Israeli security forces."

Even in cases when a company has many clients or no direct relationship with the abuser per se, the human rights due diligence standards as set out by the UN Guiding Principles on Business and Human Rights still stand, and a company can still aid to human rights violations, or be operating with a risk to human rights. As referenced in section 4.10, the UNDP Guide on human rights due diligence in conflict-affected contexts dictates that due diligence monitoring must take place at regular intervals, including prior to new activities or changes to activities, in response to changes in the environment, and throughout the lifecycle of any operation.³²⁰ Where companies identify that they have, or may in future, cause or contribute to human rights abuses, they must cease activities linked to these.

Amnesty International requested a follow up response to clarify why the relationship between Mal-Tech ended, the nature of any TKH Security-owned products used by Israeli security forces, its human rights due diligence procedures, and whether it had or intended to make a public commitment not to develop or sell facial recognition products, on 22 February 2023. Finally, on 24 April 2023, Amnesty shared its findings and conclusions with TKH Security. The company's CEO responded on 28 April 2023, stating:

"We re-confirm that TKH Security Solutions is committed to high standards of ethics and integrity. We [condemn] all forms of human rights abuse. TKH Security Solutions works with over 500+ distributors, of which Mal-Tech was one. TKH Security Solutions has not done any business with Mal-Tech since August 28th, 2019. We do not have access to the devices you specified in your letter, nor to the data. Also, TKH Security Solutions does not have a direct business relationship with the Israeli security forces."

The company's CEO responded once more on 30 April 2023, reiterating the response from 28 April 2023. At the time of publication, TKH Security has not answered Amnesty International questions about the nature of any TKH Security-owned products used by Israeli security forces, including any indirect relationships, its human rights due diligence procedures, why it ended its business relationship with Mal-Tech and whether it had or intended to make a public commitment not to develop or sell facial recognition products.

8. CONCLUSION AND RECOMMENDATIONS

8.1 CONCLUSION

This report has established that, by using FRT and other biometric technologies to restrict Palestinians' right to freedom of movement, the Israeli authorities have introduced powerful new tools to fragment, segregate and control Palestinians in the OPT, and ultimately, to enforce their system of apartheid. They are achieving this through 1) the establishment of the supporting physical infrastructure to expand the reach of their control; 2) the creation of exclusively Palestinian databases for purposes of surveillance, along with; 3) the use of facial recognition software for mass and targeted discriminatory surveillance; and 4) large-scale segregation and other harms resulting from the use of these technologies. In combination, these practices systematically violate Palestinians' human rights.

Israeli authorities are using these tools to entrench their system of oppression and domination over Palestinians in the OPT. This has implications for the ways in which apartheid is maintained.

Firstly, biometric surveillance entrenches restrictions on freedom of movement, bolstering existing physical restrictions, making them more permanent. As checkpoints govern the ability of Palestinians in Hebron's H2 district to travel outside their homes, Israel is able to contain Palestinians in space, using domination by way of military force and surveillance tools such as Red Wolf and Blue Wolf to deter resistance. Freedom of movement, which is a precursor to the realization of so many rights such as work, education, an adequate standard of living, family life, and health, is constantly subject to arbitrary restrictions. As described by military testimony in this report, arbitrary searches, registrations and look-ups using Blue Wolf have been documented to have interfered with the daily activities of Palestinians in H2.

Secondly, surveillance is part of a coercive environment which routinely make their lives unbearable, which is aimed at forcing Palestinians to leave areas of strategic interest to Israeli authorities. Through the Mabat 2000 system and the further expansion of CCTV, for example, Israeli police subject Palestinian neighbourhoods of occupied East Jerusalem to constant observation. In areas such as Silwan, surveillance has increased in tandem with illegal settler activity, which continues to inflict severe damage to Palestinian homes and communities. As communities in occupied East Jerusalem resist settlement expansions and demolitions of Palestinian homes, their participation in protests in turn exposes them to further surveillance.

Facial recognition is therefore one of the measures of discrimination, segregation and oppression that Israel imposes on Palestinians as part of its system of apartheid.

The technology encroaches on the privacy of Palestinians without their consent, curating a database of Palestinians to be deployed at checkpoints primarily used by Palestinians, to the effect of stifling their ability to move and assemble freely. In Hebron and occupied East Jerusalem, the rights to freedom of movement, privacy, equality and non-discrimination, and freedom of peaceful assembly are violated by a cruel apartheid system, bolstered by increasingly advanced surveillance systems.

8.2 RECOMMENDATIONS

TO THE STATE OF ISRAEL

- End the system of apartheid by dismantling measures of discrimination, segregation and
 oppression currently in place against the Palestinian population, and undertake a review of all
 laws, regulations, policies and practices that discriminate on racial, ethnic or religious
 grounds, and repeal or amend them to bring them into line with international human rights
 law and standards, in particular Israel's obligation to respect the principle of nondiscrimination under international law.
- Immediately cease the deployment of facial recognition technologies for identification against Palestinians in the OPT, including at checkpoints. Israel must end mass surveillance and discriminatory targeted surveillance.
- Ensure that any rights violations stemming from the use of unnecessary and disproportionate artificial intelligence-driven surveillance tools, such as facial recognition, are investigated and remedied effectively.
- Ensure Palestinians enjoy their right to freedom of movement without discrimination of any kind, by ending the regime of closures in its current form, as well as other forms of restrictions on freedom of movement of people and goods, that result in collective punishment. Ensure that any restrictions on movement are only imposed if they are absolutely necessary to respond to a specific security threat or for other compelling reasons, are non-discriminatory and proportionate in terms of their impact and duration, and do not target whole communities.
- Immediately cease all settlement activity as a first step to dismantling all Israeli settlements
 and related infrastructure in the West Bank including occupied East Jerusalem and relocating
 Israeli civilians living in such settlements outside the OPT. Immediately end policies and
 practices that confer privileged access to resources for Israeli settlers in the West Bank
 including occupied East Jerusalem.

TO OTHER STATES AND REGIONAL ACTORS in particular those that enjoy close diplomatic relations with Israel, including China, the USA, the European Union and its member states, and the UK.

- Regulate companies domiciled in their jurisdictions to ensure they do not provide any surveillance technology that can be used by Israel to maintain its apartheid system over the Palestinians and commit inhuman and inhumane acts, and war crimes, including the maintenance of illegal settlements in occupied territory.
- Enact legislation to ban the use, development, production, sale and export of remote biometric recognition technology for mass surveillance as well as remote biometric or facial recognition technology used for identification purposes used within their own jurisdictions by both state agencies and private sector actors, as technologies that are fundamentally incompatible with international human rights law.

- Pending the ban on such technology, as recommended by the UN Special Rapporteur on contemporary forms of racism, racial discrimination, xenophobia and related intolerance, take "swift and effective action to prevent and mitigate the risk of the racially discriminatory use and design of emerging digital technologies, including by making racial equality and non-discrimination human rights impact assessments a prerequisite for the adoption of systems based on such technologies by public authorities. These impact assessments must incorporate meaningful opportunities for co-design and co-implementation with representatives of racially or ethnically marginalized groups. A purely or even mainly voluntary approach to equality impact assessments will not suffice; a mandatory approach is essential". 321
- In no way support any system of apartheid or render aid or assistance to maintaining such a regime, and cooperate to bring an end to this unlawful situation.
- Immediately suspend the direct and indirect supply, sale or transfer, including transit and shipment, to Israel of all weapons, munitions and other military and security equipment, and provision of training and other military and security assistance. Use all political and diplomatic tools at their disposal to ensure Israeli authorities implement the recommendations outlined in this report and ensure that human rights are central to all bilateral and multilateral agreements with the Israeli authorities, including by exercising due diligence to ensure that these do not contribute to maintaining the system of apartheid.

TO TKH SECURITY & HIKVISION

- Commit to respect human rights and put in place robust human rights due diligence policies
 and processes which cover human rights risks and abuses connected with the use of
 company products, services and supply chain.
- TKH Security and Hikvision must formulate public plans and commitments to ensure their
 products cannot be used to further Israel's apartheid, or risk being held complicit in the
 perpetuation of the system.
- Businesses must ensure that their distributors only sell to human rights compliant customers. This duty applies in this case regardless of the precise contracts that link TKH Security, Hikvision, and the Israeli military or security forces.
- Stop supplying technologies that are used by the Israeli state to impose a system of apartheid
 and to commit violations of international humanitarian law and human rights violations,
 constituting crimes against humanity and war crime against Palestinians in the OPT, through
 the maintenance of illegal settlements in the OPT.
- Make public commitments to cease the creation, development, sale and use of facial recognition and remote biometric recognition technologies that enable mass surveillance and discriminatory targeted surveillance.
- Issue transparency reports that detail all their public contracts (including ones that are suspended, ongoing, or in development) for the provision of these technologies.

^{321.}United Nations Human Rights Council, Racial discrimination and emerging digital technologies: a human rights analysis: report of the Special Rapporteur on Contemporary Forms of Racism, Racial Discrimination, Xenophobia and Related Intolerance, UN Doc A/HRC/44/57, 18 June 2020, https://digitallibrary.un.org/record/3879751 accessed 2 February 20

TO BUSINESSES SELLING FACIAL RECOGNITION PRODUCTS including CCTV hardware that can be used in combination with third party facial recognition software

- Immediately cease the production of facial recognition and remote biometric recognition technologies that enable mass surveillance and discriminatory targeted surveillance and delete any illegitimately acquired biometric data used to build databases and any models or products built upon such data.
- Identify, prevent, mitigate, and account for the human rights impact of company operations, products, and services, as well as supply chain, before, during and after transfer. The implementation of human rights policies and processes through due diligence needs to be on-going, proactive and dynamic, covering all aspects of the business relationship and product lifecycle (including end-use). Risks can change rapidly in countries that lack a legal framework that adequately protects human rights or countries that are experiencing armed conflict including military occupation. Digital surveillance companies must have policies and processes in place that allow them to adapt and respond to potential and emerging human rights threats. Expectations of compliance with human rights law need to be built into the way commercial contracts are drawn up and then tracked through product transfer and use.
- Enable effective remedies where necessary. If a company's product does contribute to human
 rights violations or serious violations of international humanitarian law, the company must
 endeavour to provide or facilitate prompt and effective remedy, including through reparations
 such as restitution, compensation, rehabilitation, satisfaction and guarantees of nonrepetition.

TO THE UNITED NATIONS GENERAL ASSEMBLY

- Pass a resolution supporting a ban on the use, development, production, sale and export facial recognition technologies that are used for mass and discriminatory targeted surveillance, by both state agencies and private sector actors.
- As recommended by the UN Special Rapporteur on contemporary forms of racism, racial discrimination, xenophobia and related intolerance, pass a resolution calling upon member states to take "swift and effective action to prevent and mitigate the risk of the racially discriminatory use and design of emerging digital technologies, including by making mandatory racial equality and non-discrimination human rights impact assessments a prerequisite for the adoption of systems based on such technologies by public authorities. These impact assessments must incorporate meaningful opportunity for co-design and co-implementation with representatives of racially or ethnically marginalized groups."
- Re-establish the Special Committee against Apartheid, which was originally established
 under UN General Assembly Resolution 1761 (XVII) of 6 November 1962, to focus on all
 situations, including Israel and the OPT, where the serious human rights violation and
 crime against humanity of apartheid are being committed and to bring pressure on those
 responsible to disestablish these systems of oppression and domination.

ANNEX 1

Non-exhaustive list of some of the Hikvision products identified in Silwan, East Jerusalem, courtesy of Amnesty's research partners at the Post-Visual Security project at Tampere University.

The identification, cartographic positioning and counting of CCTV cameras in Wadi Hilwe and Wadi al-Rababa areas of Silwan was undertaken through recurring on-the-ground surveys along the main roads and small alleyways between 2021- early 2023. During these surveys, we systematically walked through the site and once a camera was identified a close-up image of it was taken along with a wide-angle image of the camera and its surroundings. On most occasions, this wide-angle view was taken with a phone-camera so that GPS information of the location could be registered. The position of the camera and its directionality was then marked on a printed map with a high-resolution satellite image. This location and orientation information was there to help with the cartographic stage of the survey.

Where the camera is accessible up close and clearly visible, documentation of the manufacturer or installer labeling on the CCTV system would be recorded.

Notes and surrounding image/s would include information relating to the type and context of architecture to which the camera was fixed. For example, identifying whether the cameras are positioned on infrastructure of the IAA archaeological excavations, on structures owned by Elad, at entrances or peripheries of private settler homes or alternatively positioned at the entrances to Palestinian homes.

The cartographic process includes 3 stages:

- Importing camera positions into ArcGIS using the georeferenced information on the photographs.
- Manually identifying the camera locations seen in the photographs on the satellite base image
 and adding a feature point per camera location. This positioning stage includes refined lat/
 long as well as an estimated Height measurement from the street surface level.
- Each camera location point is then assigned (where possible to verify by sight) a Classification of the camera type, manufacturer and potential (estimated) installer/owner.

ID	Camera Type	Lat	Long
1	HIK vision	31.77119663	35.23568067
2	HIK vision	31.77115627	35.23579002
3	HIK vision	31.77173012	35.23286977
4	HIK vision	31.77297126	35.23274242
5	HIK vision	31.77068263	35.23547761
6	HIK vision	31.77072069	35.23550772
7	HIK vision	31.77108584	35.23540603
8	HIK vision	31.7706255	35.23335252
9	HIK vision	31.77063196	35.23338154
10	HIK vision	31.77063641	35.23339005
11	HIK vision	31.77063915	35.23338965
12	HIK vision	31.7707692	35.23337473
13	HIK vision	31.77068075	35.23338028
14	HIK vision	31.77070483	35.23338234
15	HIK vision	31.76896717	35.22971032
16	HIK vision	31.7714467	35.23364862
17	HIK vision	31.77144869	35.23364738
18	HIK vision	31.77144433	35.23365118
19	HIK vision	31.774411	35.23415605
20	HIK vision	31.77440734	35.23415741
21	HIK vision	31.77175277	35.23438299
22	HIK vision	31.77175138	35.23438384
23	HIK vision	31.77170804	35.23442193
24	HIK vision	31.77214387	35.23436671
25	HIK vision	31.77214701	35.23437933
26	HIK vision	31.7721503	35.23438202
27	HIK vision	31.77275264	35.23455634
28	HIK vision	31.77305158	35.23489919
29	HIK vision	31.77287066	35.23265834
30	HIK vision	31.77210495	35.23663404
31	HIK vision	31.77210869	35.23663448
32	HIK vision	31.77152415	35.2368234
33	HIK vision	31.77153178	35.23682043
34	HIK vision	31.77307028	35.23676711
35	HIK vision	31.77307134	35.23677631
36	HIK vision	31.77275427	35.23672296
37	HIK vision	31.77308651	35.23600011

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AUTOMATED APARTHEID

HOW FACIAL RECOGNITION FRAGMENTS, SEGREGATES AND CONTROLS PALESTINIANS IN THE OPT

The constant surveillance Palestinians face means they not only live in a state of insecurity, but they are also at risk of arbitrary arrest, interrogation, and detention. This repression was especially exacerbated in Hebron, as well as in the Sheikh Jarrah and Silwan neighbourhoods of East Jerusalem, in the immediate aftermath of the crackdown on protests in May 2021.

This report establishes that facial recognition technologies are providing the Israeli authorities with powerful new tools for curbing freedom of movement – a pre-requisite for the realization of basic rights – adding further layers of technological sophistication to the system of apartheid that Israel is imposing on Palestinians in the OPT.



