#### **Flash Report**

# For Medicinal Purposes: The Israeli Military Sector and the Coronavirus Crisis

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The Israeli Ministry of Defense (IMOD), army and state-owned and private military corporations have been at the forefront of the Israeli government's coronavirus crisis response. Their conspicuous involvement, hailed by the Israeli media as a demonstration of social solidarity and civic engagement, exposes the deep military bias that underpins the Israeli economy and political regime and the symbiosis between the civilian sphere and the military apparatus.

One of the features that stand out in the Israeli case is the conversion of military production and Research and Development (R&D) into a national medical business enterprise.

Seemingly overnight, the Israeli Directorate for Defense R&D (DDR&D) was transformed into a medical technology hub, top secret intelligence units were repurposed into medical intelligence gathering bodies, and the largest Israeli military corporations became contractors for the medical sector. These developments expose the dominance of the military sector in Israeli commercial R&D and present new opportunities for military corporations to gain materially and symbolically from the crisis.

In this flash report, Who Profits will investigate the coronavirus-related activities of the Israeli military establishment and private enterprises, focusing on new initiatives reportedly launched by the three largest and most lucrative Israeli military corporations: the state-owned Israel Aerospace Industries (IAI) and Rafael Advanced Defense Systems and the publicly traded Elbit Systems.

## "A Fusion of Medicine and War" - Israel's Militarized Coronavirus Response

Israel's militarized approach to the virus is vividly captured in the IMOD's National Corona Plan for Israel, a 31-page document published on 29 March 2020. The document refers to the pandemic as "a fusion of medicine and war" and envisions a central role for the IMOD in matters of public health and economic policy.1 Among other things, it presents a public-private initiative to develop, operationalize and potentially export a centralized data system to rate the probability of individuals being infected with the virus.<sup>2</sup> Israeli media reports revealed the private company involved in the project is the Israeli spyware firm NSO Group.3

From the onset of the crisis, governmental national security bodies have played a leading role in shaping and executing Israel's coronavirus agenda. These include the National Security Council (NSC), operating under the Prime Minister's Office, the Mossad, Israel's secret intelligence agency, and Israel's General Security Service (GSS or Shin Bet). The NSC was tasked with overall coordination at the national level, despite dubious qualifications in the fields of public health and economics. The division of roles between the Mossad and the Shin Bet in the crisis response paralleled their respective domains of operations, international and domestic. The Mossad, which operates a vast global network of covert agents routinely linked with confirmed and alleged cases of extrajudicial assassinations,4 was deployed in the area of medical equipment procurement.5 The head of the Mossad's technology division told an Israeli journalist that some of the equipment was obtained illicitly, stating that "we activate our special connections in order to [...] get our hands on stock that someone else has ordered."6 The Shin Bet, which operates in the occupied Palestinian territory and within the Green Line, was swiftly authorized by the Israeli government to track confirmed coronavirus patients and those around them.7 The considerable surveillance powers of the Shin Bet far precede the current pandemic, and have long been used against Palestinians on both sides of the Green Line. According to Ynet, the tracking of coronavirus patients relies on a massive secret database already in existence, known as 'the Tool,' which gathers continuous real-time

Konrad, Ido. Equating coronavirus with terror, Netanyahu turns surveillance powers on Israelis. +972 Magazine, 15 March 2020.



National Corona Plan for Israel. Israeli Ministry of Defense. 29 March 2020.

Ibid. "This is why we have established in the IMOD in collaboration with the IDF [sic] and civilian companies a centralized data system, into which we will 'spill' all the data...The system is ready to be operationalized. It is the most advanced system in the world, in my opinion, and will be replicated later (gladly!) all over the world."

Goichman, Rafaela. Ministry of Defense Teamed Up with NSO to Rate the Probability of You Catching Coronavirus. The Marker, 29 March, 2020. For more on the involvement of NSO Group, see NSO **Group: Technologies of Control**, Who Profits, May 2020.

Black, Ian. Rise and Kill First: The Secret History of Israel's Targeted Assassinations – review . The Guardian. 22 July 2018.

Holmes, Oliver. <u>Israeli spies source up to</u> 100,000 coronavirus tests in covert mission. The Guardian. 19 March 2020.

Dayan, Ilana. Commander of Mossad war room for fighting coronavirus, in an interview with Uvda: Globally people are dying due to shortage of ventilators. That won't happen in Israel. Channel 12, 31 March 2020 (Hebrew).



Israel's militarized coronavirus response. Photo by Activestills. 29 April 2020

data on all Israeli citizens.8 The Shin Bet is deeply involved in the Israeli policy of targeted assassinations, drafting the death-lists and providing the intelligence for the Israeli air force to carry out.9 In September 2019, Amnesty International reported the state-sanctioned torture of Palestinian detainee Samir Arbeed by Shin Bet interrogators. 10

The Intelligence Division of the Israeli army has also become involved in the national coronavirus response, establishing a National Information and Knowledge Center on Coro-

navirus.11 According to media reports, two elite intelligence units, Unit 8200, the signals intelligence unit, and Unit 81, the intelligence division's technology unit, now conduct coronavirus-related medical research.12

Tellingly, technological efforts to address the virus on the national level have not been spearheaded by Israel Innovation Authority (IIA) or the Ministry of Science and Technology, but by the Directorate of Defense Research and Development (DDR&D), a joint body of the IMOD and the Israeli military, operated by both military personnel and civilians and responsible for the development of weaponry and the technological infrastructure of the

Berkovitz, Uri. Hush-hush IDF intel unit takes on Covid-19. Globes, 20 April 2020.



Bergman, Ronen and Shvartztuch, Ido. "The Tool" is exposed: The secret GSS database that collects your SMS texts, calls and locations. Ynet+, 27 March 2020 (Hebrew).

Weizman, Eyal. Hollow land: Israel's architecture of occupation. Verso books, 2012, p. 241.

Israel/ OPT: Legally-sanctioned torture of Palestinian detainee left him in critical condition. Amnesty International, 30 October 2019.

National Information and Knowledge Center 11 on Coronavirus. Gov.il (Hebrew).

Israeli military.13

The DDR&D's director, Brigadier-General (Res.) Dani Gold, was appointed head of a newly formed National Technological Center to Fight Coronavirus, which Defense Minister Naftali Bennett described as a "commando unit" for identifying advanced technologies. 14 The Directorate established a 'National Emergency Team' comprised of government ministries (Defense, Health and Finance), the Israeli army, military industries, IIA, tech companies, hospitals and academic institutions. The Center provides the institutional framework for many of the recent collaborations between Israel's military companies and medical civilian firms, hospitals and academics in the medical field.

This framework provides a potential business development model for the Israeli military sector in the medical market. As the director of the Government Companies Authority told the Israeli newspaper Globes, "These are two kinds of industries where there's big money, the industries developing means of killing people, and the industries developing means of saving them."15 As will be discussed in the following section, since the launch of the DDR&D-directed Center, there has been a rapid proliferation of coronavirus-related proposals, products and projects, involving Israeli government authorities, private capital, academic research bodies and hospitals.

It should be emphasized that its newfound medical calling has not taken the Israeli military apparatus away from its primary funccontrol over a civilian Palestinian population. The daily repression of Palestinians remains the army's 'essential' work. According to the official magazine of the Israeli army, protective equipment, including surgical masks and gloves, and other measures ensure soldiers can continue to raid Palestinian homes in the occupied West Bank and patrol the fence around the besieged Gaza at minimal health risk to themselves.<sup>16</sup> Moreover, since the crisis began, there have been multiple reports of Israeli airstrikes in Syria, 17 raising the possibility that Israel is taking advantage of the global health crisis to make strategic geopolitical gains.<sup>18</sup>

tion and raison d'être, the continued military

## Militarism on Meds – Israel's Military **Industries and Coronavirus-related** Tech

The coronavirus crisis offers a window into the workings of the transfer of Israeli military knowledge to civilian industries, in this case to the medical industry.

Previous research by Who Profits exposed the ways in which the commercialization of occupation-generated Israeli military know-how extends beyond the security industry and into civilian markets. The state military apparatus functions as a laboratory, a reference, a client and an incubator for Israeli technological innovation. From underwater walls to crowd control weapons to biometric systems, Isra-

Harel, Amos. Analysis Under Cover of COVID-19, Israel Seems to Intensify Its Attacks Against Iran in Syria. 5 May 2020.



DDR&D- Directorate of Defense Research & Development. Israeli Ministry of Defense. Accessed 11 May 2020.

DDR&D: Emergency team to address the COVID-19 pandemic. Israeli Ministry of Defense. Accessed 11 May 2020.

Barkat, Amiram. Weapons against coronavirus. Globes, 1 April 2020.

Barel, Merav, Van Zayden, Batya, Greenberg Cohen, Einav and Neustein, Lior. Adjusted training, surgical gloves and dispersing the force: How does one maintain operational preparedness under the coronavirus pandemic?. IDF [sic] Editorial Board, 22 March 2020 (Hebrew).

Salama, Daniel, Zeitoun, Yoav and Blumenthal, Itay. Syria: Israel attacked in the northern region. *Ynet*, 5 May 2020 (Hebrew).

el's prolonged occupation provides a fertile breeding ground for the development and application of new technologies of control. Contracts with the Israeli military serve as a "business card" for companies among potential customers, giving them a competitive edge. The importance of the military establishment as a buyer of security products is material as well as reputational, creating the initial local demand and facilitating the emergence of local industry.<sup>20</sup> Finally, the military and state-owned military industries form a highly effective training ground for tech workers, many of whom, upon leaving the military, come to occupy key positions in the private high-tech sector, carrying with them the technical know-how as well as the informal networks obtained over the course of their military careers.

In surveying the Israeli technological response to the coronavirus pandemic, the involvement of the three largest players in the Israeli military sector stands out. IAI, Rafael and Elbit Systems have reportedly been involved in numerous coronavirus-related initiatives, including the manufacturing of ventilators and the conversion of remote monitoring capabilities for medical use.

While IAI, Rafael and Elbit derive most of their revenues from defense and security markets, all three are active in civilian markets, either directly or through their subsidiaries. In 2018, IAI reported that 28% of its revenues came from civilian markets.21 Rafael holds 49.9% of Rafael Development Corporation (RDC), a private company that manages a portfolio

of technology companies engaged in product development based on military technologies originating in Rafael for civilian markets.<sup>22</sup> Elbit Systems provides products and solutions in a number of commercial fields, including medical instrumentation.23 Previous research by Who Profits showed all three have adapted military capabilities for use in the growing agritech industry: IAI converted drones for agricultural use, Rafael subsidiary mPrest collaborated with Netafim on a digital irrigation platform and Elbit is a member of a research consortium around plant identification technologies.<sup>24</sup> The current public health crisis presents these corporations with new prospects for material and symbolic gain. The ability to diversity their product offering is especially significant as the pandemic threatens to impact global defense supply chains and governments' budgetary priorities.25 Moreover, with the number of critically-ill patients in Israel stabilizing around 100,26 the potential for future export is undeniable.

#### Ventilators

One of the first initiatives undertaken by the DDR&D was pairing Israeli ventilator manufacturers with military industries, using the production capabilities of the latter to increase output.27 The DDR&D's director told the Israeli media that "our military industries have extraordinary abilities to produce rapid-

Etzion, Udi. <u>Head of MOD emergency team:</u> "We will supply ventilators in a short period time". Calcalist, 29 March 2020 (Hebrew).



<sup>19</sup> Israel Aerospace Industries, 2018 Annual Report, p. 124. On file with Who Profits.

Gordon, Neve. "The political economy of Israel's homeland security/surveillance industry." The New Transparency: Surveillance and Social Sorting 28 (2009). P. 24

Israel Aerospace Industries, 2018 Annual Report, p. 154. On file with Who Profits.

<sup>22</sup> Rafael Advanced Defense Systems, 2018 Annual Report, p. 13. On file with Who Profits.

Elbit Systems, 2019 Annual Report. On file with Who Profits.

Agribusiness as Usual Agricultural Technology and the Israeli Occupation. Who Profits, January 2020.

<sup>25</sup> Sreekumar, Arjun. How COVID-19 Will Impact the Defense Industry. The Diplomat, 27 March 2020.

<sup>26</sup> Covid-19 in Israel. Haaretz. Accessed 11 May 2020.

ly and in large quantities any component, for weapons or ventilators, and to eliminate the dependence on import."28 According to an interview with the head of the Mossad's technology division, the Mossad also procured, "by circuitous means," vital information for the production of ventilators.<sup>29</sup>

On 31 March 2020, IAI stated in a press release that the DDR&D, the Production and Procurement Directorate of the IMOD, the private Israeli firm Inovytec Medical Solutions and a classified IAI missile production department established a production line for Ventway Sparrow ventilators.30 According to Calcalist, the production department in question manufactures surveillance satellites for the IMOD and international customers.31 IAI engineers also reportedly took part in a collaboration between the electronics division of the Air Force, Microsoft Israel and other bodies to convert manual respirators into automated ones.32

Rafael and the private Israeli companies Flight Medical and Baya Technologies are likewise engaged in mass production of ventilators.33 Flight Medical is a developer of portable ventilators,34 while Baya Technologies specializes in manufacturing sensitive electronic systems for both military and medical industries.35 A blog entry by Rafael stated the company was assisting in the procurement of difficult-to-obtain components and in establishing production infrastructure.36

Finally, Elbit Systems was selected by the IMOD, the DDR&D and the Ministry of Health to establish a serial production line to manufacture large quantities of LifeCan One ventilators, based on technology developed by the Israeli medical startup LifeCan Medical.<sup>37</sup>

### **Remote Monitoring**

Whereas the manufacturing of ventilators primarily leverages the production capacity of the military sector, a series of technological projects seek to adapt Israeli military technologies, developed in the context of Israel's prolonged occupation of Palestinian and Syrian land, for civilian medical use.

Among these projects is a joint initiative of Elbit Systems and Elta Systems, a wholly owned subsidiary of IAI, carried out in the framework of the DDR&D's National Technological Center, to develop a remote patient monitoring system for coronavirus patients.38 According to TheMarker, the system is based on Elbit and Elta's radar and optics systems, as well as technologies developed by the Israeli startups

<sup>38</sup> Cohen, Sagi. Without a doctor's touch: An <u>Israeli system will remotely monitor temperature</u> and breathing in coronavirus patients. The Marker, 31 March 2020 (Hebrew).



Etzion, Udi. A peek into Israel's ventilators 28 production line. Calcalist, 6 April 2020 (Hebrew).

Dayan, Ilana. Commander of Mossad war room for fighting coronavirus, in an interview with Uvda: Globally people are dying due to shortage of ventilators. That won't happen in Israel. Channel 12, 31 March 2020 (Hebrew).

In Accordance with the Directive of the 30 Minister of Defense, Naftali Bennett: The Ministry of Defense, IAI and Invoytec will Begin the Serial Production of Israeli-developed Ventilators. Press release. Israel Aerospace Industries. 31 March 2020. Accessed 11 May 2020.

Etzion, Urdi. Coronavirus brings military industries into a new battlefield. Calcalist, 31 March 2020 (Hebrew).

Ibid; Etzion, Udi. Head of MOD emergency team: "We will supply ventilators in a short period time". Calcalist, 29 March 2020 (Hebrew). Ibid. 33

<sup>34</sup> Flight Medical Homepage. Accessed 11 May 2020.

Etzion, Udi. A peek into Israel's ventilators production line. Calcalist, 6 April 2020 (Hebrew).

Fighting the Coronavirus with Powerful Technologies. Rafael Blog. Rafael Advanced Defense Systems, 16 April 2020. Accessed 11 May 2020.

Globes Correspondent. Elbit Systems to produce LifeCan Medical ventilators. Globes, 10 April 2020.



An Israeli drone documented in a Great March of Return demonstration. Gaza. Photo by Activestills. 10 August 2018

Neteera, Vayyar and EchoCare.<sup>39</sup> A highly sensitive radar would measure a patient's pulse and respiratory rate while a thermal camera would measure their body temperature; at a later stage, an Artificial Intelligence (AI) component may be added to cross analyze the data.40

Another company to join the business of coronavirus-related tech is the Israeli facial recognition firm AnyVision, whose surveillance products have been deployed in the occupied West Bank, including East Jerusalem. Company technology has been used in military checkpoints and on existing CCTV networks within the West Bank to monitor and surveil Palestinians,41 as well as by Israel Police to

track suspects through the Israeli-controlled streets of East Jerusalem, where three in five residents are Palestinian.42

In early April, Calcalist reported that AnyVision will begin to deploy thermal cameras at a Tel Aviv hospital that can remotely measure body temperatures and determine whether high temperature is the result of a disease or of physical exertion.<sup>43</sup> The system is based on IAI MiniPOP44 thermal cameras. According to Calcalist, the technology was originally devel-

surveils Palestinians. TheMarker, 14 July 2019 (Hebrew).

MiniPOP Lightweight Payload for Day/Night Observation System. Israel Aerospace Systems. Accessed 11 May 2020.



<sup>39</sup> Ibid. 40 Ibid.

Ziv, Amitai. Scoop: The curious Israeli startup that operates clandestinely in the territories and

Solon, Olivia. Why did Microsoft fund an Israeli firm that surveils West Bank Palestinians? NBC News, 28 October 2019.

Kabir, Omer. Face Recognition Startup AnyVision to Deploy Thermal Cameras at Tel Aviv Hospital. CTech, 7 April 2020.

oped for military warships and drones.<sup>45</sup>

A similar product, designed to identify people with fever in public places, was developed by Rafael using the thermal imaging cameras of its partially-owned (49.9%) subsidiary Opgal. According to the company's blog, "These highly sensitive cameras, which are used in the homing devices attached to our missiles, can detect and measure heat from a significant distance."46 Following a pilot in two Israeli hospitals, the product is currently in operational use. In the future, the blog further states, such cameras may also be deployed in places such as malls and shops.

While the presence of Israel's biggest military players in the initiatives of the National Technological Center to Fight Coronavirus has been far-ranging and ubiquitous, there are additional channels for the transfer of knowledge from the state military apparatus to the private medical sector. Various Israeli military intelligence and computer engineering units and training programs function as a "conveyor belt" for hundreds of Israelis, many of whom migrate to the private high-tech industry.<sup>47</sup>

A case in point is the Israeli start-up Sensible Medical, composed largely of veterans of Unit 81, the top-secret technological unit of the Israeli military's intelligence division.<sup>48</sup> Haaretz reported the company is piloting the use of its ReDS lung fluid monitor to monitor the lungs of coronavirus patients in a number

Cohen, Sagi. Pilot in hospitals: A radar to warn about deteriorating condition of coronavirus patients. Haaretz, 30 April 2020 (Hebrew).



of Israeli hospitals.49 The ReDS system is reportedly already in use in Italy and the United States.50 Sensible Medical CEO Amir Ronen told Haaretz that the system's core technology is a military technology, "intended to see through walls for urban warfare or locating survivors under debris."51

<sup>45</sup> Kabir, Omer. Face Recognition Startup AnyVision to Deploy Thermal Cameras at Tel Aviv Hospital. CTech, 7 April 2020.

Fighting the Coronavirus with Powerful Technologies. Rafael Blog. Rafael Advanced Defense Systems, 16 April 2020. Accessed 11 May 2020.

Gordon, Neve. "The political economy of Israel's homeland security/surveillance industry." The New Transparency: Surveillance and Social Sorting 28 (2009).

Cohen, Sagi. Pilot in hospitals: A radar to warn about deteriorating condition of coronavirus patients. Haaretz, 30 April 2020 (Hebrew).

<sup>49</sup> Ibid.

Sensible Medical ReDS Lung Fluid Monitor to Help COVID-19 Patients in Italy, US and Other Countries. News. Sensible Medical. 16 April 2020. Accessed 11 May 2020.