

The Threat to Israel's Civilian Population and Israel's Civil Defence Measures

During the 51 days of the 2014 Gaza Conflict (from July 7 to August 26, 2014), Hamas and other terrorist organisations operating from the Gaza Strip fired thousands of rockets and mortars at Israel's civilian population, at ranges which threatened most of the country. These attacks resulted in significant harm to civilian life and property. However, the civil defence measures which Israel has invested in over many years and which were employed during the 2014 Conflict substantially reduced the harm that otherwise would have resulted to Israel's civilian population from these unlawful armed attacks. This Paper describes the armed attacks against Israel's civilian population during the 2014 Conflict; the extensive steps Israel has taken to reduce the harm inflicted by such attacks; and the harm that nevertheless resulted to Israel's civilian population, despite Israel's precautionary efforts.¹

A. Life under the Threat of Terrorist Rocket Fire and Cross Border Tunnel Attacks

Over the last 14 years, Hamas organisations other terrorist and operating in the Gaza Strip have fired rockets and mortars at Israel and its civilians, with increasing range and frequency.² Between 2001 and the outset of the 2014 Gaza Conflict, rocket and mortar attacks from the Gaza Strip killed 41 and injured thousands of Israeli civilians. During the same time period, Hamas and other terrorist organisations fired more than 15,200 rockets and mortars at Israel (more than 11,600 of which came after Israel's military and civilian withdrawal from the Gaza Strip in 2005).

During the 2014 Gaza Conflict, which lasted 51 days, Hamas and other terrorist organisations fired more than 4,500 rockets and mortars, with approximately 90% of them directed at Israel's civilian population, reaching as

THESE HAMAS ROCKETS
THREATEN THE MAJORITY
OF ISRAEL'S POPULATION

R-160 RANGE: 160 KM

M-75 WARHEAD: 60 KG

GRAD RANGE: 75 KM

GRAD RANGE: 48 KM

QASSAM WARHEAD: 9 KG

QASSAM WARHEAD: 9 KG

QASSAM RANGE: 17.7 KM

far as the population centres of Be'er Sheva in southern Israel, Tel Aviv-Jaffa in central

¹ A separate Paper details the precautions taken by the IDF during the 2014 Conflict in order to avoid civilian harm and minimise the suffering of the civilian population in the Gaza Strip.

² See The Background to the 2014 Gaza Conflict, diagrams at pages 7 and 18, available at: http://mfa.gov.il/ProtectiveEdge/Documents/HamasBackground.pdf.



Israel, Jerusalem in eastern Israel, and even Haifa in northern Israel (over 150 kilometers from the Gaza Strip), and bringing about six million Israelis (almost 70% of Israel's population) within the range of attack. Notwithstanding Israel's civil defence measures, these attacks from the Gaza Strip killed six civilians, including a child, and injured over 1,600 civilians. Seventeen percent of the casualties were children under the age of 18.

In Israeli towns and residential communities bordering the Gaza Strip (known in Hebrew as the "Otef Aza" communities), the constantly increasing lethality of rocket and mortar attacks over the past 14 years has greatly harmed and disrupted daily life for the approximately 50,000 Israelis who reside there. These Israeli communities have also been terrorised by the proliferation of covert cross border tunnels from the Gaza Strip. Cross border tunnels began to appear soon after Israel's withdrawal from the Gaza Strip in 2005, and in the two years leading up to the 2014 Gaza Conflict, the IDF uncovered four such tunnels with openings in close proximity to civilian residential communities in Israel. The discovery of these tunnels — which were used to infiltrate Israeli territory during the 2014 Gaza Conflict — has greatly undermined any sense of security for Israelis living in the Otef Aza border region.³

B. Israel's Civil Defence Measures against Rocket and Mortar Attacks

Given the severity of the threat to Israel's civilian population posed by rocket and mortar fire from the Gaza Strip (not to mention from Lebanon and Syria to the north), Israel has invested substantial resources over the years to develop civil defence systems and implement public safety measures in order to defend its civilian population. While these civil defence measures cannot fully protect against attacks from the Gaza Strip, they have helped to limit the death and destruction.

1. Passive defence measures

The main pillars of Israel's "passive" defence methods are (1) early warning systems; (2) campaigns to instruct the public how to respond to a warning siren; and (3) construction and planning regulations aimed at building protective infrastructure (e.g., underground bomb shelters and security rooms within homes, offices, schools and public buildings, and bomb shelters near public open areas).

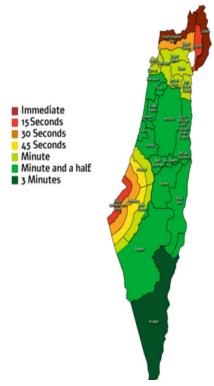
Early Warning Systems and Sirens. The IDF has developed an early warning system that sounds sirens when a rocket or mortar is fired towards Israel. The current system is able to calculate where a rocket is likely to land and set off a siren or a "Code Red" alert in the at-risk area. Israel has invested significant resources in recent years to develop this system and to make it more precise. During the 1991 Gulf War, for instance, every Iraqi Scud missile directed towards Israel set off warning sirens in the whole country. Today, Israel's early warning system divides the country into hundreds of geographical areas (known as "polygons") that receive individualized warnings. The IDF is striving to add more polygons, to make warnings even more precise and thereby also encourage greater public adherence. In the last decade, Israel has invested more than 545

³ See Violations of the Law of Armed Conflict, War Crimes, and Crimes Against Humanity Committed by Hamas and Other Terrorist Organisations During Operation Protective Edge, page 10, available at: http://mfa.gov.il/ProtectiveEdge/Documents/HamasCrimes.pdf.



million NIS (approximately 140 million USD) in developing and deploying early warning systems and sirens.

Public Safety Guidance. Israel has launched numerous public campaigns to raise awareness about how to respond to a warning siren. For example, the public is told the amount of time available to find shelter, which varies (as shown by the map to the right) based on proximity to where the rockets or mortars are fired. Thus, the residents of the Otef Aza border region need to reach shelter within 15 seconds, while the residents of Tel Aviv-Jaffa and Jerusalem have about 90 seconds. There are also specific instructions about the best places to take cover, what to do if driving a car, and what to do if there is no cover available nearby.4 The IDF has instructed that when the sirens are sounded, civilians must immediately run to the nearest protected area. Those who are outdoors and cannot run to a closed space are advised to lie on the ground, with their hands covering their heads. The instructions stipulate that civilians should take cover for at least ten minutes after a siren, in order to avoid falling debris and shrapnel. The instructions have been translated into Amharic, Arabic, English, French and Russian. Moreover, Israel has directed a special campaign at the disabled population.⁵



Above: Map of early warning alerts (Source: IDF). The areas in Northern Israel are in the "immediate" warning alert due to the threat of rockets from Lebanon and Syria.

⁴ The full instructions are available at http://www.oref.org.il/Sip_Storage/FILES/9/2689.pdf.

⁵ See Information for People with Special Needs, The Home Front Command, available at: http://www.oref.org.il/10660-en/Pakar.aspx.





Above: Civilians in an Israeli Street adhering to IDF instructions, July 20, 2014 (Source: David Avikar / MFA)

As an additional precautionary measure to protect the civilian population in Israel, during most of the 2014 Gaza Conflict, the IDF Home Front Command prohibited all gatherings of over 300 people within seven kilometers of the Gaza Strip border; all gatherings of over 500 people in areas between seven and 40 kilometers of the Gaza border; and outdoor gatherings of over 1,000 people in areas between 40-80 kilometers of the Gaza Strip border.⁶ These public safety restrictions necessitated the cancellations of weddings, cultural events, and sports games, among many other things. In addition, civilian train service from the southern cities of Ashkelon to Sderot was suspended from July 18 to August 28, after IDF intelligence determined that terrorist organisations in the Gaza Strip were planning to target the train service with anti-tank missiles.⁷

Residents of the *Otef Aza* border region received special instructions for situations when terrorists infiltrated (or were suspected to be attempting to infiltrate) Israeli territory through cross border tunnels. The instructions included, *inter alia*, remaining indoors until the IDF announced that the area is safe. Public adherence to the safety instructions is crucial for reducing deaths and injuries; and constant efforts are made by the Israeli Government to increase public awareness.

Reinforcement of Domestic Infrastructure. As part of Israel's commitment to protecting its citizens, domestic legislation requires all homes, residential buildings and industrial structures to have and maintain bomb shelters. The primary responsibility to construct shelters rests with the property owners, while tenants and municipalities may also shoulder some responsibility. Given the high costs of these protective measures, the Government subsidises the construction of shelters in the areas of the country that are most at risk from mortar and rocket attacks. Since 2004, for example, Israel has invested approximately 384 million USD to protect schools and civilian homes in Israel — most of which has gone to the *Otef Aza* border region, which is subject to particularly frequent

⁶ These instructions regarding a "special situation" were issued pursuant to Civil Defence Law - 1951.

⁷ In 2011 Palestinian terrorists in the Gaza Strip also fired an anti-tank missile at a school bus in Israel. *See Teen hit by anti-tank missile dies of wounds*, Ynet (April 18, 2011), available at: http://www.ynetnews.com/articles/0,7340,L-4058157,00.html

⁸ See also Bomb Shelters, The Home Front Command, available at: http://www.oref.org.il/10625-en/Pakar.aspx. The municipalities are responsible for supervising the maintenance of private bomb shelters and for the maintenance of public bomb shelters within their jurisdiction.



and intense rocket and mortar attacks (during the 2014 Gaza Conflict alone, more than 2,000 rockets and mortars exploded within 14 kilometers from the border with the Gaza Strip).⁹

Unfortunately, despite this vast investment in protective infrastructure, due to the large number of older buildings constructed without bomb-shelters and limited resources, approximately 27% of the population in Israel still lacks ready access to bomb shelters and other safe areas in the event of a rocket or mortar attack.



Above: Drivers take refuge from rockets in Tel Aviv-Jaffa's major freeway, July 9, 2014 (Source: IDF)



Above: Mother protects her child during a red alert siren on a main road in central Israel, July 20, 2014 (Source: MFA)

2. Active defence measures (the Iron Dome System)

In addition to its "passive" defence measures, Israel has developed, and continually strives to improve, various "active" defence systems. The most well-known is the "Iron Dome." Since 2007, Israel has invested approximately 1.5 to 2 billion USD

http://www.pmo.gov.il/English/MediaCenter/Spokesman/Pages/spokehomefront080714.aspx.

⁹ For example, on December 7, 2008, the Israeli Government decided to approve a special budget to fortify existing shelters in localities within a 4.5-kilometer range of the Gaza Strip border at a cost of approximately 81 million USD. In October 2012, the Government decided to expand the range of the 2008 fortifying plan from 4.5 to 7 kilometers from the Gaza Strip border, at a cost of approximately 67 million USD. More recently, in May 2013, the Government allocated more than 102 million USD for additional home-front defence projects, including reinforcing social welfare institutions in certain threatened areas, reinforcing educational institutions up to 15 kilometers from the Gaza Strip border, reinforcing sensitive infrastructure (*e.g.*, electricity, water, and fuel), building a national radio network for first-responders, and upgrading IDF Home Front Command warning systems and sirens. See more on these governmental measures at:



in this system, which has played a significant part in reducing the extent of casualties and civilian damage caused by rocket attacks, including during the 2014 Gaza Conflict.

Iron Dome is designed to intercept rockets and artillery shells. The system is able to estimate a projectile's point of impact and then decide, based on whether the point of impact is likely to cause damage (for example, whether it will land in an open or populated area), whether the projectile should be intercepted. While the Iron Dome has helped protect millions of Israelis, it does not provide complete protection to the civilian population. Furthermore, even when the system successfully intercepts a projectile, the resulting debris and shrapnel can still cause great harm. Therefore, adherence to the public safety instructions mentioned above remains essential for minimising casualties and injuries.

Despite all the resources and efforts invested in protecting Israeli civilians and civilian property, rocket and mortar attacks from the Gaza Strip (as well as dozens of covert cross border tunnels) continue to terrorise Israel's civilian population, to cause considerable damage and expose the majority of Israel's population to dangers that no country could be expected to tolerate.



Above: A house in Be'er-Sheva after a direct hit from a Gaza rocket on July 12, 2014 (Source: IDF)

C. Harm Caused to Israel's Civilian Population by Rocket and Mortar Attacks

Rocket and mortar attacks against Israel have already caused extensive civilian harm, including deaths, injuries, and damage to infrastructure, private property, and a variety of economic activity. The growing number of high-trajectory weapons arsenals situated in Gaza poses an increasingly dangerous, multi-layered threat to Israel's national sovereignty and the Israeli Government's ability to protect its population, their property, and the larger economy.



1. Civilian deaths and injuries

During the 2014 Gaza Conflict, six civilians in Israel were killed directly by mortars and rockets from the Gaza Strip (Dror Hanin, ¹⁰ Ouda Lafi al-Waj, ¹¹ Daniel Tregerman, ¹² Ze'ev Etzion, Shahar Melamed, ¹³ and Narakorn Kittiyangkul ¹⁴). In addition, two elderly women died as a result of heart failure while trying to seek cover in Haifa and Jerusalem from rocket attacks aimed at those areas, respectively. 15



Above: July 11, 2014: A rocket hits an oil truck (Source: IDF)

¹⁰ On Tuesday, July 15, at 19:30, Dror Hanin, a 37-year-old father of three was killed by a mortar near the Erez Crossing, which serves as a humanitarian crossing point between Israel and the Gaza Strip. ¹¹ On Saturday, July 19, at around 13:00, Ouda Lafi al-Waj, 32, was killed, and members of his family were injured (including his three-month-old baby, his five-year-old nephew, his sister and his wife) when a rocket fired from the Gaza Strip struck a small Bedouin community near Dimona.

¹² On Friday, August 22, at 18:30, <u>Daniel Tregerman</u>, 4, was killed by a mortar that hit outside his home in Kibbutz Nahal Oz. Hamas claimed responsibility for the attack. See Daniel Tregerman, 4, killed by mortar fire, Israel Ministry of Foreign Affairs (Aug. 22, 2014), available at: mfa.gov.il/MFA/ForeignPolicy/Terrorism/Victims/Pages/Daniel-Tragerman.aspx; Four-year-old Israeli boy killed, eight wounded by Gaza fire on Friday, Haaretz (Aug. 23, 2014), available at:

www.haaretz.com/news/diplomacy-defense/.premium-1.612034.

At around 18:00 on August 26, the last day of the 2014 Gaza Conflict, a mortar fired at Kibbutz Nirim killed Ze'ev Etzion, 55, and Shahar Melamed, 43, and injured four (one person was taken to the hospital in critical condition).

¹⁴ On Wednesday, July 23, at around 13:00, a mortar fired from the Gaza Strip killed Narakorn Kittiyangkul, 36, an agricultural worker from Thailand. At the time of his death, Kittiyangkul was working in a greenhouse in one of the Israeli communities in the Ashkelon Coast Regional Council. ¹⁵ On Friday, July 11, a 70-year-old woman collapsed and died as a result of heart failure while running to shelter in Wadi Nisnas, a neighbourhood in downtown Haifa. See Israeli, 61, badly injured by rocket hit in Ashdod, Jewish Telegraphic Agency & Times of Israel (July 11, 2014), available at: www.timesofisrael.com/elderly-man-seriously-injured-in-rocket-hit-near-ashdod/#ixzz3LPYknsxX. On Sunday, July 13, a 75-year-old woman died as a result of heart failure after seeking safety following a warning siren activated in Jerusalem. See Moshe Weisberg, Silent victims of war - Mrs. Finkel OBM, Behadrey Haredim (July 14, 2014), available at:



In a September 3, 2014 letter to the U.N. Secretary-General, Daniel Tregerman's parents described the incident in which their four-year old son was killed by mortar fire:

Then, last Friday, Daniel was killed. All the precautions that we have taken have failed. Daniel, 4.5 years old, was killed in our House, while playing with Yoval in a tent built indoors and not outside, because it's dangerous. He was killed from a mortar shell that was shot by terrorists from Gaza, he died in our hands. Daniel died in front of his little sister and his best friend Yoval, 3.5 years old; he died in front of Uri, only four months old and right before our eyes, his mother and father. 16

According to the Ministry of Health, more than a thousand Israeli civilians sought hospital treatment for physical injuries during the 2014 Conflict. Hundreds more sought hospital treatment for shock suffered, usually as a result of being in close proximity to a rocket or mortar explosion. ¹⁷ At least 270 of those hospitalized were children.

There are many examples. On July 11, a rocket hit a gas station in the coastal city of Ashdod, setting fire to an oil tank and causing an explosion. The gas station was located near a home for the elderly. As a result, a 61 year-old disabled man, who was in his car at the gas station and was unable to reach a protected area in time, sustained burns and other serious injuries. In addition, seven civilians were wounded. 18 On July 13, at around noon, a rocket fired from the Gaza Strip hit an urban area in Ashkelon. A 16 yearold was severely wounded from shrapnel. A 50-year-old man was injured, and seven others were treated for anxiety. 19 On July 14, a rocket fired from the Gaza Strip hit Lakiya, located near Be'er Sheva, wounding two girls aged 10 and 13. One girl was seriously injured and the other sustained moderate injuries.²⁰ Earlier that day, an eight year-old boy was lightly wounded from shrapnel when a rocket fired from the Gaza Strip struck Ashdod.²¹ On July 31, in the afternoon, a 30 year-old man was wounded from a rocket that landed in an apartment building in Kiryat Gat. A teenage girl and a 60-yearold man were also lightly hurt from shrapnel, and vehicles in the parking lot of the building were set aflame. ²² On August 2, at 19:00, an Israeli civilian, 70 years old, was seriously wounded in the Eshkol Regional Council by a mortar fired from the Gaza Strip.²³ On August 21, in a rocket barrage directed at Kibbutz Nir Oz in the Eshkol

¹⁶ The letter from Daniel Tregerman's parents to the U.N. Secretary-General is available at: embassies.gov.il/san-francisco/Newsandevents/Pages/Letter-from-Mother-of-Daniel-Tragerman.aspx.

These figures do not include the number of military IDF personnel injured, both in the State of Israel and in the Gaza Strip.

¹⁸ See Video: Documentation: The rocket explosion at the gas station, Ynet (July 7, 2014), available at: www.ynet.co.il/articles/0,7340,L-4541715,00.html; see also Israeli, 61, badly injured by rocket hit in Ashdod, supra note 15.

See http://www.jdn.co.il/news/372024 (in Hebrew).

²⁰ See Yoav Zitun, Rocket hit Eilat amid reports of ceasefire, Ynet (July 15, 2014), available at: http://www.ynetnews.com/articles/0,7340,L-4543164,00.html.

²¹ Yoav Zitun, Rocket hit Eilat amid reports of ceasefire, see supra note 20.

²² See Matan Zuri, Eight wounded in the mortar attack on Eshkol after three hurt in Kirya Gat, Ynet (August 1, 2014), available at: http://www.ynetnews.com/articles/0,7340,L-4552636,00.html.

²³ See Itamar Sharon, 70-year-old seriously hurt by mortar shell, Times of Israel (August 2, 2014),

available at: http://www.timesofisrael.com/70-year-old-seriously-hurt-by-mortar-shell/.



Regional Council, one man was moderately wounded when a rocket exploded in a nursery filled with children between the ages of 3 and 4. The man had come to celebrate his son's third birthday, and shielded the children from the explosion with his body.²⁴ On August 22, nine civilians were wounded in rocket attacks, including from rockets that hit a synagogue in Ashdod, hit a home in Sderot, landed in close proximity to a pre-school in Be'er Sheva, and struck a road in Gan Yavne. The direct hit on the synagogue injured three persons, including one woman who was moderately injured; several additional persons were treated for shock and the rocket also caused extensive property damage.²⁵ On August 24, three Israeli taxi drivers waiting at the Erez Crossing to pick up Gazan residents who were entering Israel in order to receive medical treatment were wounded two of them seriously — by mortars. As a result, the Erez Crossing was closed.²⁶ On August 26, at 6:30, a rocket hit an Ashkelon home. The family members were on their way to the safe-room when the siren sounded and the rocket hit. The rocket impact left the bedroom and living room in ruins. More than 60 people were lightly wounded, including six young children. Twelve surrounding buildings were damaged as a result of the rocket.²⁷

Magen David Adom ("MDA"), Israel's national emergency medical service, treated more than 800 civilians who were injured as a result of rocket and mortar fire from the Gaza Strip. For example, MDA paramedics treated the six civilians who were killed by rocket and mortar fire, and the two civilians who died while running for shelter. In addition, MDA paramedics treated civilians who were injured by mortars, rockets, falling shrapnel, shattered glass, building debris, and traffic accidents in the turmoil triggered by warning sirens. In total, MDA teams treated 159 people injured as a result of falls and trauma while running to shelter, and 581 people suffering from documented anxiety attacks.

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²⁴ See Ilana Curiel, Hamas keeps up rocket pressure on Israel; man seriously hurt along Gaza border, Ynet (August 21, 2014), available at: http://www.ynetnews.com/articles/0,7340,L-4561539,00.html.

²⁵ See Ben Hartman, 71st Israeli fatality of Gaza war: Man succumbs to wounds from rocket attack, JPost (August 29, 2014), available at: http://www.timesofisrael.com/70-year-old-seriously-hurt-by-mortar-shell/

²⁶ See Erez crossing closed today due to mortar fire, Israel Ministry of Foreign Affairs (August 24, 2014), available at: http://mfa.gov.il/MFA/PressRoom/2014/Pages/Erez-Crossing-closed-today-due-to-mortar-fire-24-Aug-2014.aspx.

²⁷ See Matan Zturi and Raanan Ben-Zur, 'Our lives are a gift', says woman whose house was hit with rocket, Ynet (August 26, 2014), available at: http://www.ynetnews.com/articles/0,7340,L-4564195,00.html.





Above: Cars destroyed in Ashdod caused by a Gaza rocket, July 10, 2014 (Source: IDF).



Above: A rocket hits an oil truck, July 11, 2014. (Source: Sivan Afriat)

An MDA paramedic who arrived at the scene of the August 26, 2014 mortar attack that killed two civilians and injured two others in Kibbutz Nirim, reported that:

Near one of the buildings in the Kibbutz we found several wounded people lying on the floor, one of them a 50 year old male in critical



condition with multiple shrapnel wounds all over his body. We attempted advanced treatments and resuscitation under heavy mortar fire but were unfortunately forced to declare his death. We also provided treatment to one more critically injured patient with shrapnel wounds to his back and limbs and to another two seriously injured patients suffering from similar wounds. All the treated patients were evacuated by helicopter to Soroka Hospital for further treatment. At the scene were another three lightly injured patients who were treated by another MDA team and were evacuated by a MICU to the ER at Soroka Hospital.²⁸

Gadi Yarkoni, a 47-year-old civilian who suffered serious injuries in the mortar attack, had to have both of his legs amputated below-the-knee. He recalled the incident in an interview:

There was a Code Red and I didn't make it to cover in time. The mortar exploded right by us. When I was lying on the ground, I could tell that my legs were injured; I had no idea of the extent of the injury; I simply shouted that I was hurt so that they would come to take care of me... I was in excruciating pain. I didn't care about what happened to my legs; I just wanted a tablet to take away the terrible pain and make me feel nothing.²⁹



Above: Civilians at a bus stop in Tel Aviv-Jaffa, adhering to IDF instructions, during a Gaza rocket attack, July 9, 2014 (Source: IDF)

²⁸ See The 50th Day of Operation Protective Edge ONE CASUALTY & 6 WOUNDED AS A RESULT OF A MORTAR SHELL IN THE ESHKOL REGIONAL COUNCIL, Magen David Adom in Israel (Aug. 27, 2014), available at: www.mdais.com/316/7002.htm; Anat Meidan, Casualties of War, Ynet (Sept. 20, 2014), available at: www.ynetnews.com/articles/0,7340,L-4573154,00.htm].

²⁹ Anat Meidan, Casualties of War, supra note 28.



2. Effects on children, teenagers and college students

During the 2014 Gaza Conflict, children were especially vulnerable. All residents living within 40 kilometers of the Gaza Strip were instructed to remain close to protected areas. Many parents stayed home and did not go to work because they were afraid to leave their children alone. Children living within a range of up to seven kilometers from the Gaza Strip often remained in bomb shelters for the entire day in order to ensure they would not be in open areas during a rocket or mortar attack. The situation required the entire Israeli population to take precautions, such as the "missile drills" conducted by nursery school children in the picture on the right. ³⁰

Out of concern for children's safety, the IDF prohibited school activities and summer camps within 40 kilometers of the Gaza Strip, unless there was an adequate shelter nearby.³¹ Some high school students had their exams disrupted by rocket fire. Others were forced to take their baccalaureate exams in bomb shelters. Moreover, classes and exams at Sapir College in Sderot and Ben-Gurion University in Be'er Sheva were cancelled.



Above: Israeli children, aged one-and-a half to three years taking cover during a missile drill in a nursery in Hod Hasharon, July 16, 2014. (Source: IDF)

Children's education facilities in Israel were under constant threat during the 2014 Gaza Conflict. In many cases, it was the defensive measures initiated by civilians or the IDF instructions to cancel certain public activities that prevented great physical harm. In other instances, only pure luck prevented a major catastrophe. For example, on July 3, during an escalation of rocket and mortar attacks by Hamas and other terrorist organisations in the days before the 2014 Gaza Conflict began, a children's day-camp in Sderot suffered a direct hit; miraculously, no children were injured. On July 9, a projectile hit a building near a kindergarten in the Sha'ar HaNegev Regional Council; On July 10, a rocket hit a pre-school in Netivot; On July 15, a rocket hit a year-round school for children with special needs in Rishon LeZion (in the centre of Israel); On July 16, a rocket exploded in a school in Ashdod (30 kilometers from the Gaza Strip); on July

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³⁰ For a video of the reality faced by kindergarten children during the 2014 Gaza Conflict, *see* Itay Blumenthal and Michal Margalit, *Watch the kindergarten's kids flattened on the floor: "for the whole world to see"*, Ynet (July 28, 2014), available at: www.ynet.co.il/articles/0,7340,L-4551010,00.html.

³¹ The IDF's actions were taken pursuant to Civil Defence Law - 1951.

³² Sderot children's miraculous escape from rocket, Israel Today (July 3, 2014), available at: www.israeltoday.co.il/NewsItem/tabid/178/nid/24715/Default.aspx?archive=article_title. Sderot is located approximately 10 km from the Gaza Strip.

³³ Sha'ar HaNegev Regional Council is located on the border of the Gaza Strip.

³⁴ See Heavy Gaza rocket barrage: Direct hit on vehicle in Ashdod, Ynet (July 10, 2014), available at www.ynetnews.com/articles/0,7340,L-4540871,00.html. Netivot is located approximately 20 km from the Gaza Strip.

³⁵ See Rio Avitayler, Watch: Rocket debris fell on Rishon Lezion School, damage caused, JerusalemONLINE (July 16, 2014), available at: www.jerusalemonline.com/news/in-israel/local/watch-rocket-debris-fell-on-rishon-lezion-school-damage-caused-6485. Rishon LeZion is located approximately 60 km from the Gaza Strip.



18, a rocket exploded in a kindergarten in Gan Yavne, damaging the building and the neighbouring synagogue;³⁶ on July 20, rocket fragments and shrapnel fell in a kindergarten yard in Rishon LeZion (fortunately, at the time, the children participating in the summer camp in the kindergarten were in the camp's bomb shelter);³⁷ on July 31, a mortar fell near a school in Sderot, where 30 children and their parents were meeting, injuring the school headteacher from the force of the blast; and on August 26, a rocket exploded in the playground of a kindergarten in Ashdod, severely damaging the playground. The municipality of Ashdod worked intensively to make repairs before the school year began only days later, on September 1, 2014.³⁸



Above: Children seeking shelter in Ashkelon, July 9, 2014 (Source: Kobi Gideon / GPO)

The lasting impact of the rocket and mortar attacks on children. Because of the constant threat of rocket and mortar fire for the last 14 years, children raised in Gaza border communities have essentially spent their entire lives under attack. According to the Israeli Trauma Coalition ("ITC"), the effects on children "vary, from refraining from specific activities, such as refusing to walk to school along a route where a rocket once fell, to intrusive thoughts where you feel like you're re-experiencing the traumatic event, as well as hyper-vigilance, where everything makes you jump." The ITC has reported that parents from Gaza border communities (as well as from other communities, including the Tel Aviv-Jaffa metropolitan area) frequently call hotlines run by ERAN (Hebrew acronym for "Emotional First Aid") and NATAL (The Israeli Centre for Victims of Terror and War) to seek help with children crying, vomiting, shaking uncontrollably, wetting the bed or suffering from stomach pains, as a result of rocket and mortar attacks.39

During the 2014 Gaza Conflict, over 20,000 children from communities in southern Israel were sent north by their families, to reduce their risk from rocket and

³⁶ Gan Yavne is located approximately 30 km from the Gaza Strip.

³⁷ See Tova Dvorin, 'Miracle' After Rocket Shrapnel Narrowly Misses Kindergarten, Arutz Sheva (July 20, 2014) available at: www.israelnationalnews.com/News/News.aspx/183107#.VIWB-NJdWIk; www.mako.co.il/news-israel/local/Article-6ab44c3d8135741004.htm.

³⁸ Yael Klein, Children Play in Rocket-hit Kindergarten, JerusalemONLINE (Sept. 1, 2014), available at: www.jerusalemonline.com/news/in-israel/local/children-play-in-rocket-hit-kindergarten-7822

³⁹ Avigayil Kadesh, Israel Trauma Coalition reports on emotional toll of conflict, Sderot Media Centre (July 16, 2014), available at: http://sderotmedia.org.il/bin/content.cgi?ID=1070&q=3.



mortar attacks (though rockets fired from the Gaza Strip did reach some northern parts of Israel). Some educational facilities temporarily relocated from the area bordering Gaza. For example, over 50 children with special educational needs were transferred from Kibbutz Ein Hashlosha to a safer location farther from the Gaza Strip border. Moreover, during the 2014 Gaza Conflict, stress-treatment facilities received thousands of calls for help. The "HOSEN" trauma centres 40 and "MATAN" regional stress centres averaged 600-700 calls per day, many of which dealt with children. Over 100 children visited these centres for treatments.



Above: A rocket from Gaza severely damaged a children's health clinic in Ashkelon, July 16, 2014 (Source: IDF)

3. Effect on the elderly and people with disabilities

The 2014 Gaza Conflict was especially difficult for the elderly and disabled populations, who struggled to seek shelter in the short time available between the sounding of warning sirens and the explosions from the rocket and mortar attacks. Although the IDF Home Front Command issued instructions designed to protect the

⁴⁰ During the 2006 conflict with Hezbollah (which is also known as the "Second Lebanon War"), many trauma victims flooded emergency rooms as a result of the massive rocket attacks. The hospitals were not able to give the optimal medical treatment to both the physically and mentally injured. As a result, Israel decided in November 2006 to found trauma centres, called HOSEN centres ("strength," "power" or "resilience" in Hebrew). There are a number of HOSEN centres in the Otef Aza border region communities that are active throughout the year, offering psychological and psychiatric treatment to residents, including children, suffering from traumatic stress disorders. According to the HOSEN centre in Sderot, "70% of Sderot's residents suffer from Traumatic Stress Disorders (TSD) and are in need of psychological help." Resilience is built in times of peace and tested in times of crisis, Gvanim Association, available at: http://www.gvanim.org.il/pics/mercazhahosen/mercazhahosen-001.htm. When the rocket and mortar attacks become more frequent, the centres open emergency rooms for civilians who suffer from anxiety attacks.



elderly, 41 more than 25% of the civilians injured were above 65 years old. Many of these elderly civilians suffered injuries in their hurried attempt to seek shelter from an attack.

The rocket and mortar attacks are even more difficult for the mentally and physically disabled. For example, on July 6, prior to the 2014 Gaza Conflict, a Grad rocket fired from the Gaza Strip struck the ALEH Negev rehabilitation village, which is home to 160 residents, including children, teens, and adults with severe disabilities. These residents had to deal with the threat of rockets and mortars throughout the 2014 Gaza Conflict. The most severely disabled residents were confined to protective shelters that had to be fitted with beds and essential medical and paramedical equipment.⁴²

In addition, approximately 40 medical clinics within 40 kilometers of the Gaza Strip were forced to close due to rocket and mortar attacks. About 25 family health centres had to close for the same reason. The Ministry of Health has reported further difficulties in serving vulnerable populations. For example, many dialysis patients in southern Israel were forced to travel north for life-saving treatment.

4. Internal displacement

During the 2014 Gaza Conflict, Israeli civilians living in the *Otef Aza* border region faced a particularly grave threat from rocket and mortar attacks. ⁴³ In that period, more than 2,000 rockets and mortars exploded within 14 kilometers from the border with the Gaza Strip. The residential communities of Zikim and Kerem Shalom, for example, each suffered landings of between 200 to 250 rockets during the Conflict, and as many as 100-150 rockets and mortars landed in each of the following *Otef Aza* border region communities: Be'eri, Kissufim, Kfar Aza, Nirim, Nativ Ha'Asara, Netivot, Ein Hashlosha, and Sderot. The maps below illustrate the extent to which rocket and mortar attacks from Gaza deliberately targeted residential areas (in Kfar Aza, Saad, Kissufim, Ein Hashlosha, Nirim and Nir Oz).

Added to the rocket and mortar threat to residential communities in the *Otef Aza* border region was the danger of terrorist infiltrations via cross border tunnels. In order to protect towns and cities in Israel from attempted incursions through cross border tunnels, the IDF was also deployed to search for and detect tunnel openings in Israeli territory and to patrol Israeli territory around the fence-line with the Gaza Strip. These efforts prevented incursions by Hamas from resulting in Israeli civilian casualties during the 2014 Gaza Conflict.

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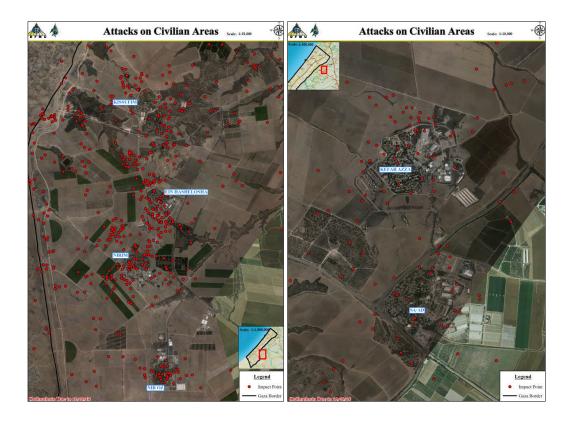
⁴¹ For example, the IDF recommended that if they cannot get to the nearest shelter in time, individuals with limited mobility should consider creating an alternative shelter or turning their sleeping area into one. It also recommended that the path to cover be cleared in advance to avoid tripping on obstacles, and that the wheelchair bound have spare batteries on hand just in case their motors run out of power. In the event that they are unable to use an elevator to reach the nearest shelter, the Home Front Command recommended they prepare themselves to be carried by others.

⁴² For more information see *Keeping special populations safe from missiles*, Israel Ministry of Foreign Affairs (July 16, 2014), available at: mfa.gov.il/MFA/AboutIsrael/Spotlight/Pages/Keeping-special-populations-safe-from-missiles-16-July-2014.aspx.

populations-safe-from-missiles-16-July-2014.aspx.

43 More than 60% of the rockets launched from the Gaza Strip were directed towards areas lying within 20 km of the border with Gaza. The rest, launched beyond the 20 km range, targeted cities and densely populated areas, including Israel's biggest metropolitan areas of Tel Aviv-Jaffa, Jerusalem, and Haifa.





While most Israelis in these areas remained in their home communities (including for the purposes of localized farming and agriculture), many *Otef Aza* residents determined that the threat required them and their families to relocate to other areas in Israel. The Israeli government's best estimation, based on information received from local authorities, is that approximately 10,000 civilians were displaced. For example, in Sdot HaNegev Regional Council, it is estimated that between 1,400 to 1,800 residents evacuated (20% of the residents); in Kibbutz Sa'ad, approximately 800 residents evacuated (80% of residents); in the Hof Ashkelon Regional Council, approximately 4,800 residents evacuated (30% of residents); and in the Eshkol Regional Council, approximately 70% of residents of the kibbutz communities bordering Gaza evacuated, and approximately 40% of residents of other communities evacuated. In Sha'ar HaNegev Regional Council, approximately 950 residents evacuated (13% of residents).

5. Psychological damage

Rocket and mortar fire from the Gaza Strip, as well as fear of terrorist cross border tunnel attacks, have both a short- and long-term psychological impact. While it is still too early to evaluate fully the psychological harms caused by the 2014 Gaza Conflict, the effects of the rocket and mortar attacks from the last 14 years have been devastating, and there are strong indications that the effects from the 2014 Gaza Conflict are severe. More than 500 Israelis required medical treatment for anxiety. Mental health

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⁴⁴ Since these decisions were made on an individual and voluntary basis, there is no precise data on how many residents of the *Otef Aza* border region evacuated.

⁴⁵ 544 people were hospitalized for anxiety, while MDA reported that 581 people were treated across the country for anxiety attacks.



organisations, such as ERAN (Emotional First Aid), reported tens of thousands of requests for assistance during the 2014 Gaza Conflict. 46

The psychological consequences of conflict can be personal, social and occupational, varying from manageable distress to more serious and longer-lasting posttraumatic stress disorder ("PTSD"). Psychologists have documented the severe psychological consequences of Hamas rocket and mortar attacks on the Israeli civilian population.⁴⁷ A major symptom is constant anxiety (i.e., constantly being "on edge"). The physical effects of anxiety may include heart palpitations, muscle weakness and tension, fatigue, nausea, chest pain, shortness of breath, stomach aches, or headaches. The emotional effects of anxiety may include feelings of apprehension or dread, trouble concentrating, feeling tense and jumpy, anticipating the worst, irritability, restlessness and more. Both physical and emotional effects may cause long-term harm and create major obstacles to daily functioning.⁴⁸ The slightest sound — such as the revving of a motorcycle engine, or some other noise reminiscent of a warning siren — can trigger serious anxiety. For persons subject to such anxiety, each trigger revives their traumatic experience. Children suffer especially serious psychological effects, including regression, bedwetting and fear of sleeping alone.⁴⁹

Sderot, a city of approximately 22,000 residents, serves as a case study for the psychological implications of sustained rocket and mortar attacks.⁵⁰ A 10-year study published in 2014 (based on findings prior to the 2014 Gaza Conflict), found that 44% of mothers in Sderot and the Otef Aza border region suffered from various forms of emotional distress, depression and/or PTSD — four times the rate among the general population in Israel. The most common symptoms reported were sleep disorders (nightmares, insomnia, inability to sleep alone), depression, anxiety and fears, aggression, and physical ailments such as stomach aches. The study also demonstrated the long-term effects of the constant rocket threat, as more than 70% of the children suffering from

⁴⁶ http://www.ynet.co.il/articles/0,7340,L-4555271,00.html (in Hebrew). ERAN reported that calls directly relating to the security situation were as much as five times the norm and that there was an overall increase of 20% in the rest of the calls. The ITC reported that its centres in the Israeli towns and villages in the Otef Aza border region provided assistance to more than 2,000 civilians with anxiety, and answered more than 1,500 calls a day to its emergency hotlines. The Sderot Resilience Centre published that during the month of July 2014, they received a total of 437 requests for assistance. Professor Danny Brom on the impact of rocket fire on Israeli civilians, BICOM (July 30, 2014) available at: http://www.bicom.org.uk/analysis-article/21777/ (interview with Professor Danny Brom, founding director of the Israel Centre for the Treatment of Psychotrauma at the Herzog Hospital in Jerusalem). For an article regarding the psychological consequences of the Hamas attacks on the Israeli civilian population, by a clinical psychologist, see Irwin J. (Yitzchak) Mansdorf, Unseen Scars of War: Psychological Consequences of the Hamas Attacks on the Israeli Civilian Population, Jerusalem Centre for Public Affairs (July 20, 2014), available at: http://jcpa.org/article/unseen-scars-of-war-

psychological-consequences/.

48 Melinda Smith, et al., Anxiety Attacks and Anxiety Disorders: A Guide to the Signs, Symptoms, and Treatment Options (last updated Dec. 2014), available at: http://www.helpguide.org/mental/anxiety_types_symptoms_treatment.htm.

⁴⁹ See Alona Ferber, Five-year-olds know the siren drill, while Tel Aviv parents try to keep calm, Haaretz (July 14, 2014), available at: www.haaretz.com/news/national/.premium-1.605117; Alan Johnson, Hamas Rockets Traumatize Israeli Children, World Affairs (July 25, 2014), available at: http://www.worldaffairsjournal.org/blog/alan-johnson/hamas-rockets-traumatize-israeli-children; Eli Ashkenazi and Mijal Grinberg, Study: Most Sderot kids exhibit post-traumatic stress symptoms, Haaretz (January 17, 2008), available at: www.haaretz.com/news/study-most-sderot-kids-exhibit-posttraumatic-stress-symptoms-1.237438.

⁵⁰ Eli Ashkenazi and Mijal Grinberg, Study: Most Sderot kids exhibit post-traumatic stress symptoms, supra note 49.



behavioral and emotional problems in 2004 as a result of rocket and mortar attacks continued to display such symptoms in 2011. Moreover, the study found that the rate of aggressive behavior displayed by children in southern Israel was three times higher than in the general population. ⁵¹

Another study published in June 2014 evaluated the psychiatric and psychological state of nearly 9,000 Israeli teens (aged 12-17) over a 14-year period from 1998 to 2011. The findings show that Israeli teens suffered from much higher rates of psychological distress than their American peers and that exposure to the armed conflict correlates with a variety of mental health issues such as anxiety, depression, phobias, and paranoia. 52



Above: Israeli civilians on the train during a Gaza rocket attack, July 9, 2014 (Source: IDF)

51 Children from the South Suffer Four Times the Rate of Post-Traumatic Stress, Ynet (July 7, 2014), available at: www.magbitcanada.org.il/page.asp?pid=170 (in translation). Another study, conducted in 2003 found that 45% of Sderot's children under the age of six suffer from PTSD, which is expressed through developmental regression, sleeping disorders or aggression. In addition, 41% of Sderot mothers and 33% of Sderot fathers are suffering from PTSD, often experience flashbacks from difficult experiences, and avoid places that remind them of rocket attacks. The parents reported that about 60% of infants refuse to sleep alone. The study also found that children to parents who are suffering from PTSD, where twice are reported to a suffering from PTSD.

PTSD were twice as prone to suffer themselves. A study examining 1,200 children, aged 10-18, in Sderot and the surrounding towns found that 13% of the students in the area suffered from PTSD, 24% suffered social harm, and 19% reported that the functioning of their families was harmed. *See* Meital Yasur-Beit Or, *Study: Half of Sderot toddlers suffering from PTSD*, Ynet (June 30, 2009), available at:

www.ynetnews.com/articles/0,7340,L-3739071,00.html.

⁵² See Andrew Tobin, Israeli teens' mental health worsens when Arab-Israeli conflict does, Times of Israel (August 4, 2014), available at: www.timesofisrael.com/long-conflict-wears-on-teen-psyche-14-year-study/; Michelle Slone & Anat Shoshani, Psychiatric Effects of Protracted Conflict and Political Life Events Exposure among Adolescents in Israel: 1998-2011, 27 JOURNAL OF TRAUMATIC STRESS, 353-360 (2014).



A 2008 research study by NATAL (The Israeli Centre for Victims of Terror and War),⁵³ identified variables associated with trauma and resilience in Sderot, such as a sense of threat, helplessness, social cohesiveness, community belonging, and optimism. The study clearly demonstrated a high level of exposure to rocket and mortar fire: 91.9% of Sderot residents had experienced a rocket or mortar explosion close to their home (either on their street or a nearby street); 55.8% had experienced a direct or indirect hit to either their home or a neighbour's home; 65.3% knew someone injured by rocket or mortar fire; and 48.4% knew someone killed by rocket or mortar fire. The study found that 30% of children and 28% of adults in Sderot suffer from PTSD, that school-age children had severe symptoms of anxiety, and that there was a correlation between parent and child anxiety. In addition, the study found that between 75% and 94% of Sderot children aged 4-18 exhibited symptoms of post-traumatic stress. At the time of the study, 120 children in Sderot were undergoing long-term therapy for anxiety. Between May 2007 and January 2008, NATAL found an additional 105 children identified as suffering from trauma, 70% of whom needed extended psychological treatment. ⁵⁴

According to the Ministry of Education ("MOE"), 38% of children in the *Otef Aza* border region have been diagnosed as suffering from full or partial symptoms of PTSD and are undergoing therapy. Moreover, the MOE reports that professionals continue to identify additional children in need of psychological support. Following the 2014 Gaza Conflict, the MOE has allocated 29 million NIS (approximately 7 million USD) for mental-health treatment and related assistance for the staff and children in the public education system.⁵⁵

The terror and fear caused by the cross border assault tunnels. As mentioned above, in addition to rocket and mortar attacks, assaults through covert cross border tunnels have terrorised residents of the Israeli communities that are closest to the Gaza Strip.⁵⁶ During the

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<u>psychological toll on children in Sderot</u>, IRIN (Jan. 27, 2008), available at: <u>www.irinnews.org/report/76438/israel-opt-relentless-rocket-attacks-take-psychological-toll-on-children-in-sderot</u>.

⁵³ NATAL conducted a comprehensive study on the effects of terrorist rocket attacks on the community in Sderot. The study examined levels of exposure to rocket fire and the frequency of PTSD and other post-traumatic symptoms in Sderot, compared to nearby cities that suffered fewer rocket attacks. *NATAL's research in Sderot*, NATAL, available at:

www.natal.org.il/English/?CategoryID=244&ArticleID=282; Eli Ashkenazi and Mijal Grinberg, Study: Most Sderot kids exhibit post-traumatic stress symptoms, supra note 49; Ilana Curiel, Study: Over half of Sderot residents are Qassam casualties, Ynet (Oct. 24, 2008), available at: www.ynetnews.com/articles/0,7340,L-3627943,00.html; Israel-Opt: Relentless rocket attacks take

children-in-sderot.

Another study conducted in 2007-2008, found that 43.5% of a sample of 154 seventh- and eighth-grade students in Sderot, were found to have a likely diagnosis of PTSD, see Rony Berger, et al., A Teacher-Delivered Intervention for Adolescents Exposed to Ongoing and Intense Traumatic War-Related Stress: A Quasi-Randomized Controlled Study, 51 JOURNAL OF ADOLESCENT HEALTH 453-461 (2012); Dan Even, Israeli survey: Almost half of Sderot preteens show symptoms of PTSD, Haaretz (Nov. 20, 2014), available at: www.haaretz.com/news/diplomacy-defense/israeli-survey-almost-half-of-sderot-preteens-show-symptoms-of-ptsd.premium-1.479113.

Due to the steep rise in the need for treatment, the MOE has developed new programs incorporating

Due to the steep rise in the need for treatment, the MOE has developed new programs incorporating psychological treatment into the everyday routines of certain schools.
 See Inna Lazareva, Gaza conflict: Israelis living in fear of Palestinian tunnel attacks, Telegraph (July

³⁶ See Inna Lazareva, Gaza conflict: Israelis living in fear of Palestinian tunnel attacks, Telegraph (July 21, 2014), available at https://www.joildnews/middleeast/israel/10979467/Gaza-conflict-Israelis-living-in-fear-of-Palestinian-tunnel-attacks.html; AFP news agency, Fear of Gaza tunnels emptied kibbutz of children, YouTube (Aug. 5, 2014), available at: https://www.youtube.com/watch?v=PE0mqXHCMD0; www.telem.org.il/uploads/24H.pdf (in Hebrew). In addition to cross border tunnels, Hamas built tunnels that started and ended within the Gaza Strip which were designed to facilitates military operations there.



2014 Gaza Conflict, the IDF uncovered fourteen cross border assault tunnels penetrating Israeli territory, along with over a dozen unfinished tunnels approaching the border with Israel. On four separate occasions during the 2014 Gaza Conflict, Hamas militants emerged from covert tunnels onto Israeli territory, near civilian residential communities, in attempts to attack, kidnap, and kill Israeli civilians and soldiers. As a mother of four from southern Israel attested, "We used to look up to the sky in fear, but now we are looking down at the ground." For the statement of the sky in fear, but now we are looking down at the ground.

Many civilians who left their homes in the *Otef Aza* border region did so out of an extreme fear of cross border tunnel infiltrations and attacks. According to one Sderot resident:

Here in the neighbourhood everyone only talks about the tunnels. Since the event in Nir-Am we are not yet relaxed. Everyone thinks they hear noises from the ground and are certain that they have a tunnel underneath their house. There is a great fear to deal with now. ⁵⁹

Liraz Levi, a resident of Kibbutz Nirim in the *Otef Aza* border region and a mother of three, left the Kibbutz during the 2014 Gaza Conflict. She explained:

This is the 21st day that I am out of my house. We packed a suitcase after a mortar fell in our neighbourhood [...] I am not coming home until someone looks into my eyes and tells me that there is no threat any more, no tunnels, and that I am able to come back to my pastoral life in my peace and quiet kibbutz, without terrorists popping out from a dining room or a kindergarten. 60



Above: July 14, 2014: Damage from rocket fired at Ashdod. (Source: Kobi Gideon / GPO)

⁵⁷ See Violations of the Law of Armed Conflict, War Crimes, and Crimes Against Humanity Committed by Hamas and Other Terrorist Organisations During Operation Protective Edge, supra note 3. ⁵⁸ See Melanie Lidman, They thought it was rockets they had to be scared of, Times of Israel (Aug. 6,

2014), available at: http://www.timesofisrael.com/they-thought-it-was-rockets-they-had-to-be-scared-of/.

⁵⁹ Shirly Seidler, *After three weeks of fighting, the residents of southern Israel and the Gaza Strip feel the respite*, Haaretz (July 28, 2014), available at: http://www.haaretz.co.il/news/politics/.premium-1.2389865 (in Hebrew).

⁶⁰ Residents of Otef Aza: "contempt for cease fire, how can we return home?", Nana10 (July 28, 2014), available at: http://news.nana10.co.il/Article/?ArticleID=1072048 (in Hebrew).



Dana Bar-On, an Israeli living near the border with the Gaza Strip, reported:

[T]hey found a tunnel outside our Kibbutz ... I can see it from here, it's a space right near our Kibbutz where we go for picnics ... They just came out of this hole and started walking around. ... They have found a way into our homes now and that is scary ... they are just digging their way up from Gaza into our country and it's a whole new threat and it's a very scary threat - to walk around your own home and be afraid.⁶¹

6. Economic Damage

The intense rocket and mortar attacks against Israel's civilian population during the 2014 Gaza Conflict caused significant damage to Israel's economy. Businesses around the country, especially in the south, suffered major economic losses. Many businesses, shops and restaurants closed, as people remained home with their families near shelters.62



Above: Rocket hits house at Kfar Aza, in southern Israel, August 3, 2014 (Source: Emily Damari)

Under Israeli law, the State compensates its citizens for damages caused directly or indirectly by military operations. 63 While the amount of compensation does not reflect

⁶¹ Dana Bar-On, 10 minutes about living on the Gaza border, YouTube (July 21, 2014), available at: http://www.youtube.com/watch?v=zqonroORsSA (at 5:30).

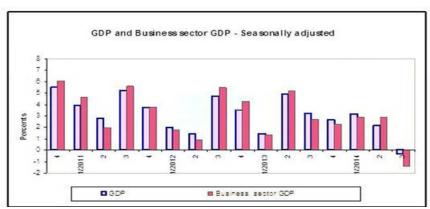
⁶² The Israeli Chamber of Commerce, a private sector organisation, estimated in September 2014, that the damage to the commercial sector as a result of the 2014 Gaza Conflict was approximately 1.6 billion NIS (410,000 USD). This included a 50% decrease in sales. The Israeli Industry and Manufacturers Association estimated that the damage to the industrial sector from the 2014 Gaza Conflict was approximately 1.3 billion NIS (330 million USD). According to the Israeli Restaurant Association, damage to the restaurant sector was as much as 400 million NIS (102 million USD). ⁶³ Israel compensates its citizens by law. As written in the Tax Authority's guide, compensation is provided by law "for damages caused to buildings as a result of War operations. This is aimed at restoring the situation to its former state as quickly as possible." Domestic objects, vehicles, and business equipment, among other things, may be also eligible for compensation. See Guide to Citizens Whose Property Was Damaged in War Operations, Israel Tax Authority (Aug. 5, 2014), available at: http://ozar.mof.gov.il/ita2013/eng/mainpage.htm. The compensations are paid out of The Tax Authority Compensation Fund, founded in accordance with Israeli law. The Treasury Minister has the discretion to compensate civilians for indirect damages caused by war, in accordance with Israeli law.



the full economic harm caused to Israel and its civilians by the rocket and mortar attacks from Gaza, these figures are indicators of the extent of the damages.

Direct Damages. The Israel Tax Authority estimates that the total compensation for direct damages will reach approximately 100 million NIS (about 25 million USD). The Israel Tax Authority reported that as of January 28, 2015 a total of 4,550 claims had been filed for compensation for such damages (which includes damage caused to buildings and vehicles by rockets and mortars during the 2014 Gaza Conflict), and that over 24 million USD had already been paid in compensation. As of January 28, 2015, claims for direct damage were still being processed. Moreover, the state has allocated million NIS (over 15 million USD) to repair public infrastructure (e.g., electricity, roads) directly damaged during the 2014 Gaza Conflict.

Indirect Damages. The Tax Authority Compensation Fund thus far has paid over 815 million NIS (over 207 million USD) for indirect damages⁶⁶ and estimates that the final amount will be approximately 1.7 billion NIS (over 433 million USD).⁶⁷ The Ministry of Economy also has approved special loans to small and medium-sized businesses that suffered economic damage in southern Israel during the 2014 Gaza Conflict. The total amount approved as of December 8, 2014 was 157 million NIS (almost 40 million USD).⁶⁸



Above: The chart shows the decrease in GDP and Business Sector GDP in the 3rd Quarter of 2014, in sharp contrast to the increases in the preceding quarters going back to the 4th Quarter of 2010.

In cases where the Minister approves compensation for indirect damages, the Government enacts designated regulations, which are to be approved by the Israeli parliament (the Knesset). For more details regarding the compensation procedure, *see id*.

⁶⁴ Out of the 4,550 claims, 2,585 were filed in compensation for damage to buildings as a result of the 2014 Gaza Conflict; 1,631 claims were filed for compensation for damage to vehicles; 240 claims were filed for compensation for damage to agriculture; and 94 additional claims for various other damages. According to the Tax Authority, of the 915 million NIS in total compensation for direct and indirect damage given through January 28, 2015, only approximately 30 million NIS (7 million USD) was attributable to damage caused by IDF military activities in the *Otef Aza* border region.

⁶⁵ Additional photos of direct damage caused by rockets can be found at the MFA flickr site. Israel MFA, *Rockets fired at Israel from Gaza*, Flickr, available at: https://www.flickr.com/photos/israel-mfa/sets/72157645617361945/.

⁶⁶ Indirect damages includes lost income from missed work days, loss of business income, damage to agriculture, and other losses resulting from the threat of rocket and mortar fire.

⁶⁷ By January 28, 2015 a total of 24,066 claims had been filed for compensation due to indirect damages resulting from the 2014 Gaza Conflict, and the Israel Tax Authority had compensated civilians for over 207 million USD in indirect damages. As of the date of publication, approximately 34% of claims for indirect damage were still being processed.

 $^{^{68}}$ 1,028 requests for loans were made.



According to Israel's Central Bureau of Statistics, economic indicators for the June-August 2014 period point to decreases of 14.2% in export of goods, 7% in import of goods, 6.2% in the Industrial Production Index, and 5.5% in the Revenue Index for all sectors of the economy. In the third quarter of 2014 (which corresponds with the 2014 Gaza Conflict and its immediate aftermath), Israel's GDP decreased at an annual rate of 0.4%. This decline reflects, *inter alia*, a decrease in exports and in investments and an increase in expenditures. Business-sector GDP decreased at an even greater annual rate of 1.4%. The section of 1.4%. The

In addition, past experience indicates that the effects of the 2014 Gaza Conflict on the tourism sector could last for years. The months of July and August are the peak months for tourism in Israel. The Ministry of Tourism estimates that the direct damage to the tourism sector was 750 million NIS (over 190 million USD) and that additional indirect damage was two billion NIS (over 500 million USD). This includes damage to the hotel sector (which experienced cancellations of rooms, conferences, and other events through the end of 2015), travel agents, tour guides, transportation systems, cancellations by cruise-ship companies, as well as damages caused after several international airlines cancelled their flights to Israel because of rocket fire directed at Israel's international airport.⁷¹



Above: Cattle killed by rocket attack in Be'er Tuvia (more than 30 kilometers from the Gaza Strip) (Source: ICBA)

The agriculture sector also has suffered greatly. During the 2014 Gaza Conflict, the IDF prohibited agricultual activity within three kilometers of the Gaza Strip border. Farmers and others in the agricultural sector filed 231 claims for compensation for direct damage. Many more claims were filed for indirect damages. These claims involved damage to southern Israel's key agricultural products, such as potatoes, peanuts and

⁶⁹ Main Economic Indicators June - August 2014, Israel Central Bureau of Statistics (Sept. 30, 2014), available at: http://www.cbs.gov.il/reader/newhodaot/hodaa_template.html?hodaa=201422266 (in Hebrew).

⁷⁰ National Accounts - In the Third Quarter of 2014: GDP decreased at Annual Rate of 0.4%, Israel Central Bureau of Statistics (Nov. 16, 2014), available at:

http://www.cbs.gov.il/reader/newhodaot/hodaa_template.html?hodaa=201408310 (in Hebrew).

71 See e.g., Elad Benari, U.S. Condemns Hamas for Threatening Ben Gurion Airport (Aug. 22, 2014),
Arutz Sheva, available at:

http://www.israelnationalnews.com/News/News.aspx/184298#.VMtvhJv9m1s.



sunflowers, as well as damage to farmland, to livestock, 72 and to income because of the inability to work the land for an extended period.

D. Conclusion

During the last 14 years, Israel has been subjected to increasingly deadly threats and terrorist attacks from the Gaza Strip, and has been required to invest vast resources in developing and deploying civil defence systems to protect its civilian population.

The 2014 Gaza Conflict and the period immediately preceding it represented the most intense period of rocket and mortar fire against Israel's civilian population in the nation's history, during which more than 4,000 rockets and mortars were launched against Israel's civilian population, at ranges threatening about six million Israelis (approximately 70% of Israel's population). The 2014 Conflict also exposed an extensive network of cross border tunnels built by Hamas for the purpose of infiltrating Israel and carrying out terrorist attacks.

Israel's extensive civil defence measures, including the Iron Dome and the early-warning systems, assisted in reducing the civilian harm that was ultimately caused during the 2014 Gaza Conflict. Nevertheless, despite the substantial investment in defense measures, the deliberate attacks and threats to Israel's civilian population have caused death, injury and trauma to the Israeli civilian population, as well as extensive long-term damage to infrastructure, agriculture and the economy of Israel. Hamas and other terrorist organizations are continuously developing methods and means to evade Israel's civil defence systems in order to carry out their terror attacks, requiring ongoing investment, improvement and development in order to protect Israel's civilian population.

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⁷² For example, on July 9, at 23:30, a rocket directly hit a cowshed in Be'er Tuvia. The rocket killed 11 cows and landed near the owner's house, where the parents were staying with their children. David Kurzweil, *A Rocket hit a barn in Be'er Tuvia - 11 cows were killed and a shed was damaged*, Kol Chai (93 FM) (July 10, 2014), available at: www.93fm.co.il/radio/121172/ (in Hebrew). On July 15, a rocket hit a cowshed in a kibbutz in the regional council of Eshkol near the Gaza border, killing 30 cows, injuring 20 cows, and causing severe property damage. On July 19, a chicken coop in the Hof Ashkelon Regional Council suffered a direct rocket hit. *Man killed near Dimona as southern Israel comes under heavy rocket fire from Gaza*, KosherPress (July 19, 2014), available at: www.kosherpress.com/man-killed-near-dimona-as-southern-israel-comes-under-heavy-rocket-fire-from-gaza/). On August 24, at 16:00, a mortar shell hit a cowshed in Kibbutz Nirim, killing 6 cows and injuring 40. Severe damage was caused to infrastructure, including water and electricity (israel.agrisupportonline.com/news/csv/csvread.pl?show=5073&mytemplate=tp2; www.ihaklai.org.il/%D7%A8%D7%90%D7%A9%D7%99/%D7%9B%D7%AA/tabid/56/ctl/ArticleView/mid/368/articleId/9722/----6--40--.aspx (in Hebrew).