

ARMED BANKING AND ITS JOINT RESPONSIBILITY IN THE GAZA GENOCIDE

The financing of companies that manufacture
arms used in the massacres against the
Palestinian people

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INDEX

Executive summary	5
1. Introduction	7
2. Who sells and exports the weapons causing genocide in Gaza? 10	
Arms exports to Israel in the last ten years.	12
US	17
Germany	21
Italy	23
Spain.....	24
3. Which cases do we know of the use of arms transferred to Israel, and how are they impacting the Palestinian people?	25
Aircraft.....	25
Bombs / Missiles.....	29
Ships.....	33
Armored land vehicles.....	36
4. Who finances the companies producing the arms that the Israeli military uses in Gaza? The role of armed banking in the genocide	41
4.1 The Spanish armed banking and its ties with the genocide	42
Banco Santander	43
BBVA.....	43
BBVA and Santander: Oshkosh Corp, Rheinmetall shareholders and Rolls-Royce	44
BBVA and Santander: financing the bombs dropped on Gaza . . .	44
Caixabank and other Spanish financial institutions	46
4.2 International financial institutions and their ties with the genocide	46
5. Conclusions and recommendations	47
Appendix	50

ACRONYMS

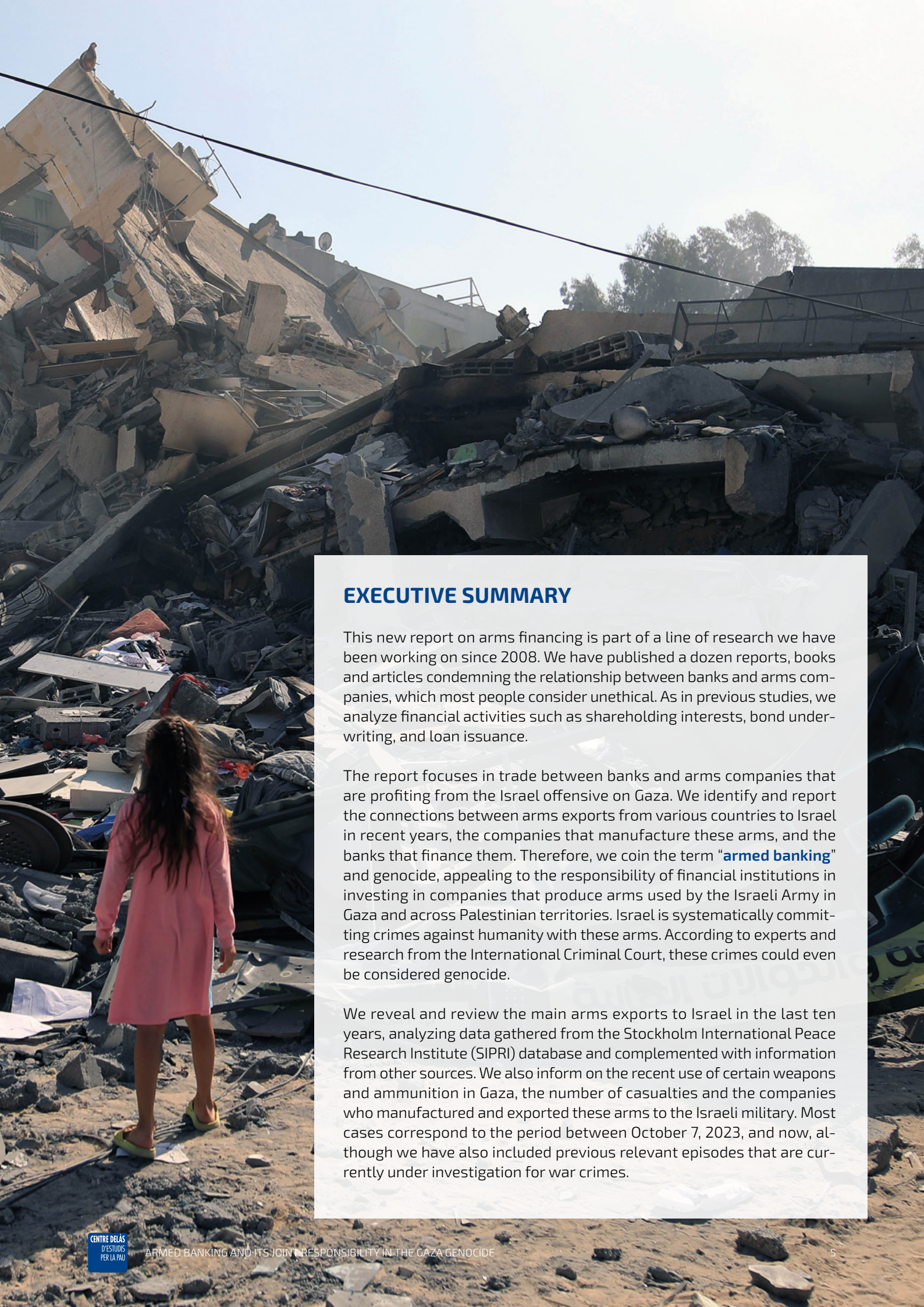
OHCHR	Office of the United Nations High Commissioner for Human Rights
DE	Germany
AOAV	Action on Armed Violence
APV	Armored Patrol Vehicle
CAAT	Campaign Against Arms Trade
CNN	Cable News Network
HR	Human Rights
USA	United States of America
IDF	Israel Defense Forces
IAF	Israeli Air Force
FMF	Foreign Military Financing
FMTV	Family of Medium Tactical Vehicles
GBU	Guided Bomb Unit
HRW	Human Rights Watch
AI	Artificial Intelligence
ISTAT	Italian National Institute of Statistics
JDAM	The Joint Direct Attack Munition
JLTV	Joint Light Tactical Vehicles
UN	United Nations
NATO	North Atlantic Treaty Organization
NL	The Netherlands
UK	United Kingdom
CSR	Corporate social responsibility
SDB	Small Diameter Bomb
SIPRI	Stockholm International Peace Research Institute
TIV	Trend-indicator value
ICJ	International Court of Justice
EU	European Union
UNRWA	United Nations Relief and Works Agency for Palestine Refugees in the Near East
WRSP	War Reserve Stockpile Allies

TABLE INDEX

Table 1. Arms exports from all states to Israel in the last 10 years (2014-2023), according to data from SIPRI	14
Table 2. Examples of weapons used in Israeli attacks on Gaza, the companies that produce them, the impacts they cause, and the banks that finance them	38
Table 3. Distribution by financing and investment categories of Spanish armed banking in arms companies exporting to Israel.....	42
Table 4. Ranking of Spanish armed banking linked to the genocide.....	42
Table 5. Banco Santander financing to companies exporting arms to Israel which are being used in Gaza	43
Table 6. BBVA financing to companies exporting arms to Israel which are being used in Gaza.....	44
Table 7. Financing of other Spanish banks to companies exporting arms to Israel which are being used in Gaza	45
Table 8. First 25 organizations from the Top 100 international armed banking jointly responsible for the Gaza genocide.....	46

Annex

Table 9. Top 100 international armed banking jointly responsible for the Gaza genocide	50
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EXECUTIVE SUMMARY

This new report on arms financing is part of a line of research we have been working on since 2008. We have published a dozen reports, books and articles condemning the relationship between banks and arms companies, which most people consider unethical. As in previous studies, we analyze financial activities such as shareholding interests, bond underwriting, and loan issuance.

The report focuses in trade between banks and arms companies that are profiting from the Israel offensive on Gaza. We identify and report the connections between arms exports from various countries to Israel in recent years, the companies that manufacture these arms, and the banks that finance them. Therefore, we coin the term "**armed banking**" and genocide, appealing to the responsibility of financial institutions in investing in companies that produce arms used by the Israeli Army in Gaza and across Palestinian territories. Israel is systematically committing crimes against humanity with these arms. According to experts and research from the International Criminal Court, these crimes could even be considered genocide.

We reveal and review the main arms exports to Israel in the last ten years, analyzing data gathered from the Stockholm International Peace Research Institute (SIPRI) database and complemented with information from other sources. We also inform on the recent use of certain weapons and ammunition in Gaza, the number of casualties and the companies who manufactured and exported these arms to the Israeli military. Most cases correspond to the period between October 7, 2023, and now, although we have also included previous relevant episodes that are currently under investigation for war crimes.

We identify 15 arm's companies supplying guns and ammunition to Israel: **BAE Systems, Boeing, Day & Zimmerman, Elbit Systems, General Dynamics, Israel Aerospace Industries, Leonardo, Lockheed Martin, Nammo, Navantia, Oshkosh Corp, Rafael Advanced Defense Systems, Rheinmetall, Rolls-Royce** and **RTX Corp** (formerly **Raytheon Technologies**). We analyze 3,606 financial operations executed in recent years, classifying them into four categories: lending facilities, corporate loans, bond underwriting, and share purchases. All these operations have been carried out by the mentioned companies and financial institutions, both in the Spanish state and internationally.

Specifically, we have identified up to 12 Spanish financial institutions, among them **Santander, BBVA** and **CaixaBank**, and other Spanish banks such as **Ibercaja, Banco Caminos** and **Banca March**, who have invested in seven of these companies: **Boeing, Day & Zimmerman, General Dynamics, Oshkosh Corp, Leonardo, Rheinmetall** and **MTU Friedrichshafen**. Of these financial institutions, Santander and BBVA are the main banks financing companies manufacturing arms used by the Israeli military to commit the genocide in Gaza, with over \$2.442 and \$15 billion, respectively.

Among the cases explained in the report, we want to highlight the following due to their financing volume and the damages caused to the civilian population:

- **BBVA** has invested 1.300 millions, **Santander** 1.200 millions and **Caixabank** 110 millions, to companies exporting guided bomb units type *GBU* used by the Israeli military (manufactured by **Boeing** and **General Dynamics**) in the Jabalia massacre on October 9 or 31, in which bombs destroyed two buildings in the first attack, and 20 in the second. Casualties amounted to 42 killed civilians in the first, and 56 in the second, besides multiple injured.
- In the last years, three main banks have financed the production and maintenance of F-15 and F-35 strike fighters exported to Israel. **Santander** (\$1,218 billion, **Boeing, F-15**; \$198 million, **Leonardo, F-35**), **BBVA** (\$933 million, **Boeing, F-15**; \$198 million, **Leonardo, F-35**) and **CaixaBank** (\$110 million, **Boeing, F-15**). These fighters have been widely used in the bombing campaign over Gaza, Lebanon and Yemen, launching missiles with the *JDAM* guidance

kit and causing an undetermined number of casualties. The July 2024 attack on the Hudaydah Port in Yemen killed several people and caused at least 80 injuries.

- **Rheinmetall**, the company producing and exporting *M109-52 self-propelled 155mm howitzers* to Israel, launched in October (for instance in attacks on the Port of Gaza and nearby hotels, as well as in Lebanon), has received financing from Spanish financial institutions such as **Banco Santander** (\$1.8 million), **BBVA** (\$16.89 million), **EDM Group** (\$8.82 million), **Ibercaja** (\$2.53 million), **Banco Caminos** (\$0.25 million), **Dux Inversores** (\$0.17 million), **Renta 4 Banco** (\$0.56 million) and **GVC Gaesco Group** (\$0.41 million). **Rheinmetall** also manufactures the *Rh-120* tank ammunition, which has been used against Palestinian civilians and critical civilian infrastructure indiscriminately, including medical facilities, aid convoys and shelters in Gaza, as well as against journalists.
- **BBVA** and **Santander** have financed the companies producing high caliber ammunition used by the Israeli military, such as 155 mm *M107* and *M795* projectiles of **General Dynamics** and *M830A1* of **Day & Zimmerman**, launched in January from Israeli tanks, killing a six-year-old girl and the family members and medics who tried to rescue her. **General Dynamics** has been financed by **BBVA** with \$345 million and **Day & Zimmerman** by **Santander** with \$58 million.

Therefore, with this new report, we try to name those jointly responsible for the biggest massacre perpetrated in recent times, the genocide of the Palestinian people in Gaza. The Israeli military would not have been able to carry out these attacks without the weapons it has imported in the last year, many of them manufactured by companies that depend on financing from Spanish banks such as **Banco Santander** and **BBVA** as well as from international banks. Most of the Spanish population has shown solidarity with the struggle of the Palestinian people and strongly opposes the genocide in Gaza. Therefore, banks that invest their resources, and those of their clients, to support the Israeli military-industrial complex must accept responsibility and cancel all operations that may be linked to war crimes perpetrated by the Israeli military.



1. INTRODUCTION

This report is part of a line of research on arms financing that Centre Delàs has been working on since 2008. We have published a dozen reports, books and several articles condemning the relationship between banks and arms companies. “Armed banking” refers to banking institutions financing, and therefore strengthening the arms industry. Although many people and organizations believe that this link makes financial institutions jointly responsible for the use of the weapons they finance, the arms trade is allowed, and many banks and financial institutions take part in it without reservations. This “controversial” relationship is established in various ways, such as through shareholding interests, bond underwriting and loan issuance.

Currently, there is a global rise in the number of armed conflicts and growing geopolitical tensions between states (and also *intrastates*) and blocs and alliances between them. This has also been the case in the launch of the Israeli offensive on Gaza on October 7, 2023. Since that day, the Israeli military has been carrying out an unprecedented attack on the Gaza Strip —and to a lesser extent on the West Bank and Golan Heights— reported by Human Rights associations such as Amnesty International and the United Nations (UN).

After a year of conflict, the situation faced by the Palestinian people is hard to describe with words. Nonetheless, the numbers give us a glimpse of the impact of the Israeli offensive. As of the beginning of September, the Gaza Health Ministry reported that deaths reached 40,435, with the

number of wounded climbing to 93,534.¹ However, these numbers could be much higher.² The prestigious medical magazine *The Lancet*, in a conservative estimate, points to over 186,000 deaths due to direct or indirect causes derived from the Israeli actions in Gaza.³ So far, Israel has dropped nearly 70,000 metric tonnes of explosives during its offensive on Gaza, which averages out to about 35 kg of explosives for every man, woman, and child living in Gaza.⁴ Israeli bombs have destroyed or damaged all universities⁵ and most hospitals,⁶ besides all basic infrastructure and most arable lands⁷. Additionally, it has caused the forced mass displacement of 90% of the population at least once.⁸ In light of this backdrop, South Africa filed a genocide case against Israel at the International Criminal Court⁹ (ICC), which other countries supported.

States and military alliances like the North Atlantic Treaty Organization (NATO) play a key role in the war business. But they are not the only ones. Other relevant actors are companies from the military-industrial complex or banks that finance them. The UN has set the Guiding Principles on Business and Human Rights, and the Organization for Economic Co-operation and Development (OECD) the Guidelines for Multinational Enterprises on Responsible Business Conduct. These determine the responsibility of companies to estab-

lish due diligence mechanisms to prevent and remedy Human Rights violations caused to local communities in situations of armed conflict, including the abstention or cease of their economic activities in cases of military occupation.¹⁰ However, there is a clear lack of mechanisms, transparency and willingness to comply to the extent that it hinders a company's potential profits. In response to the advocacy of civil society organizations and to keep up appearances in front of a mostly critical and pacifist society, some banks have endorsed more or less detailed and broad social corporate responsibility (CSR) policies about investing in the arms trade or the use of fossil fuels. However, these policies are not effective in preventing the financing of arms companies¹¹ and, as the report explains, they are not useful to avoid investments in cases of flagrant breaches of international humanitarian law, or what could constitute war and genocide crimes by Israel according to international law.¹²

Facing this situation, the current report focuses on the arms trade profiting from the genocide in Gaza. We identify and report the connections between arms exports from various countries to Israel in recent years, the companies that manufacture these arms, and the banks that finance them. This is what we call "armed banking" and genocide. The link between financial institutions and a conflict involving potential war crimes was already analyzed three years ago in the Yemen war¹³ through a report that led to ongoing strategic litigation. This report highlights specific incidents¹⁴ in Gaza where weapons bought from companies in other countries and sold to Israel have been used in recent years. Then, we identify which banks and other financial institutions have been financing these arms companies in recent years, making them jointly responsible for their use and impacts.

1. United Nations Office for the Coordination of Humanitarian Affairs (August 26, 2024). Humanitarian Situation Update #209 | Gaza Strip. Available at: <https://www.ochaopt.org/content/humanitarian-situation-update-209-gaza-strip>. Accessed September 10, 2024.
2. In February, the UN estimated that 35% of Gaza's buildings had been destroyed and the number of corpses that could be hidden in the rubble would exceed 10,000. months later this figure could be much higher.
3. Khatib, Rasha et al., (2024). Counting the dead in Gaza: difficult but essential. *The Lancet*, Volume 404, Issue 10449, 237 - 238. *Indirect causes* include indirect health implications during and post conflict such as reproductive, communicable and non-communicable diseases due to factors such as the intensity of the conflict, destruction of health infrastructure, severe shortages of food, water and shelter, inability of the population to flee to safety and lack of humanitarian support, among others.
4. Euro-Med Human Rights Monitor (April 24, 2024). 200 days of military attack on Gaza: A horrific death toll amid intl. failure to stop Israel's genocide of Palestinians. Available at: <https://euromedmonitor.org/en/article/6282/200-days-of-military-attack-on-gaza-a-horrific-death-toll-amid-intl.-failure-to-stop-israel%E2%80%99s-genocide-of-palestinians>. Accessed September 13, 2024.
5. ACNUDH (April 18, 2024). UN experts deeply concerned over 'scholasticide' in Gaza. Available at: <https://www.ohchr.org/en/press-releases/2024/04/un-experts-deeply-concerned-over-scholasticide-gaza>. Accessed September 10, 2024.
6. An infographic with some of the main data on the destruction of hospitals and impacts on healthcare personnel from October through July is available at <https://visualizingpalestine.org/> Accessed September 9, 2024.
7. Forensic Architecture (March 29, 2024). No traces of life: Israel's ecocide in Gaza 2023-2024. Available at: <https://forensic-architecture.org/investigation/ecocide-in-gaza>. Accessed September 10, 2024.
8. UN (July 4, 2024). 9 out of 10 people in Gaza have been displaced at least once. Available at: <https://palestine.un.org/en/273224-9-out-10-people-gaza-have-been-displaced-least-once>. Accessed September 10, 2024.
9. Meilhan, P., et. al. (December 29, 2023). South Africa files genocide case against Israel at International Court of Justice over Gaza war. CNN. Available at: <https://edition.cnn.com/2023/12/29/middleeast/south-africa-icj-israel-genocide-intl/index.html> Accessed September 10, 2024.

10. Extensive analysis of the potential criminal implications for companies that continue to sell products such as weapons or fuel, which are essential to Israel's military development, can be found in the SOMO (2024) and PAX (2024) reports. Respectively, SOMO (2024). Fuelling the flames in Gaza. Available at: <https://www.somo.nl/fuelling-the-flames-in-gaza/>; PAX & Profundo (2024). The companies arming Israel and their financiers. Available at: <https://paxforpeace.nl/publications/the-companies-arming-israel-and-their-financiers/>.
11. Centre Delàs (2024). Informe 63: La Financiación de las armas y la (I) Responsabilidad Social Corporativa. Available at: <https://centredelas.org/publicacions/irresponsabilitatsocialcorporativa/>
12. ONU. (June 12, 2024). Una Comisión de investigación de la ONU acusa a Israel de crímenes de lesa humanidad y a Hamás de crímenes de guerra. Available at: <https://news.un.org/es/story/2024/06/1530501#:~:text=En%20el%20informe%2C%20la%20Comisi%C3%B3n,y%20tratos%20inhumanos%20y%20cruetes>. Accessed 23/09/2024.
13. Centre Delàs (2021). Report 48: Financing weapons of the Yemen War. Analysis of the financing of arms companies that have exported to Saudi Arabia and the United Arab Emirates (2015-2019). Available at: <https://centredelas.org/publicacions/financiaciondelasarmasenyemen/?lang=en>
14. The instances of use that we will present have been documented, many of them by reputable international rights organizations and international bodies such as UN commissions.

In the first chapter, we reveal and review the main arms exports to Israel in the last ten years, analyzing data gathered from the Stockholm International Peace Research Institute (SIPRI) database and complemented with information from journalists and official documents. In the following section of the chapter, we address a series of recent arms uses in Gaza and their context, the number of casualties and wounded people, and relevant information on the weapons employed and the companies that manufactured them. Most cases correspond to the period between October 7, 2023, and now, although we have also included earlier relevant episodes under investigation for war crimes or which show a similar usage behavior. Most of the cases gathered and reviewed have been previously reported by international Human Rights organizations, such as Amnesty International, Oxfam or Human Rights Watch (HRW), or international bodies such as the Office of the United Nations High Commissioner for Human Rights (OHCHR).

Once we have identified the companies involved, the weapons they produce and when they have been used in Gaza and across Palestine, the next chapter focuses on who is financing these arms companies, through which financial operations, how much and for how long, both in Spain and internationally. This analysis is a fundamental part of the report because it sheds light on the degree of joint responsibility of various financial institutions and their connections to specific companies. This means that we can determine not only which banks contribute to armed banking—something we have already proven in previous reports—but also rank those that have contributed the most to financing these weapons and therefore, hold more responsibility for the genocide Israel is perpetrating in Gaza. We provide specific examples of how the financing of certain arms companies is causing massacres in various locations across Gaza.

We identify the main Spanish Banks (also the international ones) contributing to the genocide in Gaza and profiting from it. We pay special attention to those international financial institutions that operate in Spain.

Methodologically speaking, we want to note that in the second chapter, the main sources are the SIPRI database (**Table 1**) and the reports from international Human Rights organizations or bodies such as the UN (**Table 2**), with complementary information from journalist sources and others. In the third chapter, we have obtained data through the collaboration of *Profundo*, an organization specialized in gathering financial data (**Tables 3 to 9**). Financing data on "armed banking" gathered in this report will also be available in the International Armed Banking Database of the Centre Delàs¹⁵ once we update it. We also want to highlight that sources that sustain this report are all referenced in footnotes rather than in a bibliography at the end to ease reading, source verification and quick access to comments that complement the text.

Finally, we underline that this report uses the term *genocide* following the definition set by the Royal Spanish Academy, in the sense of "extermination or systematic elimination of a group of humans due to their race, ethnic group, religion, politics or nationality". This definition does not match the technical legal concept of genocide; condemning Israel for this international crime will require proving its intent to destroy the Palestinians as a national community in whole or in part, which will require demanding burdens of proof. In any case, and from a legal perspective, it is clear that the State of Israel is systematically conducting a widespread attack against civilians in Gaza, thus perpetrating crimes against humanity and serious war crimes such as genocide.

15. View database here: <https://database.centredelas.org/banca-armada-es>



2. WHO SELLS AND EXPORTS THE WEAPONS CAUSING GENOCIDE IN GAZA?

According to an article published by Bloomberg¹⁶ in mid-August 2024, about ten months after the Israel Defense Forces (IDF) launched the offensive over Gaza, the attacks have reduced Gaza to 42 million metric tonnes of rubble. Over 70% of housing has been damaged or destroyed, as well as most basic infrastructures and services (hospitals, roads, schools, shops, etc.). Up to 40,000 people have been killed, including at least 16,456 children.¹⁷ Furthermore, almost the entire Gaza Strip population — 2.2 million people before the October 7 offensive — has suffered forced internal displacement to increasingly reduced areas. They have been cut off from drinkable water and food supplies, as well as medicines and basic sanitary measures, causing the proliferation of diseases and widespread famine. Additionally, the Forensic Ar-

chitecture report, *No Traces of Life*¹⁸, states that the Israeli military has systematically targeted orchards, farms, greenhouses and arable lands. These attacks may constitute ecocide, adding to the allegations of war crimes and genocide already under investigation by various courts, among them the International Criminal Court.¹⁹

Israel has caused all these damages on the Strip by land, sea and air with the arms and weapons of one of the most advanced armies in the world.²⁰ As Antony Loewenstein explains in his book, *The Palestine Laboratory*,²¹ Israel has carried a brutal occupation of Palestine for more than 50 years. It has developed “an enormous quantity of tools and technology to maintain the occupation: unmanned aircraft, espionage programs, biometric data collection, facial recogni-

16. Hodali, F. et al. (2024). How Will Gaza be Rebuilt After Israel-Hamas War — And Who Will Pay? *Bloomberg Equality*. Available at: <https://www.bloomberg.com/graphics/2024-gaza-who-will-pay-to-rebuild/>. Accessed 10/09/2024.

17. Israel kills more than 40,000 Palestinians in Gaza, 16,456 of them children (August 15, 2024.). *Al Jazeera*. Available at: <https://www.aljazeera.com/news/2024/8/15/israel-kills-more-than-40000-palestinians-in-gaza-16456-of-them-children>. Accessed 10/09/2024.

18. Weizman, E. et al. (2024). 'No Traces Of Life': Israel's Ecocide In Gaza 2023-2024. *Forensic Architecture*. Available at: <https://forensic-architecture.org/investigation/ecocide-in-gaza>. Accessed 10/09/2024.

19. In this *Wikipedia* article the different investigations and open cases in courts regarding the possible crimes committed in the Israel-Hamas war are updated regularly.

20. According to the annual Global Fire Power ranking (2024 Military Strength Ranking), Israel has one of the 20 most powerful armies in the world, and one of the most powerful in the region, being a small state of less than 10 million inhabitants.

21. Loewenstein, A. (2023) *El laboratorio palestino. Cómo Israel exporta al mundo la tecnología de la ocupación*. Capitan Swing.

tion systems, and similar measures".²² These tools and weapons have not only been useful in the military occupation but have also been deployed to attack other states. Not surprisingly, Israel has become one of the main global exporters of arms and technology.²³ The war and occupation business is a hefty part of the national economy, both in developing security and surveillance technology as producing and trading arms.²⁴

Over these last 12 months, we have witnessed —almost in real time— the full and brutal capacity of this army to unleash death and destruction, employing war technology to carry out targeted or widespread espionage, surveillance and control, as well as to inflict massive, systematic and systematized destruction. On this last point, it is important to highlight how the IDF is increasingly relying on artificial intelligence (AI) to gain efficiency, scale, and capacity. For instance, in November, a research²⁵ by +972 Magazine and Local Call reported the use of the AI system Habsora to automatically and quickly "generate" targets (*i.e.* hundreds of daily targets), creating a kind of "mass killing factory", which not only kills suspected military targets (*e.g.* Hamas officials) but also entire civilian families with no relation with these targets. In April, another investigation²⁶ by these same magazines revealed the use of "Lavender", also an AI system to guide bombs, allowing to target tens of thousands of Gazans as assassination suspects with minimal human oversight and a lax policy regarding victims or collateral damage.

Thus, in April, seven months after the outbreak of the war, Israel had launched the equivalent of five atomic bombs matching the caliber of those dropped on Nagasaki and Hiroshima, thanks to its military deployed potential and systems as those mentioned above.²⁷ This means dropping 75,000 metric tonnes of bombs over what the Israeli historian Ilan Pappé described as "the biggest open-air prison on Earth", a small region of hardly 365km² (11km wide and 50 km long). Such

destructive power surpasses the combined destruction of the Dresden, Hamburg and London bombings of World War II.²⁸

A significant part of Israel's military power comes from developing its own military industry and exporting and selling technology and weapons to other countries; at least 125 in the last decade, according to Loewenstein, including authoritarian states and genocidal governments. However, a complementary and fundamental aspect has been buying arms, ammunition and technology from other states, and here, the United States (US) tops the ranking. En este sentido, destaca por encima de todos la estrechísima colaboración estratégica y militar entre Estados Unidos (en adelante, EEUU) e Israel a lo largo del tiempo. Acuerdo mediante el cual los EEUU han transferido anualmente durante los últimos 6 años una cifra de 3.800 millones de dólares (acuerdo 2018–2028) y 3.100 millones al año los anteriores 10 años.²⁹ Y no solo se trata de un acuerdo económico, sino de colaboración militar y tecnológica. Additionally, Israel is a major buyer of arms produced by US companies such as Boeing and Lockheed Martin.³⁰ Similarly, Israel maintains relevant arms trade agreements with Italy, Spain, Germany and the United Kingdom.³¹

Following the start of the offensive on Gaza, international attention has focused on the arms trade between Israel and other states due to its implications in the genocide Israel is perpetrating and the potential legal ramifications.³² Protests and demonstrations have condemned the collaborationist role of companies, banks and states in producing, financing and transferring arms to Israel to use them against the civilian population and perpetrate the current genocide. But protesters also denounce the illegal military occupation, the colonialist expansionism, the

22. Planas Bou, C. (October 15, 2023). Entrevista a Antony Loewenstein "Palestina es un laboratorio de represión que Israel exporta a todo el mundo". *El Periódico de España*. Available at: <https://www.epe.es/es/internacional/20231015/antony-loewenstein-palestina-laboratorio-represion-93357344>. Accessed 10/09/2024.

23. Loewenstein, A. *op. cit.*

24. Among the TOP100 arms producing companies there are 3 Israeli companies, Elbit Systems (24), Israel Aerospace Industries (35) and Rafael (46), with a combined turnover in 2022 of €12.44 billion (4690, 4100 and 3380, respectively), according to SIPRI.

25. Abraham, Y. (30 de noviembre, 2024). 'A mass assassination factory': Inside Israel's calculated bombing of Gaza. +972 Magazine and Local Call. Available at: <https://www.972mag.com/mass-assassination-factory-israel-calculated-bombing-gaza/>. Accessed 10/09/2024.

26. Abraham, Y. (April 3, 2024). 'Lavender': The AI machine directing Israel's bombing spree in Gaza. +972 Magazine and Local Call. Available at: <https://www.972mag.com/lavender-ai-israeli-army-gaza/>. Accessed 10/09/2024.

27. Zhang, S. (August 7, 2024). US Ambassador Pulls Out of Nagasaki Peace Event Because Israel Was Excluded. *Truthout*. Available at: <https://truthout.org/articles/us-ambassador-pulls-out-of-nagasaki-peace-event-because-israel-was-excluded/>. Accessed 10/09/2024.

28. Enes Çağrı, M. (June 4, 2024). Amount of Israeli bombs dropped on Gaza surpasses that of World War II. *Anadolu Agency (AA)*. Available at: <https://www.aa.com.tr/en/middle-east/amount-of-israeli-bombs-dropped-on-gaza-surpasses-that-of-world-war-ii/3239665>. Accessed 10/09/2024.

29. Lee, M. (14 de September, 2016). US, Israel sign massive military aid deal; \$38B, 10 years. *AP News Associated Press*. Available at: <https://apnews.com/united-states-government-fa4e190c3c9e4602bda57c84315bf0b5>. Accessed 10/09/2024.

30. As the SIPRI arms transfer database reveals, the US has continuously exported arms to Israel for at least the last 60 years. In terms of cost, the highest cost has been for aircraft, followed by armored vehicles, missiles, air defense systems, artillery, etc.

31. Centre Delàs (2024). Report 64: Business as usual. Analysis of the Spanish arms trade in 2022–23 and the case for an arms embargo on Israel. Available at: <https://centredelas.org/publicacions/businessasusual/?lang=en>. Here you can find the most updated and complete information about arms trade between Israel and Spain.

32. It is worth highlighting the grassroots pressure and mobilization on governments worldwide to achieve arms embargoes and the breaking of commercial and diplomatic relations. In Spain, the campaign End the arms trade with Israel, led by the Red Solidaria Contra la Ocupación de Palestina, and in Catalonia by the Coalició Prou Complicitat amb Israel and the Comunitat Palestina a Catalunya. At the international level we find campaigns such as Shut Elbit Down, in the United Kingdom, with direct and decentralized actions against the Israeli arms company Elbit Systems, which has been replicated in other territories.

apartheid regime faced by all Palestinians in the 1948 territories, in the West Bank, Gaza and Golan Heights, and the situation of Palestinian refugees.

Considering all this, the chapter will touch on which companies and countries have produced and sold arms to Israel in the last 10 years, including the months after October 7. We must underline that although the genocide has become more visible since October, the ethnic cleansing process suffered by Palestinians began with the creation of the State of Israel in 1948, in a process known as Nakba;³³ An ongoing process perpetrated through different wars and a military occupation deemed illegal under international law since 1967. In the last decades, Palestinian Human Rights organizations —such as Al-Haq³⁴— have repeatedly denounced this situation. Now, well-known international organizations, Amnesty International, HRW, the UN, and the Israeli B'Tselem³⁵ have joined these claims and condemned the apartheid regime through which Israel oppresses Palestine. Given such serious evidence, any type of economic or military cooperation with Israel is even more grave. In the second part of the chapter, to establish a more in-depth causal relationship between different stakeholders (companies, states and financial institutions) and their impacts (innocent civilian deaths and genocide), the analysis focuses on recent exports through which Israel has obtained specific arms and ammunition being deployed in Gaza and produced by these companies. In this section, we also collect and detail specific examples of arms deployment against civilians in Israeli military attacks, some of which are under investigation for potential war crimes in the frame of the broader genocide investigation.

ARMS EXPORTS TO ISRAEL IN THE LAST TEN YEARS

Although Israel has a well-developed arms industry and exports play a significant role, particularly with

the "battle-tested" label³⁶ as a selling point, it still relies on acquiring arms and ammunition from other states. This is all the more revealing in a context that goes beyond the ongoing occupation and colonialist expansion, marked by the current year-long unprecedented military offensive on Gaza. Israel has been a heavily militarized state since its inception and still maintains import and export relationships with various states, with the US leading the ranking, followed by some European Union (EU) powers and NATO.

In this section, we precisely analyze the arms exports agreed, authorized and executed between Israel and countries of this bloc over the last decade, including Spain. This timeframe gives us a broad and up-to-date perspective on the main countries and companies supplying arms to Israel. We gather information from the SIPRI database on International Arms Transfers. **Table 1** showcases the documented arms transfers from the US, Germany and Italy in the last 10 years, ordered by volume.

We pay special attention to the transfers executed since 2023, particularly from October, the month that marks the beginning of the Israeli offensive. SIPRI will not provide data on the following crucial months until next year, as 10 of the 12 months of the offensive belong to 2024.³⁷ Nonetheless, we provide more data and information obtained through complementary sources, such as those offered by states and media.

The high consumption rate of ammunition and weapons due to the ongoing genocidal offensive by the Israeli state in the Gaza Strip (and to a lesser extent in the West Bank and Golan Heights) is driving Israel to strengthen its alliances and boost military and commercial relations with other countries. However, given the current media context, governments come under pressure to curb, withdraw or pause such ties. Although available information is incomplete, it is crucial to turn our attention to those states that are still sending arms to Israel because besides social and political backlash, they can also face legal allegations.³⁸ Likewise, we also have to focus on arms companies of

33. The concept "Nakba" comes from the Arabic النكبة (al-nakba) meaning 'catastrophe' or 'disaster' and is used to refer to the massive displacement and occupation of Palestinian territories during the 1948 Arab-Israeli war.

34. Palestinian organizations have been denouncing and documenting the apartheid regime, settlement colonialism and military occupation for many years. An example is this [interview with the director of Al-Haq, Mr. Shawan Jabarin](#), from 2009. Also noteworthy is Susan Power's (Al-Haq) report, "The legal architecture of apartheid", from 2021.

35. In 2021, HRW published the report [A Threshold Crossed: Israeli Authorities and the Crimes of Apartheid and Persecution](#); that same year B'tselem published "A regime of Jewish supremacy from the Jordan River to the Mediterranean Sea: this is apartheid"; in 2022, Amnesty published the report [Israel's apartheid against Palestinians: Cruel system of domination and crime against humanity](#); and also in 2022, the Special Rapporteur on the situation of human rights in the Palestinian territories occupied since 1967, Michael Lynk, also published the report [A/76/433 on the Situation of human rights in the Palestinian territories occupied since 1967](#).

36. Centre Delàs (2022). Report 54: Combat proven business. Exporting the 'Israel brand' to maintain the occupation and normalise injustice. Available at: <https://centredelas.org/publicacions/negociosprovadosencombate/?lang=es>.

37. The latest SIPRI update is dated March 11, 2024, including only data relating to transfers ordered and/or sent up to 2023 at the latest.

38. In this regard, numerous civil society organizations are pushing for legal measures to force the states in which they operate to stop the arms trade with Israel. For more information on cases at the European level, see for example: Sunnival, R. (April 13, 2024). Court cases pile up in Europe in bid to halt weapons exports to Israel over Gaza war. The National. Available at: <https://www.thenationalnews.com/news/europe/2024/04/13/court-cases-pile-up-in-europe-in-bid-to-halt-weapons-exports-to-israel-over-gaza-war/>. HRW, for its part, has also done extensive analysis of the potential legal implications for states of continuing trade despite having official knowledge - through the ICJ - of the crime of genocide that the state of Israel "might" be committing.

these and other states that are producing and transferring the arms and ammunition employed by Israel. We must highlight that many of these companies have seen their profits and stock value soar during the last years, both in 2022 due to the Russian invasion of Ukraine and towards the end of 2023 with the Israeli offensive on Gaza.³⁹

39. Alvarez, Y. (February 24, 2023) Un año de guerra en Ucrania: la industria armamentística va ganando. El Salto. Available at: <https://www.elsaltdiario.com/guerra-en-ucrania/un-ano-invasion-rusia-industria-armamentistica-va-ganando>. Accessed September 10, 2024. See also, Tasca, E. (October 11, 2023). Las empresas de defensa suben en Bolsa ante la guerra de Israel y Hamás. Cinco Días. Available at: <https://cincodias.elpais.com/mercados-financieros/2023-10-11/la-guerra-entre-israel-y-gaza-da-alas-en-bolsa-a-la-industria-de-defensa.html#>. Incluso los propios CEO y representantes de las compañías de armas hacen alarde de ello ante sus inversores, como puede verse en: Atkins, C. J. (October 27, 2023). U.S. weapons makers tell investors to expect big profits from Israel's war. People's World. Available at: <https://www.peoplesworld.org/article/u-s-weapons-makers-tell-investors-to-expect-big-profits-from-israel-war/>. Accessed September 10, 2024.

Table 1. Arms exports from all states to Israel in the last 10 years (2014-2023) according to data from SIPRI

STATE	MANUFACTURER	WEAPON NAME	WEAPON CATEGORY	WEAPON DESCRIPTION	# ORDERED	# DELIVERED	YEAR OF ORDER	YEAR OF DELIVERY	STATUS	Total SIPRI TIV of the order (in millions)	COMMENTS
GERMANY	MTU (owned by ROLLS-ROYCE)	MT883Ka (1500hp) diesel engine	ENGINES	Engine Vehicle	[1370]	[250]	[2000]	2019; 2020; 2021; 2022; 2023	New	411.00	MT883Ka (1500 CV) diesel engine for Merkava-4 and APC Namer tanks produced in Israel and the modernization of the old Namer; assembled in the US from components manufactured in FRG.
		MTU 750hp diesel engine (possibly 6V-890)			-	[10]	[2019]	2023	New	0.00	MTU 750 PS diesel engine (possibly 6V-890) for APC and IFV Eitan produced in Israel
	ThyssenKrupp Marine Systems (THYSSENKRUPP subsidiary)	Dakar	SHIPS	Submarine	3	-	2022	[2031]	New	0.00	Deal worth €3 billion (partly financed by Germany); estimated delivery 2031
	Howaldtswerke-Deutsche Werft (THYSSENKRUPP subsidiary)	Dolphin/Type-800			1	-	2012	-	New	300.00	Deal worth €405 million (33% financed from FRG aids)
ITALY	Blohm+Voss	MEKO PC-IN	MISSILES	Frigate	4	[4]	2015	2022; 2023	New	729.00	Deal worth €430 million (including €115 million payed by Germany and €700 million from NIS compensation; including the component production and final assembly in Israel); assigned for the Israeli Sa'ar-6 or Magen
	Atlas Elektronik (THYSSENKRUPP subsidiary)	DM2A4 Seehecht			[150]	[50]	[2002]	2019; 2020; 2021; 2022; 2023	New	270.00	For Dolphin submarines
	LEONARDO	AW119 Koala			12	[7]	2019	2022	New	27.00	AW119M version; for leisure use; from the US production line; assigned to the Israeli Sayfan
US	LEONARDO	Super Rapid 76mm (OTO Melara) ***	ARTILLERY	Naval cannon	4	[4]	[2015]	2022; 2023	New	11.00	For four MEKO PC-IN (Sa'ar-6) German frigates
		GBU-39 SDB ***			[4100]	[3850]	[2017]	2019; 2020; 2021; 2022	New	82.00	
	BOEING	JDAM ***	MISSILES	Guided bomb	[1000]	[1000]	[2021]	2023	New	20.00	Part of a \$735 million deal
					[1200]*	[1200]	2023	2023	Second hand	9.60	** Second hand; aid after the October 2023 attack by Hamas on Israel.
					[1800]	[1800]	[2021]	2023	New	36.00	Part of a \$735 million deal
Total TIV 7,794.80											

STATE	MANUFACTURER	WEAPON NAME	WEAPON CATEGORY	WEAPON DESCRIPTION	# ORDERED	# DELIVERED	YEAR OF ORDER	YEAR OF DELIVERY	STATUS	Total SIPRI TIV of the order (in millions)	COMMENTS	
US (cont.) Total TIV 7,794.80	BOEING (cont.)	KC-46A Pegasus		Carrier/Tanker aircraft	4	-	2021	[2025-2026]	New	360.00	FMF \$927 million aid; estimated delivery 2025-2026	
		AH-64A Apache ***		Combat helicopter	[12]*	-	[2023]	-	New	168.00	Selected by at the end of 2023 no contract signed	
		F-15 Advanced Eagle / F-15IA (F-15EX) version ***		Strike fighter	[25]*	-	[2023]	-	New	1,875.00	FMF aid; F-15IA (F-15EX) version; selected but not yet ordered at the end of 2023	
	Sikorsky (owned by LOCKHEED MARTIN)	CH-53K King Stallion		Transport helicopter	12	-	2021	[2026]	New	0.00	FMF \$2 billion aid; estimated delivery 2026	
		S-70B/SH-60B Seahawk / SH-60F version	AIRCRAFT	Anti-submarine war helicopter	8	-	[2017]	[2024]	Second hand	54.40	Second hand but possibly modernized before delivery; SH-60F version; estimated delivery 2024	
	LOCKHEED MARTIN	F-35A Lightning-2 / F-35I version***			Strike fighter	25*	-	[2023]	[2027]	New	1,375.00	Aid; selected but not yet ordered at the end of 2023; estimated delivery 2027
					Strike fighter	17	6	2017	[2022; 2023; 2024]	New	935.00	FMF aid; including component production in Israel; F-35I version; estimated delivery 2024.
				Strike fighter	14	14	2015	2019; 2020; 2021; 2022	New	770.00	FMF \$2.8 billion aid; including component production in Israel; F-35I version	
				Self-propelled MRL	19	[5]	2010	2019	New	1,045.00	FMF \$2.8 billion aid; including component production in Israel; F-35I version	
				ARTILLERY	15	15	2015	2015	Second hand	7.2	Second hand	
Raytheon-RTX Raytheon-RTX / Lockheed Martin	AGM-114 Hellfire-2 ***			Anti-tank missile / air-to-ground missile	2000*	[2000]	2023	2023	Second hand	40.00	** Second hand; aid	
	GMLRS (US)			guided rocket	1000	1000	2016	2017, 2018	New	80.00		
	AIM-9X Sidewinder,	MISSILES	Beyond-visual-range missile (BVR)	[28]	[18]	2014	2019; 2020	New	5.04	AIM-9X Block-2 and Block-3 version; possibly included for assessment		
RS2 (Rafael & Raytheon-RTX)	Paveway			Guided bomb	[700]	[422]	2015	2019	New	14.00		
	Tamir MI			Air-to-ground missile	[300]*	[300]	2023	2023	Second hand	18.00	** Second hand; aid	
Gulfstream Aerospace (General Dynamics subsidiary)	Iron Dome		AIR DEFENSE SYSTEM	Air-to-ground missile system	2*	2	2023	2023	Second hand	20.00	** Second hand; leased	
	Gulfstream-5 / G-550 version		AIRCRAFT	Light transport aircraft	1	1	2017	2023	New	28.00	G-550 version; modified in Israel for the Oron AGS/SIGINT	

STATE	MANUFACTURER	WEAPON NAME	WEAPON CATEGORY	WEAPON DESCRIPTION	# ORDERED	# DELIVERED	YEAR OF ORDER	YEAR OF DELIVERY	STATUS	Total SIPRI TIV of the order (in millions)	COMMENTS
US (cont.) Total TIV 7,794.80	Oshkosh Defense	L-ATV / JLTV version ***	ARMORED VEHICLES	Armored patrol vehicle	[100]*	-	2023	-	New	18.00	JLTV version
	General Dynamics	Namer ***		Armored carrier vehicle/	[531]	2011	2019; 2020; 2021; 2022; 2023	New	796.50	FMF aid; designed in Israel but produced in the US for Israel	
				Armored infantry combat vehicle							
	MDT Armor Corporation / Shladot	David		-	[74]	[2022]	2022; 2023	New	0.00		
	BAE Systems	M-113		Armored patrol vehicle	300	300	2012	2013, 2014, 2015	Second hand	30	Second hand; aid; M-577A2 command post version
	Bollinger Shipyards	Kuroda	SHIPS	Landing aircraft	2	[1]	2019	2023	New	80.00	FMF aid; assigned to the Israeli Nashon
	General Electric	T-408-GE-400 turboshaft	ENGINE	Aircraft engine	[4]	-	2021	-	New	8.00	General Electric T-408-GE-400 turboshaft; replacement engines for CH-53K helicopters
				Possibly 16V-92 (710-850hp) diesel engine	[50]	[25]	2017	2019	New	5.50	\$10.5 million FMF aid; possibly 16V-92 (710-850 PS) diesel engine; for the modernization of the Achzarit IFV
	-	16V-92 (710-850hp) diesel engine;		Engine vehicle	100	100	2015	2016, 2017	New	11.00	\$16 m deal; probably 16V-92 (710-850hp) diesel engine; for modernization of Achzarit IFV

The table has been modified to add information on the manufacturer of the exported arms, as well as the sum value of the transfers by country in TIV (trend-indicator-values, in millions), the unit used by SIPRI. In addition, 2023 transfers not included in the PAX report are highlighted (*), some of which appear to be in response to the attack suffered by Israel on October 7, according to SIPRI's own comments (**). Some transfers ordered before 2014 are also included because their delivery year is after 2014. We note arms exports potentially linked to specific cases of current use in Gaza (***) (see section 2.2 and Table 2).

Source: modified from SIPRI Arms Transfers Database (c) SIPRI. For information on the methodology used by SIPRI for TIV and other explanations, abbreviations and acronyms, see: <https://www.sipri.org/databases/armstransfers/sources-and-methods>.

Below we focus on the main arms exporting countries to Israel.

UNITED STATES OF AMERICA

As seen in **Table 1** and as mentioned above, the US is Israel's most important military and commercial ally. The US provides aid through the Foreign Military Financing program (FMF).⁴⁰ As SIPRI information and **Table 1** comments show, a portion of these funds are allocated to arms and ammunition⁴¹ purchase from Israeli or US companies. Moreover, Israel and the US have joint development and military production programs, with an annual budget reaching \$500 million. Through these program, they manufacture defense weapons such as the *Iron Dome* produced by arms companies financed by both countries (e.g. Raytheon/RTX from the US and Rafael and RS2 from Israel). Although Israel is capable of sustaining small-scale conflicts relying on its own industry, its dependency on the US is obvious in more intense and prolonged wars.⁴²

Table 1 shows how the US⁴³ has carried out at least 40 arms transfer operations to Israel, for a total value of 7,794.80 TIV in the last 10 years.⁴⁴ However, not all operations have been consistently reported, thus we believe there have been more. It is noteworthy to highlight that the US has a weapons and ammunition stockpile on Israeli soil (the War Reserve Stockpile Allies - Israel, WRSA-I). In "emergency" cases, Israel can demand access to use it without going through the conventional channels of arms transfer.⁴⁵ Evidence proves that after October 7, the US and Israel have been working to minimize or remove the access

restrictions to the stockpile.⁴⁶ We suspect Israel has already gained authorization to use 227kg, 454kg and 907kg bombs,⁴⁷ among other weapons and ammunition.

These 40 arms and war ammunition transfers amount to substantial volumes and, in many cases, are being used in Gaza, as we will see in the next section. The four major US arms companies ordered by transfer volume are **Lockheed Martin, Boeing, General Dynamics and RTX** (formerly **Raytheon**). Yet, in some cases, connections are set up through subsidiaries (**Sikorsky** belongs to **Lockheed Martin**), other companies that produce versions of the same device (*Pave-way* missiles are manufactured by **Lockheed Martin** and **RTX**), or through collaborations between US and Israeli projects (i.e. RS2 is a collaboration project between the US company **RTX** and the Israeli **Rafael Advanced Defense Systems**⁴⁸).

A key detail from the data shows that most transfers correspond to missiles (9 or 10 if we include the *Iron Dome* air defense system) and aircraft (10), followed by armored vehicles (4), engines (3) and 1 ship. The transfer of missiles and aircraft, and to a lesser extent, armored vehicles, has proven crucial in Gaza due to their massive lethal capacity and destructive power. Their direct impact is examined in detail later in this report. It is significant that in 2023, multiple orders were placed for this type of ammunition and arms, and this trend has persisted into 2024, according to available data.⁴⁹

Regarding missiles, **Boeing** produces and sells the *GBU⁵⁰-39 Small Diameter Bomb* (hereinafter, *SDB*) and the *JDAM*.⁵¹ The first is a high-precision guided bomb, and the second is a kit to transform unguided bombs into guided ones. PAX's June 2024 report⁵² gathers data proving that Israel ordered 4,100 *GBU-39* bomb units in 2017. Of these, 3,850 were delivered between 2019 and 2022, with an additional 1,000 ordered in 2021, arriving in 2023. The US has not halted

40. Masters, J. & Merrow, W. (May 31, 2024). U.S. Aid to Israel in Four Charts. Council on Foreign Relations. Available at: <https://www.cfr.org/article/us-aid-israel-four-charts>. Accessed September 10, 2024. As the article explains, the US went from \$3.9 billion in military aid to Israel in 2023 to \$12.5 billion so far in 2024, of which \$5.7 billion in missiles, an all-time record since data was collected in 2006 (last year it was \$0.5 billion), approaching the all-time high of \$14 billion in 1979 (it will likely surpass it by the end of the year). According to the author of the article, US aid accounts for 15% of Israel's defense budget.

41. This is only allowed to Israel, unlike what applies to other states that receive aid through the FMF (Ibid.)

42. This dependence is not only on weapons, ammunition or spare parts, but on such important things as fuel for military vehicles. In this regard, SOMO's *Fuelling the flames in Gaza* report published in May 2024 documents Israel's dependence on external military fuel and exposes the potential criminal consequences of providing Israel with fuel needed for its operations. See: SOMO (2024), *op. cit.*

43. According to SIPRI, the U.S. is responsible for 42% of the global arms trade.

44. See footnote to **Table 1** for more information about this unit used by SIPRI, which allows comparing the value of equipment/arms transferred between different countries, currencies and time points without depending so much on price fluctuations and other monetary variables.

45. WRSF-I has already been used on at least 2 previous occasions, in 2006, in the Lebanon war, and in 2014, in the Gaza war, although it could have happened more often. See Chappell, J. R. & Harrison, S. (January 16, 2024). The "War Reserve Stockpile Allies - Israel" Explained & Why Congress Should Not Expand It. Just Security. Available at: <https://www.justsecurity.org/91213/the-war-reserve-stockpile-allies-israel-explained-why-congress-should-not-expand-it/>. Accessed September 10, 2024.

46. Klippenstein, K. (November 25, 2023). Joe Biden Moves to Lift Nearly Every Restriction on Israel's Access to U.S. Weapons Stockpile. The Intercept. Available at: <https://theintercept.com/2023/11/25/biden-israel-weapons-stockpile-arms-gaza/>. Accessed September 10, 2024.

47. Bubola, E. (May 8, 2024). What We Know About the Weapons the U.S. Sends to Israel. The New York Times. Available at: <https://www.nytimes.com/2024/05/08/world/middleeast/us-israel-weapons.html>. Accessed September 10, 2024. Consultado el 10 de septiembre de 2024.

48. Defense News Army (February 28, 2024). R2S joint venture between Rafael and Raytheon to produce Iron Dome's Tamir Missiles in US. Army Recognition. Available at: https://www.armyrecognition.com/news/army-news/2024/r2s-joint-venture-between-rafael-and-raytheon-to-produce-iron-dome-s-tamir-missiles-in-us?utm_content=cmp-true. Accessed September 10, 2024.

49. As we will see below, the U.S. Defense Security Cooperation Agency has issued at least two press releases in recent months with relevant information on arms transfers to Israel.

50. GBU refers to guided bomb units.

51. Joint Direct Attack Munition, for its acronym in English.

52. PAX & Profundo (2024). *op. cit.*

these ammunition transfers during the war.⁵³ In April, the State Department approved the transfer of over 1,000 *GBU-39/B* SDBs with carriage, the same day that the IDF bombed a World Central Kitchen humanitarian aid convoy in Gaza, killing seven individuals.⁵⁴ Furthermore, in 2016, Israel had already acquired 1,588 *JDAM* kits. In 2021, it placed another order for 1,800 units, which arrived in 2023, expedited due to the company's efforts following the start of the Israeli offensive on Gaza.⁵⁵ Recently, news leaked that the US had lifted restrictions on supplying *Mk-83* and *Mk-82* bombs to Israel.⁵⁶ In 2023, Israel also purchased 1,200 additional second-hand *JDAM* units from **Boeing**, probably due to the high demand for their use in Gaza, which could not be met by its existing reserves or previous orders.⁵⁷

As the table explains, the other exported missiles were produced by **Lockheed Martin** and **RTX**. Lockheed Martin manufactures⁵⁸ the *AGM-114 Hellfire II*, an anti-armor or air-to-ground missile. In 2023, second-hand units of this ammunition were sent to Israel under the concept of "aid", signaling they arrived after October 7. Around 2,000 *Hellfire* missiles were delivered to Israel sometime between October 7 and November 14, 2023.⁵⁹ The same company also produces the *GMLRS* guided rockets. Between 2017 and 2018, it exported 1,000 new units and 15 *M-270 MLRS 227mm* units, a self-propelled rocket launcher system (belonging to the "artillery" category) that launches guided rockets with great range and precision. This rocket launcher system has been used by the Israeli



Boeing (US)

A US multinational corporation, ranked as the fourth-largest company in the world, according to SIPRI data. In addition to aircraft, the company also designs and manufactures helicopters, rockets, satellites, electronic and defense systems, nuclear missiles, and telecommunications equipment. Boeing has supplied Israel with a variety of military equipment, including AH-64 Apache helicopters, F-15 strike fighters, and Hellfire missiles, as well as bombs and GPS-guided munitions kits. Moreover, it manufactures the Arrow 2 and Arrow 3 missile systems, developed in collaboration with Israel. The company has 282 global subsidiaries, including Boeing Aerospace Inc., Boeing Capital Corporation, and Boeing Israel. Boeing is active on every continent and in key countries such as Australia, Brazil, Canada, China, France, Germany, India, Japan, Mexico and the United Kingdom.



Lockheed Martin (US)

The company is the largest producer of weapons and military services in the world, according to SIPRI. It is behind the construction of nuclear missiles and strike fighters such as the F-15 and the F-18. Its produces aircraft, directed energy weapons, land vehicles, logistics, missiles, naval and radar systems, among others. The company also produces the popular F-16 and the advanced F-35 strike fighters, as well as the Trident missile system, which are part of the US and UK strategic nuclear force.

Air Force (IAF) in Gaza for the first time since 2006.⁶⁰ In 2022, the US signed a 33 million dollar contract with **Lockheed Martin** to modernize the *M-270* systems. Israel was one of the countries that ordered units.⁶¹

Both **Lockheed Martin** and **RTX** produce different versions of the guided missile known as *Paveway*,⁶² of which 700 units were ordered in 2015 and 422 arrived in 2019. Similarly, in 2015, **RTX** also sold 28 *AIM-9X*

53. In mid-August, the Biden administration, which had already given up on running for re-election, approved a new multi-billion dollar arms sale to Israel. See Singh, K. & Stone, M. (14 August 2024). US approves sale to Israel of \$20 billion weapons package. Reuters. Available at: <https://www.reuters.com/world/middle-east/blincken-approves-sale-israel-military-equipment-worth-over-20-bln-2024-08-13/>. Accessed September 12, 2024.

54. Brown, C. et. al. (May 29, 2024). Experts say Israel used U.S.-made bomb in deadly Rafah strike. The Washington Post. Available at: <https://www.washingtonpost.com/world/2024/05/29/rafah-strike-us-munition-israel/>. Accessed September 12, 2024.

55. Capaccio, A. (October 18, 2023). Boeing Speeds Delivery of GPS-Guidance Bomb Kits to Israel. Bloomberg. Available at: <https://www.bloomberg.com/news/articles/2023-10-18/boeing-accelerates-delivery-of-up-to-1-800-gps-guidance-bomb-kits-to-israel?embedded-checkout=true>. Accessed September 12, 2024.

56. Shoval, L. (August 5, 2024). US to supply Israel with 1000lb MK-83 bombs as regional tensions mount. Israel Hayom. Available at: <https://www.israelhayom.com/2024/08/05/us-to-supply-israel-with-1000lb-mk-83-bombs-as-regional-tensions-mount/>. Accessed September 12, 2024.

57. Israel purchased 1,000 units of the *GBU-39* from Boeing in 2008 and it has been a widely used bomb by the IDF ever since. SIPRI's comments on the purchase of 1,200 units in 2023 indicate that they are second-hand and sent as "assistance following the October 2023 Hamas attack on Israel".

58. Northrop Grumman would manufacture together with Lockheed Martin the *Hellfire-114L* (or *Longbow Hellfire*) and it seems that Boeing did the same in its beginnings with other variants.

59. AFSC (May 28, 2024). Companies Profiting from the Gaza Genocide. American Friends Service Committee. Available at: <https://afsc.org/gaza-genocide-companies>. Accessed September 12, 2024.

60. Fabian, E. (October 11, 2023). IDF: Multiple rocket launcher used to target Hamas in Gaza for first time since 2006. The Times of Israel. Available at: https://www.timesofisrael.com/liveblog_entry/idf-multiple-rocket-launcher-used-to-target-hamas-in-gaza-for-first-time-since-2006/. Accessed September 15, 2024.

61. Lockheed Martin to modernize more US army M270 MLRS rocket launchers to M270A2 standard. Global Defense News. (June 10, 2022). Available at: <https://www.armyrecognition.com/news/army-news/2022/lockheed-martin-to-modernize-more-us-army-m270-mlrs-rocket-launchers-to-m270a2-standard>. Accessed September 15, 2024.

62. *Paveway* is the acronym for precision avionics vectoring equipment used by laser-guided bombs. It was developed in the 1960s by Texas Instrument, but later Raytheon was responsible for improved versions of *Paveway II*, *III* and *IV*. However, Lockheed Martin became the second supplier of bombs in 2001 and had a legal dispute with Raytheon over the use of the term: either at a generic level to refer to the type of weapon (as defended by Lockheed Martin) or at a specific level for those developed only by Raytheon (as defended by the latter).

Sidewinders short-range air-to-air guided missiles (18 arrived between 2019 and 2020). Lastly, another important missile is the *Tamir MI*, jointly produced by **RTX** and **Rafael**, which is part of the *Iron Dome* interceptor system. In 2023, 300 second-hand units of this missile were delivered, also under the concept of "aid". Two other defense systems developed by the same companies were ordered and delivered in 2023.

Boeing is also a key player in the aircraft sector, as it produces the *AH-64 Apache* attack helicopter, for which Israel ordered 12 models in 2023. No data confirms their delivery or a signed contract at the end of 2023. In November, the Pentagon notified that the increase in military aid to Israel included additional laser-guided missiles for its *Apache* fleet.⁶³ By December, it seems that Israel was considering expanding the use of these missiles in Gaza.⁶⁴ Besides these helicopters, **Boeing** produces the *F-15 Advanced Eagle* fighter, extensively used in Gaza. In 2023, Israel selected 25 of these fighters within the FMF program; they have not yet been ordered/delivered. Lastly, **Boeing** also produces the *KC-46A Pegasus* tanker aircraft, which has operational significance as it supplies fuel to fighters.⁶⁵ In 2021, four were ordered, and they are expected to be delivered in 2025 or 2026. Although the table does not show it, between April and June 2024, the Biden Administration has taken several steps⁶⁶ to promote arms sales amounting to \$18 billion, including 50 *F-15* fighters. In April, CNN reported that this agreement would constitute one of the largest sales of military equipment to Israel since October 7. President Joe Biden faced pushback from members of his party but managed to persuade them.⁶⁷ Recent information confirms that the US State Department approved a \$20 billion arms sale, which covered the cost of the 50 *F-15* fighters.⁶⁸

63. Capaccio., *op. cit.*

64. Saballa, J. (December 27, 2023). Israel Wants US-Made Apache Helicopters for Use Against Hamas: Report. The Defense Post. Available at: <https://thedefensepost.com/2023/12/27/israel-apache-helicopters-hamas/>. Accessed September 12, 2024.

65. SOMO (2024), *op. cit.*

66. Bertrand, N. et al. (April 1, 2024). Biden administration set to greenlight \$18 billion sale of F-15 fighter jets to Israel. CNN. Available at: <https://edition.cnn.com/2024/04/01/politics/biden-administration-f15-fighter-jets-israel/index.html>. Accessed September 12, 2024.

67. Marquardt, A. (June 18, 2024). Key Democrats allow US sale of F-15 jets to Israel in \$18 billion deal. CNN. Available at: <https://edition.cnn.com/2024/06/18/politics/us-israel-f-15-jets/index.html>. Accessed September 12, 2024.

68. Britzky, H. & Hansler, J. (August 13, 2024). US State Department approves \$20 billion potential weapons sales to Israel. CNN. Available at: <https://edition.cnn.com/2024/08/13/politics/us-military-sale-israel-20-billion-fighter-jets/index.html>. Accessed September 12, 2024.



RTX Corporation (US)

RTX Corporation, formerly known as Raytheon Technologies, is one of the world's leading arms companies, established in 2020 following the merger of Raytheon and United Technologies. It is organized into three main divisions, Collins Aerospace, Pratt & Whitney, and Raytheon. The latter is a major actor in the manufacturing of advanced missile and radar systems, including the Paveway IV guided bombs.

Lockheed Martin produces the *F-35A Lightning-II / F-35I* fighters (in collaboration with companies such as **Northrop Grumman** and **BAE Systems**⁶⁹). In the last years and to the present day, Israel has purchased several *F-35* fighters, usually under the scope of the FMF program. According to SIPRI, in 2010, 19 were ordered; at least 5 units arrived in 2019. In 2015, it purchased 14 units delivered between 2019 and 2022. In 2017, a further 17 units were ordered, six of which were delivered between 2022 and 2024, and the rest are expected to arrive before the end of the year. In 2023, Israel selected 25 new units, which have not yet been ordered and are expected to be supplied in 2027. In the coming months, a purchase agreement will be signed for 25 *F-35* fighters, bringing the country's fleet to 75 units, according to a statement from the Israeli Ministry of Defense.⁷⁰ The Action on Armed Violence (AOAV) and the Campaign Against Arms Trade (CAAT)⁷¹ report that the British company **BAE System** has a 15% involvement in each *F-35* Israel has received since 2016, amounting to at least £368 million.

69. According to AOAV/CAAT, the British company has lent a hand in 15% of every *F-35* Israel has received since 2016, worth at least £368 million.

70. The Defense Post (July 3, 2023). Israel Approves Buying 25 New *F-35* Stealth Fighter Jets: Ministry. Available at: <https://thedefensepost.com/2023/07/03/israel-buying-f35-jets/>. Accessed September 12, 2024. See also, Soriano, G. (June 13, 2024). Israel formaliza la compra de otros 25 cazas *F-35* por 3.000 millones. InfoDefensa.com. Available at: <https://www.infodefensa.com/texto-diario/mostrar/4866124/israel-formaliza-compra-otros-25-cazas-f-35-3000-millones>. Accessed September 12, 2024.

71. Action on Armed Violence (2024). Who is arming Israel? UK Exports to Israel. Available at: <https://aoav.org.uk/2024/who-is-arming-israel-uk-exports-to-israel/>.

BAE SYSTEMS

BAE Systems (UK)

It is the third largest arms producer worldwide, according to SIPRI. In 2020, BAE Systems reported \$24 billion in sales, with 97% of its revenue coming from the military sector. Its main markets are the US (43% of sales), the UK (20%) and Saudi Arabia (14%). BAE offers a wide range of products, including combat aircraft, warships, tanks, armored vehicles, artillery, missiles, and submarines equipped with nuclear missiles. The company has numerous subsidiaries, including BAE Systems Inc., BAE Systems Australia, BAE Systems Saudi Arabia, and BAE Systems North America. It has significant stakes in the Eurofighter Typhoon and in MBDA, Europe's leading missile manufacturer. It also produces between 13% and 15% of the value of the F-35 stealth fighter and is a leading manufacturer of howitzers such as the M777 and the M109.



Oshkosh Defense (EEUU)

It is a US-based industrial company focused on the design and construction of specialized trucks, military vehicles, truck parts, firefighting equipment for airports and access equipment. Its brands include JLG, Jerr-Dan, Hinowa, Oshkosh Defense, Pratt Miller, Pierce, Frontline, Oshkosh Airport Products, Maxi-Metal, McNeilus, Oshkosh S-Series and IMT. The company has several wholly-owned subsidiaries, such as Oshkosh Defense, LLC; Pratt & Miller Engineering & Fabrications, LLC; Pierce Manufacturing Inc; Maxi-Metal, Inc; McNeilus Companies, Inc; and Oshkosh Airport Products, LLC. It ranks 49th on the list of largest arms manufacturers in the world, and has a leading position in the production of armored vehicles and defense systems.

Lastly, it is important to point out that **Lockheed Martin** is also the owner of **Sikorsky**, a company that received, in 2021, an Israeli order to build 12 *CH-53K King Stallion* transport helicopters, expected to be delivered in 2026. The company has yet to deliver 8 second-hand (probably pending modernization) anti-submarine warfare helicopters (*S-70B/SH-60B Seahawk / SH-60F*), which were ordered in 2017 and are expected to reach Israel during 2024. Additionally, in 2017, **Gulfstream Aerospace**, a subsidiary of **General Dynamics**, sold a *Gulfstream-5 / G-550* light transport aircraft; it was delivered in 2023.

Regarding armored vehicles, companies producing them are **Oshkosh Defense**, **MDT Armor Corporation** and **General Dynamics**. The first two were ordered with the production of Armored Patrol Vehicles (APVs). **Oshkosh** produces Joint Light Tactical Vehi-

cles (JLTVs⁷²), known as *L-ATV (Light Combat Tactical All-Terrain Vehicles)*; in 2023 it received a 100-unit order. At the beginning of 2023, news came through that the Israeli Ministry of Defense had chosen **Oshkosh Defense** to produce hundreds of hulls for the new *Eitan*. The 100 million dollar contract established the construction of 500 vehicles in 18 months.⁷³ The first *Eitan* carrier was sent to the country in May 2023.⁷⁴ The US increase in military aid covered a request for at least 75 new *JLTV* from the US Army and Navy.⁷⁵ Furthermore, in 2019, **Oshkosh Defense** secured a 159.1 million dollar contract to build Medium Tactical Vehicles (*FMTV*) for Israel with specific modifications. The contract included the initial supply of pieces and training support, as reported by the US Department of Defense. According to October 2019 data, work was expected to be completed in 2024.⁷⁶

On its part, **MDT Armor Corporation** works with the Israeli company *Shladot* to produce *MDT David* ultra-light armored personnel carrier vehicles. Between 2022 and 2023, they have delivered 74 units. Lastly, the *Namer* (also known as *Merkava*) was developed and produced by the Technology and Maintenance Corps of the IDF (**Ordnance Corps**). However, in 2010, a deal was struck with **General Dynamics**⁷⁷ to also produce them in the US. In 2010, 531 units were ordered; between 2019 and 2023, 240 were delivered. Nonetheless, *The Defense Post*⁷⁸ reports that the *Namer* delivery follows a 2022 contract that requested "hundreds" of these vehicles.

72. These JLTVs are intended to replace Humvees (Israel currently owns more than 2,000 of the latter), in line with practices observed in other countries. Oshkosh Defense's JLTV, with advanced technologies and scalable armor, has become a versatile and highly mobile platform, surpassing the production milestone of 20,000 units on June 2, 2023.
73. Bisht, I.S. (December 28, 2022). Israel Awards Oshkosh \$100M Armored Personnel Carrier Contract. The Defense Post. Available at: <https://thedefensepost.com/2022/12/28/oshkosh-israel-armored-personnel-carrier-hulls/>. Accessed September 12, 2024.
74. Saballa, J. (May 29, 2023). Israel Military Receives First Advanced 'Eitan' Armored Personnel Carriers. The Defense Post. Available at: <https://thedefensepost.com/2023/05/29/israel-military-eitan-carriers/>. Accessed September 12, 2024.
75. Global Defense News (November 27, 2023). US to discreetly send 75 JLTV armored vehicles to Israeli Army. Available at: <https://armyrecognition.com/focus-analysis-conflicts/army/conflicts-in-the-world/hamas---israel-war-2023/us-to-discreetly-send-75-jltv-armored-vehicles-to-israeli-army>. Accessed September 12, 2024.
76. Adamczyk, E. (October 21, 2019). Oshkosh awarded \$159.1M for FMTV variant for Israel. United Press International. Available at: <https://www.upi.com/Defense-News/2019/10/21/Oshkosh-awarded-1591M-for-FMTV-variant-for-Israel/5361571675773/>. Accessed September 12, 2024.
77. Dagoni, R. (January 14, 2014). Israel halves Namer order with General Dynamics. Globes. Available at: <https://en.globes.co.il/en/article-1000909206>. Accessed September 12, 2024. See also, General Dynamics Land Systems (October 25, 2010). General Dynamics Selected for Merkava Armored Personnel Carriers for Israel. PRN. Available at: <https://www.prnewswire.com/news-releases/general-dynamics-selected-for-merkava-armored-personnel-carriers-for-israel-105674333.html>. Accessed September 12, 2024.
78. Manuel, R. (June 28, 2023). Israel Receives First Namer 1500 Armored Personnel Carrier. The Defense Post. Available at: <https://thedefensepost.com/2023/06/28/israel-first-namer-armored-carrier/>. Accessed September 12, 2024.

GENERAL DYNAMICS

General Dynamics (US)

According to SIPRI, it is the sixth largest arms company in the world. It has four main divisions: aerospace, combat systems, information and technology systems, and marine systems. Among its main products, it stands out as a manufacturer of armored vehicles, trucks, cannons, light weapons, bombs, nuclear submarines, nuclear missile guidance systems, howitzers and all kinds of explosives (100% for military use). It is also involved in the manufacturing of nuclear weapons.

Besides data provided by SIPRI, other sources track significant arms exports produced by US companies, which are noticeable. Firstly, the general-purpose bombs of the *Mark 80* series: *Mk82*, *Mk83* y *Mk84*. These bombs produced by **General Dynamics** can be transformed into guided bombs using the *JDAM* kits manufactured by **Boeing**, creating the *GBU-38* (*Mk-82*), *GBU-32* (*Mk-83*), and *GBU-31* (*Mk-84*). Israel has a remarkable arsenal of these large bombs. According to sources mentioned by CNN, the US has provided Israel with over 5.400 *Mk-84* bombs since October 7⁷⁹ and authorized the transfer of bombs and fighters for a value of billions of dollars. The new arms package includes over 1.800 *Mk-84* and 500 *Mk-82* bombs, as reported by the *Washington Post*⁸⁰ based on data from an internal government arms list described to *The Wall Street Journal* by US civil servants.⁸¹

Other sources have gathered details on the US' heavy artillery exports to Israel in recent years.⁸² In January 2024, the US State Department approved the sale of *M107* 155mm projectiles (produced by **General Dynamics**) and related equipment to Israel for an estimated \$147.5 million. The agreement mentions 155mm fuzes, 4,792 *M107* 155mm artillery ammunition rounds (MDE), 52,229 *M795* 155mm artillery ammuni-

tion rounds (also produced by **General Dynamics**) and 30,000 *M4* propelling charges.⁸³

The Israeli government requested 155mm ammunition accessories for a total cost of \$147,5 million.⁸⁴ Shortly after October 7, it was made public that the US was planning to transfer to Israel tens of thousands of 155mm projectiles, originally intended for Ukraine.⁸⁵ Surprisingly, this ammunition would already be in Israel, but under the *WRSA-I* program mentioned above, which implies that Israel can only access it with previous authorization from the US.⁸⁶ The US company **Day & Zimmerman** produces the *M830A1* high explosive multi-purpose anti-tank cartridges with tracer; 13.981 projectiles were delivered for the 120mm main guns of battle tanks.⁸⁷ Finally, another remarkable artillery weapon is the *M109-52 Self-Propelled Howitzer* created by **BAE Systems** (jointly produced with its US subsidiary), which is being improved by incorporating the 52mm caliber cannon system of the German arms company **Rheinmetall**.⁸⁸ According to the Turkish news agency *Anadolu Agency*,⁸⁹ Israel has 250 units of the model *M109A5* and 30 *M109A2*.

GERMANY

Germany is also one of the main arms supporters of Israel. Its reaction to the October 7 attack was a ten-fold increase in arms exports to Israel compared to 2022.⁹⁰ Germany is responsible for 30% of military aid to Israel between 2019 and 2023, according to SIPRI.

Table 1 lists six arms transfers from Germany to Israel in the last 10 years (some were requested before but were delivered between 2014 and 2023): three

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81. Malsin, J. & Youssef, N. A. (December 1, 2023). U.S. Sends Israel 2,000-Pound Bunker Buster Bombs for Gaza War. *The Washington Post*. Available at: <https://www.wsj.com/world/middle-east/u-s-sends-israel-2-000-pound-bunker-buster-bombs-for-gaza-war-82898638>. Accessed September 12, 2024. See also, Al Jazeera (December 2, 2023). US sends 'bunker buster' bombs to Israel for war on Gaza, report says. Al Jazeera. Available at: <https://www.aljazeera.com/news/2023/12/2/us-gives-bunker-buster-bombs-to-israel-for-war-on-gaza-report>. Accessed September 12, 2024.

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83. Bennet, J. (January 2, 2024). State Department Clears \$148M Sale of 155mm M107 Projectiles to Israel. *GovconWire*. Available at: <https://www.govconwire.com/2024/01/state-department-clears-148m-sale-of-155mm-m107-projectiles-to-israel/>. Accessed September 12, 2024.

84. Defense Security Cooperation Agency (December 29, 2023). Israel – 155mm Artillery Ammunition. Transmittal No. 24-16. Available at: <https://www.dsca.mil/sites/default/files/mas/Press%20Release%20-%20Israel%2024-16%20CN.pdf>

85. Ravid, B. (October 19, 2023). Scoop. U.S. to send Israel artillery shells initially destined for Ukraine. *Axios*. Available at: <https://www.axios.com/2023/10/19/us-israel-artillery-shells-ukraine-weapons-gaza>. Accessed September 12, 2024.

86. Oxfam (October 2023). Policy Brief: Artillery shells transfer. Available at: https://webassets.oxfamamerica.org/media/documents/Artillery_Shells_Transver_Policy_BriefingNote_1.pdf.

87. Defense Security Cooperation Agency (December 9, 2023). Israel – M830A1 120mm Tank Cartridges. Transmittal No. 24-15. Available at: <https://www.dsca.mil/sites/default/files/mas/Press%20Release%20-%20Israel%2024-15%20CN%20-%20FINAL.pdf>

88. BAE Systems. M109-52 Self-Propelled Howitzer. Available at: <https://www.baesystems.com/en/product/m109-52-self-propelled-howitzer>. Accessed September 12, 2024.

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Day & Zimmermann (US)

It is a US-based company founded in 1901 that is primarily involved in providing services for construction, engineering, operations and maintenance, security and workforce solutions. It also manufactures defense products, including ammunition. The company has a global presence in sectors such as defense, energy, chemicals and pharmaceuticals, among others. Its main products include military ammunition and systems for the management of facilities. It also provides engineering and maintenance services for large industrial and government projects. It is headquartered in Philadelphia, Pennsylvania, and has several divisions, including those related to defense services and ammunition manufacturing.



MTU Friedrichshafen (Germany)

Rolls-Royce Solutions GmbH, also known as MTU Friedrichshafen, is a German manufacturer specialized in engines and drive systems for both civilian and military use. It produces engines for military and naval aircraft, power supplies for military vehicles and reactors for nuclear submarines. On the civilian side, the company manufactures engines for aircraft and ships, and a variety of other power systems. Although weapons account for only 32% of its total sales, Rolls-Royce is the 22nd largest arms company in the world, providing engines to 160 customers in 103 different countries.

correspond to ships, two to engines and one to missiles. Focusing on ships, two were built by subsidiaries of the German multinational **ThyssenKrupp**. One *Dolphin/Type-800* submarine ordered in 2012 (not documented as delivered) was built by **ThyssenKrupp Marine Systems**. Three Dakar submarines ordered in 2022, which are expected to arrive in 2031, were built by **Howaldtswerke-Deutsche Werft**. The third ship export corresponds to a frigate built by **Blohm+Voss**, of the *MEKO* family. It would be part of a \$430 million deal, including producing parts for final assembly in Israel. Four *MEKO* units were ordered in 2015 and delivered between 2022 and 2023.

Regarding engines, the two exported models have been built by **MTU Friedrichshafen**, owned by **Rolls-Royce** since 2011. The first export was ordered in 2000: 1,370 units of the *MT883Ka* (1500hp) diesel engine for the *Merkava-4* tanks and *Namer* armored vehicles. In total, 250 units of this engine model were delivered between 2019 and 2023. The other export is from 2019 and corresponds to *MTU 750hp* diesel

engines (probably 6V-890) for *Eitan* armored vehicles produced by Israel. Ten units were delivered in 2023.

Lastly, the last export reported by SIPRI dates from 2012 and corresponds to the missile category: 150 anti-ship or anti-submarine warfare torpedoes for *Dolphin* submarines, of which at least 50 were delivered between 2019 and 2023.

Besides SIPRI data, the German *Forensis* report⁹¹ reveals that "in 2023 17 exports were authorized [from Germany to Israel] for bombs, torpedoes, rockets, missiles and other explosive devices and charges". Although licenses would cover a variety of equipment, not all offensive, lethal munitions amounting to \$20 million would have also been sent.⁹² Additionally, in January 2024, *Der Spiegel* reported that Germany had accepted Israel's request for 10,000 ammunition rounds for 120mm tanks produced by **Rheinmetall**. According to the German newspaper,⁹³ to ensure fast delivery, the ammunition would be provided from existing German arsenals, that would later be replenished by German arms companies.

In this context of narrow military collaboration, it is noteworthy that in 2022, **Rheinmetall** and the Israeli company **Elbit Systems** signed a strategic cooperation deal to jointly develop, produce and sell a new 155mm self-propelled artillery system. This deal allowed the integration of **Elbit Systems'** automated artillery turret with **Rheinmetall's** L52 155 mm gun, combining advanced electronic components for fire control and sensor suite.⁹⁴

In 2024, deliveries worth just €32,449 have so far been allowed, the economics ministry said on April 10 in response to a query in parliament. The exports include 3,000 portable anti-tank systems and 500,000 ammunition cartridges for automatic or semi-automatic firearms.⁹⁵

91. Forensis (2024). Report, Short Study: German Arms Exports to Israel 2003-2023. Available at: <https://content.forensic-architecture.org/wp-content/uploads/2023/04/Forensis-Report-German-Arms-Exports-to-Israel-2003-2023.pdf>.

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93. Gebauer, M. *et al.* (January 16, 2024). Waffenhilfe für den Gaza-Krieg: Bundesregierung prüft Lieferung von Panzermunition an Israel. SPIEGEL Politik. Available at: <https://www.spiegel.de/politik/deutschland/gaza-krieg-bundesregierung-prueft-lieferung-von-panzermunition-an-israel-a-0f0ce68d-7752-4b8e-81eb-9bd3a5692eeb>. Accessed September 12, 2024.

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Rheinmetall (Germany)

Rheinmetall is a German tech company that operates internationally in the mobility and security sector, both for the defense industry and civilian applications. The company has two main core activities: automotive, a sector in which it provides advanced industrial technologies; and defense, which accounts for 52% of its sales and encompasses military vehicle systems, weapons, ammunition, and electronic and network-centric warfare solutions. Rheinmetall is present in 167 locations across 28 countries, and has several subsidiaries, including Rheinmetall Defence UK Limited and Rheinmetall MAN Military Vehicles UK, as well as the Rheinmetall Denel Munition joint venture in South Africa. The company ranks as the 26th largest arms company in the world, according to SIPRI, and operates in five divisions: Vehicle Systems, Weapon & Ammunition, Electronic Solutions, Sensors & Actuators, and Materials & Trade.



Leonardo (Italy)

Formerly known as Finmeccanica, Leonardo is one of the world's largest arms companies. It is headquartered in Italy and the Italian government owns a 30.2% share. This global industrial group develops advanced technologies in the sectors of aerospace, defense and security. Its production ranges from combat and unmanned aircraft, helicopters, missiles, including nuclear ones, naval torpedoes and armored vehicles. In 2021, Leonardo's weapons sales totaled \$11.2 billion, which constituted 73% of its overall sales, positioning it as the 13th largest arms company globally, as reported by SIPRI. The company has a strong international presence with 66 subsidiaries, including DRS RADA Technologies in Israel. It is also a stakeholder in companies such as Leonardo UK, PZL Świdnik and MBDA (25%). Leonardo is involved in sectors such as cybersecurity, aerospace, unmanned systems and aerostructures, and has significant operations in the UK and in the US.

ITALY

The third country in **Table 1** is Italy, through its main arms company: **Leonardo**. According to the SIPRI database, Italy carried out two exports in the last years. In 2015, Israel ordered to Italy four new *Super Rapid 76mm (OTO Melara)* guns, that were delivered between 2022 and 2023. SIPRI also states that these guns were addressed to four *MEKO PC-IN (Sa'ar-6)* Israeli corvettes of German production. In 2019, Israel ordered 12 *AW119 Koala* helicopters to **Leonardo**, of which at least seven units were delivered in 2023. Ac-

ording to SIPRI, these exports represent 0.9% of arms imported by Israel between 2019 and 2023.

On its part, the March 2023 report of the Italian National Institute of Statistics (ISTAT) states that during that year Italy exported "*arms and ammunitions*" to Israel worth €13,707,376. Moreover, ISTAT mentions that between October and December 2023, the "*Aircraft, spacecraft and related equipment*" category registered exports to Israel worth €14,800,221. Over half of the total sum, €8,795,408 comes from the province of Varese. Here is where **Alenia Aermacchi**, owned by **Leonardo**, has its headquarters. The company is in charge of producing 30 *M-346* jet trainers selected by the Israeli Ministry of Defense in February 2012, purchased to train IAF pilots. Precisely these aircraft are taking part in bombings over the Gaza Strip.⁹⁶

According to the latest information, sources close to the Italian Ministry of Foreign Affairs confirmed that on May 9, Italy would have halted the approval of further arms exports since October 7 (having delivered the last pending orders in November). Previously, the Ministry of Defense had stated that arms had continued to be exported, only to deliver orders signed before October 7 and with the agreement that they would not be used against civilians in Gaza.⁹⁷

SPAIN

Regarding the arms trade relationship between Spain and Israel, the June 2024 report of the Centre Delàs *Business as Usual*⁹⁸ shows how Spain has authorized more exports worth millions of euros in recent years, spread out over various categories.⁹⁹ In the last five years, the export of arms (code 93 of the Foreign Trade portal, DataComex) has included 20mm caliber weapons (category 1), ammunition (3), bombs, torpedoes, rockets, missiles and other explosive charges (4), and some vehicles (6) among which armored fighting vehicles and warships (9).

96. Facchini, D. (February 27, 2024). L'Italia ha esportato "Armi e munizioni" verso Israele dopo il 7 ottobre. I dati dell'Istat. *Altraeconomia*. Available at: <https://altreconomia.it/litalia-ha-esportato-armi-e-munizioni-verso-israele-dopo-il-7-ottobre-i-dati-dellistat/>. Accessed September 12, 2024. Facchini, D. (March 13, 2024). L'Italia continua a esportare armi a Israele. Il caso delle forniture per i caccia. *Altraeconomia*. Available at: <https://altreconomia.it/litalia-continua-a-esportare-armi-a-israele-il-caso-delle-forniture-per-i-caccia/>. Accessed September 12, 2024. Facchini, D. (May 22, 2024). Export di armi da guerra italiane a Israele dopo il 7 ottobre. La conferma delle Dogane. *Altraeconomia*. Available at: <https://altreconomia.it/export-di-armi-da-guerra-italiane-a-israele-dopo-il-7-ottobre-la-conferma-delle-dogane/>. Accessed September 12, 2024.

97. *Ibid.*

98. Centre Delàs (2024), Report 64: Business as usual. *Op. cit.*

99. *Ibid.*, with information for the first half of the year, data for the second half will not be known - through the official EU report - until December 2024.

Despite confirmation from the Spanish Government that no arms had been exported after October 7, evidence suggests that in November, €987,000 worth of ammunition was exported to Israel. **Nammo** confirmed that the shipment was intended for **Elbit Systems**.¹⁰⁰ Between October 2023 and February 2024, Spain exported defensive equipment to Israel on a monthly basis. In December, for example, €125.240 were earmarked for "*bombs, hand-grenades, torpedoes, mines, missiles and other ammunition and projectiles* " although it was stated that their final destination was the Philippines.¹⁰¹ The Government has yet to explain the arms exports to Israel identi-

100. *Ibid.*

101. This export appears to be related to a €172 million contract between the Philippines and Elbit Systems and the vehicle would be an adapted version of the ASCOD produced by Santa Barbara in Oviedo (and armed with Elbit turret and guns, for a final assembly called 'Sabrah' and touted as "combat proven", as we have explained above).

fied in October (€65,300) and November (€698,910), as mentioned in the report.

In conclusion, according to the DataComex database, Spain ranks as the fifth EU country that has exported more equipment of category 93 (arms and ammunition) to Israel after October 7 —valued at €1.1 million— while other EU countries have not exported anything in this category. In any case, as the Centre Delàs report proves, military defense and security cooperation between Israel and Spain are not limited to exports, as imports, cooperation in shared projects, and research and development programs between units and defense companies are also relevant.¹⁰²

102. Quote from the report: Centre Delàs (2024). Report 64: Business as usual. *op cit.*



3. WHICH CASES DO WE KNOW OF THE USE OF ARMS TRANSFERRED TO ISRAEL, AND HOW ARE THEY IMPACTING THE PALESTINIAN PEOPLE?

So far, we have identified the States and arms companies responsible for producing and shipping arms to Israel, which are being used against Palestinian civilians in Gaza. In this section, we describe the main IDF attacks using these weapons, which have resulted in deaths and injuries, with the majority of victims being civilians. Organizations such as Amnesty International, HRW, Forensic Architecture, journalists, and other bodies have reported and documented some of these cases. These cases are currently under investigation for potential war crimes or as part of the genocide that Israel may be committing since October 7.

Below is a brief overview of aircraft, bombs, missiles, artillery, and armored land vehicles, highlighting their features and use in Israel's offensive on Gaza since October 7, along with notable examples from previous operations. We aim to identify the weapons used in Gaza since October 7, and in some cases on other dates across the occupied territories, which may have

been financed by Spanish and international financial institutions.

AIRCRAFT



AH-64 APACHE

Boeing (US), AgustaWestland International Limited (a UK Leonardo subsidiary)

It is an attack helicopter with advanced technology sensors that help acquire targets and provide night vision. It also features a laser guidance system and millimeter wave radar, along with machine guns and a missile and rocket launcher. It has been deployed for years: Israel used it in the war against Lebanon in 2006, in the Gaza Strip, and in June in the West Bank,

AgustaWestland International Limited (IT - UK)

A subsidiary of Leonardo, headquartered in Italy and with prominent branches in the UK, the company designs and manufactures high-tech helicopters for civil and military use. It has collaborated with Boeing to produce versions of the Apache helicopter, such as the AH-64D, under license in the UK. This model is the main attack helicopter of the US and is also used by the armed forces of countries such as Greece, Japan, Israel, the Netherlands and Singapore. AgustaWestland is also responsible for the marketing and support of Leonardo models in international markets, working in partnership with governments and businesses to offer advanced airlift and defense solutions

where it had not been used since 2002.¹⁰³ **Boeing** (US) produces these attack helicopters. However, **AgustaWestland International Limited**, a British subsidiary of **Leonardo**, produces a range of components for all Apache models.¹⁰⁴ It partners with **Boeing** to produce versions of this helicopter, such as the AH-64D, manufactured in the UK under the Italian subsidiary's license. This is the main attack helicopter of the US and is also used by the armed forces of Greece, Japan, the Netherlands and Singapore.¹⁰⁵

Although we outline the attacks carried out since October 7, we also want to highlight some previous attacks in recent years within the context of the illegal military occupation of the West Bank, Gaza and Golan Heights. For instance, Apache helicopters were used in June 2023, months before October 7, in the West Bank, where Hamas is not present. On June 19, Apache helicopters were used in the West Bank for the first time in 20 years.¹⁰⁶ Apache helicopters fired missiles in an air strike that killed 5 individuals and wounded 90, according to the Palestinian Ministry of Health. The following day also saw an Israeli raid with an Apache helicopter to arrest two militiamen from the Islamist groups Hamas and Islamic Jihad in Jenin, an action that led to intense armed clashes that left 6 Palestinians dead and 90 wounded, 22 of them in serious condition.¹⁰⁷

103. Masarwa, L. y Rickett, O. (June 19, 2023). Israel uses Apache helicopter fire in West Bank for first time since 2002. *Middle East Eye*. Available at: <https://www.middleeasteye.net/news/israel-apache-helicopter-attack-west-bank-first-time>. Accessed September 10, 2024.

104. Israel's arms suppliers (May 18, 2021). *Campaign against arms trade - CAAT*. Available at: <https://caat.org.uk/data/countries/israel/israels-arms-suppliers/>. Accessed September 10, 2024.

105. Helicóptero Boeing AH-64 Apache (March 5, 2015). *Avia.Pro*. Available at: <https://avia-es.com/blog/vertolet-boeing-ah-64-apache>. Accessed September 12, 2024.

106. Five Palestinians killed as Israel deploys helicopters in West Bank (June 19, 2023). *France 24*. Available at: <https://www.france24.com/en/live-news/20230619-three-palestinians-killed-in-israeli-west-bank-raid-with-helicopter-fire>. Accessed 10/09/2024.

107. Emergui, S. (June 20, 2023). Seis palestinos muertos y casi un centenar de heridos durante una incursión israelí con un helicóptero Apache en Cisjordania. *El Mundo*. Available at: <https://www.elmundo.es/internacional/2023/06/19/648ffe0121efa0211e8b4590.html>. Accessed 12/09/2024.

Furthermore, on October 7, several Apache helicopters were deployed in Gaza after the Hamas attack. Various sources mention that fire from helicopters could have killed Palestinian fighters but also multiple Israeli civilians.¹⁰⁸ According to the Israeli outlet *YNet News*,¹⁰⁹ it is probable that an Israeli soldier was killed by accident from an Apache helicopter when targeting a house where IDF soldiers were sleeping. Apache helicopters were involved in the Supernova Festival, bombing civilians and ending in a terrible massacre. Police estimate that 364 people died at the festival.¹¹⁰ The newspaper *Yedioth Ahronoth* published a report stating that Israeli forces "struggled to identify Hamas combatants" and the helicopter pilots "employed artillery" against festival goers.¹¹¹ As mentioned above, Apache helicopters are extensively employed by the IAF, a fact they openly advertise. At the beginning of November, they published an image of an AH-64 Apache helicopter taking off equipped with a detachable fuel tank and armed with missiles, along with the caption "continuing to operate and attack in the Gaza Strip",¹¹² as *Who Profits* reports.¹¹³

108. October 7: Forensic analysis shows Hamas abuses, many false Israeli claims (March 24, 2024). *Al Jazeera Investigation*. Available at: <https://www.ajunit.com/article/october-7-forensic-analysis-shows-hamas-abuses-many-false-israeli-claims/>. Accessed 12/09/2024. See also; Abunimah, A. (November 19, 2023). Israeli helicopter shot civilians at 7 October rave, police find. *The Electronic Intifada*. Available at: <https://electronicintifada.net/blogs/ali-abunimah/israeli-helicopter-shot-civilians-7-october-rave-police-find>. Accessed 12/09/2024. And see also; Winstanley, A. (November 23, 2023). The evidence Israel killed its own citizens on 7 October. *The Electronic Intifada*. Available at: <https://electronicintifada.net/content/evidence-israel-killed-its-own-citizens-7-october/41156>. Accessed 12/09/2024.

109. Zeyton, Y. (December 8, 2023). En los últimos días: un helicóptero atacó accidentalmente un edificio donde se alojaban combatientes en Gaza, uno murió (Translated from Hebrew). *YNet News*. Available at: <https://www.ynet.co.il/news/article/rjkuoqgu6>. Accessed 12/09/2024.

110. Ataque no planeado, helicópteros Apache israelíes y engaños: lo que dicen los milicianos de Hamás detenidos sobre la masacre del Nova Festival (November 19, 2023). *ABC Internacional*. Available at: <https://www.abc.es/internacional/ataque-planeado-helicopteros-apache-israelies-enganos-dicen-20231119152057-nt.html?ref=https%3A%2F%2Fwww.abc.es%2Finternacional%2Fataque-planeado-helicopteros-apache-israelies-enganos-dicen-20231119152057-nt.html>. Accessed 12/09/2024.

111. Tekin, E. (November 20, 2023). Israeli police urge media to 'demonstrate responsibility' after reports find helicopter fired at festival-goers. *Anadolu Ajansi*. Available at: <https://www.aa.com.tr/en/middle-east/israeli-police-urge-media-to-demonstrate-responsibility-after-reports-find-helicopter-fired-at-festival-goers/3058955>. Accessed 12/09/2024. See also; Helicópteros israelíes dispararon contra milicianos y civiles del festival durante el ataque del 7 de October (November 20, 2023). *Europa Press*. Available at: <https://www.europapress.es/internacional/noticia-helicopteros-israelies-dispararon-contra-milicianos-civiles-festival-ataque-october-20231119123800.html>. Accessed 12/09/2024.

112. Yaron, O. (November 13, 2023). Did the Air Force accidentally reveal advanced weaponry on Twitter? (Traducido del Hebreo). *Ha'aretz*. Available at: <https://www.haaretz.co.il/news/security/2023-11-13/ty-article/0000018b-c864-d485-ab9b-ec75e5310000>. Accessed 12/09/2024.

113. The Companies Supplying Weapons to Israel's Attack on Gaza (December 17, 2023). *Who Profits Research Center*. Available at: https://www.whoprofits.org/publications/report/170?the-companies-supplying-weapons-to-israel-s-attack-on-gaza#_ftn11. Accessed 12/09/2024.

On June 13, 8 months after the outbreak of the war, "Apache, helicopters, tanks and ships fired against 'occupied residential buildings' in the western zone of Rafah",^{114,115} according to the Palestinian agency *Wafa*, causing dozens of dead and wounded civilians. A few days later, on June 25, at least 10 members of the family of Hamas political leader Ismail Haniyeh, including his sister, died after an attack in the early hours on the family home in the Shati refugee camp to the north of Gaza City. An Israeli Apache helicopter carried out the attack, resulting in at least 13 deaths, including 10 confirmed members of Haniyeh's family.¹¹⁶



F-15EX EAGLE II

Boeing (US), BAE Systems (UK)

The *F-15EX Eagle II* is one of the world's most lethal fighters. It can carry large bombs and weapons and offers delivers affordable mass to address rapidly evolving threats. This payload is combined with range, contemporary sensors and an advanced electronic warfare suite. This version is a modern evolution of the tested *F-15*. It is manufactured by **Boeing** in collaboration with **BAE Systems**, which supplies some parts. The *F-15* has frequently been used in the bombing campaign over Gaza and in previous missions in the area.¹¹⁷ The trend has continued since October 2023. As days went by, Israel intensified its attacks on the Gaza Strip, particularly by air and thanks to its alliance with the US, using, among others, the *F-15*

fighter.^{118,119} The IAF published images explaining that the commander of the Air Forces, General Tomer Bar, "carried out a sortie attacking Hamas targets in the Gaza Strip, this week". In the image, taken from the Hazerim Airbase on November 3, General Tomer appears in the cockpit of an *F-15I* fighter.¹²⁰ In June, the outlet *Top War* published that the Israeli Minister of Defense, Yoav Gallant, flew an *F-15* fighter over the Gaza Strip and along the southern Lebanon border, highlighting that it "was part of the 113 Squadron of the Israeli Air Force, 'especially distinguished' for its air strikes on Gaza and other cities of the Palestinian settlement".¹²¹ In July, at least 20¹²² Israeli fighter jets carried out a major air strike on the Houthi-controlled port of Hudaydah in Yemen in response to the Houthi attack on Tel Aviv. *F-15* and *F-35* US-produced fighters were identified in the raid,¹²³ and it seems that the *F-15* were in charge of the bombings (as reported by Daniel Hagari, the spokesperson of the Israeli military),¹²⁴ which killed several people and left at least 80 wounded.¹²⁵

114. Israel intensifica su ofensiva en ala occidental de Rafah y causa decenas de muertos (June 13, 2024). *SWI swissinfo.ch*. Available at: <https://www.swissinfo.ch/spa/israel-intensifica-su-ofensiva-en-ala-occidental-de-rafah-y-causa-decenas-de-muertos/80540804>. Accessed 12/09/2024.

115. Guerra entre Israel y Gaza: resumen del 13/06/2024 (June 13, 2024). *El País*. Available at: <https://elpais.com/internacional/2024-06-13/guerra-entre-israel-y-gaza-en-directo.html#>. Accessed 12/09/2024.

116. Un ataque de un helicóptero Apache israelí mata en Gaza a 10 familiares de Haniyeh, líder de Hamás, incluida su hermana (June 26, 2024). *La Razón*. Available at: https://www.larazon.es/internacional/ataque-helicoptero-apache-israeli-mata-gaza-10-familiares-haniyeh-lider-hamas-incluida-hermana_20240625667a774d901ca900018da6cf6.html. Accessed September 12, 2024.

117. Tejedor, A. (April 17, 2024). Israel confía en el avión de combate F-15E más que en el F-35 si decide atacar Irán. *La Razón*. Available at: https://www.larazon.es/internacional/f15e-caza-mas-rapido-mayor-alcance-que-israel-usara-ataca-iran_20240417661f76398e6602000168fd57.html. Accessed September 12, 2024.

118. Izquierdo, R. (October 28, 2023). Los cazas con los que Israel bombardea Gaza: estos son. *Diario AS*. Available at: <https://as.com/actualidad/politica/los-cazas-con-los-que-israel-bombardea-gaza-estos-son-n/>. Accessed September 12, 2024.

119. Duggal, H. et. al. (November 9, 2024). Israel's attacks on Gaza: The weapons and scale of destruction. *Al Jazeera*. Available at: <https://www.aljazeera.com/news/longform/2023/11/9/israel-attacks-on-gaza-weapons-and-scale-of-destruction>. Accessed September 16, 2024.

120. Malka, H. (November 3, 2023). Jefe de la Fuerza Aérea israelí efectuó un ataque en Gaza. *Noticias de Israel*. Available at: <https://israelnoticias.com/en-vivo/jefe-de-la-fuerza-aerea-israeli-efectuou-ataque-en-gaza/>. Accessed September 12, 2024.

121. El Ministro de Defensa israelí hizo volar un avión de combate F-15 sobre la Franja de Gaza y a lo largo de la frontera sur del Líbano (June 6, 2024). *Top War*. Available at: <https://es.topwar.ru/243851-ministr-oborony-izrailja-sovershil-polet-na-istrebitele-f-15-nad-sektorom-gaza-i-vdol-juzhnoj-granicy-livana.html>. Accessed September 12, 2024.

122. Shoval, L. (July 21, 2024). 20 fighter jets, 1,000 miles away: This is how Israel hit the Houthis in Yemen. *Israel Hayom*. Available at: <https://www.israelhayom.com/2024/07/21/20-fighter-jets1700-km-from-israel-this-is-how-israel-attacked-the-houthis-in-yemen/>. Accessed September 12, 2024.

123. Federman, J. y Wakin, M. (July 21, 2024). Israel shoots down a missile fired from Yemen hours after carrying out airstrikes on Houthi rebels. *PBS News (AP)*. Available at: <https://www.pbs.org/newshour/world/israel-shoots-down-a-missile-fired-from-yemen-hours-after-carrying-out-airstrikes-on-houthi-rebels>. Accessed September 12, 2024.

124. Agence France-Presse (July 20, 2024). Israel strikes Houthi rebels in Yemen, killing 3, after deadly Tel Aviv attack. *Voice of America*. Available at: <https://www.voanews.com/a/israeli-military-says-it-struck-several-houthi-targets-in-yemen/7706185.html>. Accessed September 12, 2024.

125. Keller-Lynn, C., Faucon, B. y al-Batati, S. (21 July 2024). Israeli Long-Distance Strike on Houthis Leaves Yemeni Port Ablaze. *The Wall Street Journal*. Available at: <https://www.wsj.com/world/middle-east/israel-strikes-houthi-controlled-port-city-in-yemen-2d84ab06>. Accessed September 12, 2024.



F-35A LIGHTNING-2 F-35I VERSION

Lockheed Martin (US), BAE Systems (UK), Leonardo (IT), Logistiek Centrum Woensdrecht (NL, Elbit Systems subsidiary)

The F-35 is a US strike fighter built with parts manufactured in other countries such as Denmark, Italy or the UK.¹²⁶ It is a multirole, stealth strike fighter streamlined to execute both air superiority and strike missions. It combines stealth and sensor fusion capabilities. Depending on the mission, it carries internal or external weapons, enters hostile territory, and remains in survivable condition with up to 5,700 pounds of internal ammunition. It can carry over 18,000 pounds of external ammunition, including internal heavy-weight weapon bays. There are several versions, but the F-35A is the most common model, used by the US Air Force and most of its international allies. Some of the most remarkable internal weapons it can carry are the GBU-31 JDAM 907kg guided bombs, the GAU-22/A 25mm cannon and two AIM-120C/D air-to-air missiles.¹²⁷ It is produced by **Lockheed Martin** in partnership with **BAE Systems** (which manufactures parts that correspond to 13-15% of the F-35¹²⁸ value), **Leonardo**¹²⁹ and the **Elbit Systems** subsidiary **Logistiek Centrum Woensdrecht**, which is in charge

126. Action on Armed Violence (AOAV), *op. cit.*

127. About the F-35 (n.d.). *Lockheed Martin*. Available at: <https://www.lockheedmartin.com/f35/about.html>. Accessed September 12, 2024.

128. BAE Systems (October 5, 2022). *Campaign Against Arms Trade (CAAT)*. Available at: <https://caat.org.uk/data/companies/bae-systems/>. Accessed September 12, 2024.

129. Italy plays a key role in the F-35 coalition, contributing significantly to its production. At its Foggia, Nola and Venegono plants, key composites and metal structures for the F-35 are manufactured. In addition, Leonardo's Aircraft Division produces wings at its Cameri plant, although not all F-35 wings are manufactured in Italy. On the other hand, Leonardo also manufactures the F-35's laser targeting system at its Edinburgh plant, highlighting the diversification of its involvement in the project (see October Diary, *op. cit.*; Leonardo. F-35 Lightning II and Further information about the F-35 program).

of maintenance.¹³⁰ Israel became the first country to select the F-35 through the US Foreign Military Sales process when it signed a deal in October 2010. IAF-IDF gave the F-35 the Hebrew name "Adir", meaning "powerful",¹³¹ and became the only country authorized to adapt the F-35A by incorporating Israeli-developed aerospace technologies into the contract.¹³²

In May 2018, the Israeli military confirmed it was the first country to use the F-35 in combat.¹³³ Since then, it has launched hundreds of sorties in Syrian territory during the war in that country, targeting Iran-backed forces and Lebanese members of Hezbollah, as well as Syrian military positions.¹³⁴ Likewise, it systematically used them in May 2021 in the bombings on the Gaza Strip, as reported by the British newspaper *The Independent*, which underlined the role of **BAE Systems** in developing these fighters.¹³⁵ Israel has also been employing them in the current offensive, as officially confirmed by the US, which remarked the exceptional combat performance of these advanced fighters.¹³⁶ According to *YNetNews*,¹³⁷ the 140 F-35 Squadron has targeted hundreds of objectives, including Hamas tunnels and hideouts in the Gaza Strip during the war. Two of the squadron's newest fighter jets were the first to arrive at the Gaza border on October 7. The pilots emphasize how the F-35 are "very efficient" in the war against Hamas.¹³⁸

130. A more prominent role for Woensdrecht in the F-35 logistics program (12 May 2023). *Ministerie van Defensie* (Translated from Dutch). Available at: <https://www.defensie.nl/actueel/nieuws/2023/05/12/prominentere-rol-voor-woensdrecht-rond-logistiek-f-35-programma>. Accessed September 17, 2024.

131. Action on Armed Violence (AOAV), *op. cit.*

132. Tejedor, A. (April 4, 2024). Por qué el F-35 de Israel es diferente al que tienen el resto de países. *La Razón*. Available at: https://www.larazon.es/internacional/que-f35-israel-diferente-que-tienen-resto-paises_20240404660e52e30999030001d0a628.html. Accessed September 12, 2024.

133. Stocker, J. (May 22, 2018). Israel claims world's first F-35 airstrikes. *The Defense Post*. Available at: <https://www.thedefensepost.com/2018/05/22/israel-first-f-35-airstrikes-syria/>. Accessed September 12, 2024.

134. Israel Approves Buying 25 New F-35 Stealth Fighter Jets: Ministry (July 3, 2023). *The Defense Post*. Available at: <https://www.thedefensepost.com/2023/07/03/israel-buying-f35-jets/>. Accessed September 12, 2024.

135. Stone, J. (May 22, 2021). Revealed: The British military hardware used in Israel's bombardment of Gaza. *The Independent*. Available at: <https://www.independent.co.uk/news/uk/home-news/israel-gaza-uk-arms-exports-airstrikes-b1851734.html>. Accessed September 12, 2024.

136. Action on Armed Violence (AOAV), *op. cit.*

137. Zitun, Y. (March 17, 2024). Israeli F-35 crews soar to top as world's most operational pilot. *YNetNews*. Available at: <https://www.ynetnews.com/article/byk11shn0p>. Accessed September 12, 2024.

138. Tiwari, S. (January 27, 2024). F-35 Pilot Speaks On Gaza War! Explains How Israeli 'Adir' Stealth Jets Have Proved 'Very Effective' Against Hamas. *The Eurasian Times*. Available at: <https://www.eurasiantimes.com/newwww-f-35-adir-israel-to-acquire-3rd-squadron-of-us/>. Accessed September 12, 2024.



Logistiek Centrum Woensdrecht (Netherlands)

The Logistics Centre Woensdrecht (LCW), located in the Netherlands, is responsible for ensuring the availability and maintenance of air and ground weapon systems as well as communication systems for operational tasks. With divisions in Woensdrecht, Rhenen, Dongen and Den Helder, LCW offers end-to-end services including preventive and corrective maintenance, as well as aircraft and helicopter upgrades. The organization supports the Royal Netherlands Air Force, as well as the navy, the army and the military police, and meets high quality standards. Since 2011, Elbit Systems has been using LCW for the maintenance of F-16 and F-35 strike fighters.



F-16I 'SUFA'

Lockheed Martin (US), Rafael (ISR),
Elbit Systems (ISR)

The war horse of the bombing campaign over Gaza is the F-16, a well-tested old fighter. There are about 100 units in service. Although each can carry seven metric tons, for practical purposes, it can be assumed that each F-16 takes off with four bombs.¹³⁹ It was developed by **General Dynamics** in the seventies, although current versions are produced by **Lockheed Martin**, and can carry components and weapons from other companies. The F-16I, the model used by the IAF, is nicknamed *Sufa*, "storm" in Hebrew. It integrates a protection system and external fuel tank designed by **IAI (Elbit Systems)**, among other systems developed by **Elbit Systems**, besides the *Python 5* air-to-air infrared-guided missile system developed by **Rafael**.¹⁴⁰

139. Kusovac, Z. (November 4, 2023). La campaña de bombardeos en Gaza está resultando costosa para Israel. *Rebelión*. Available at: <https://rebelion.org/la-campana-de-bombardeos-en-gaza-esta-resultando-costosa-para-israel/>. Accessed September 12, 2024.

140. Carlin, M. (22 September 2023). Israel's 'Thunderstorm': Meet the F-16I Sufa Fighter. *19FortyFive*. Available at: <https://www.19fortyfive.com/2023/09/f-16l-soufa-israel-critical-asset/>. Accessed September 12, 2024.

According to *The National*,¹⁴¹ the F-16 were used for the first time since the Second Intifada (2002) in the Jenin (West Bank) refugee camp on October 22, 2023. The F-16 dropped bombs that destroyed a mosque in the refugee camp and a nearby housing building. Two people died in the Jenin bombing and four more on the same day from attacks from the Israeli military and colon in other West Bank regions.

BOMBS / MISSILES



JDAM (JOINT DIRECT ATTACK MUNITION)

Boeing (US)

JDAM is a weapon within the missiles and bomb category. It is an inexpensive kit that transforms unguided bombs into precision-guided munition. JDAMs are GPS-guided bombs with a standoff range of up to 72km. JDAM combines an inertial guidance system and a GPS receptor capable of transforming simple, free-falling bombs like *Mk-80*, into guided munition. They provide trustworthy and precise guidance in all weather conditions and have been installed on Israeli aircraft since at least 2000.¹⁴²

As outlined below, various evidence exists on the use of JDAM in the Israeli offensive on Gaza. On October 10 and 22, the Israeli military launched air strikes south of Wasi, in an area where the military had ordered the relocation of displaced civilians from the north. The bombings killed 43 civilians, including 19 children.¹⁴³ An Amnesty International report¹⁴⁴ clearly says that "*the air strikes were either direct attacks on civilians or civilian objects, or indiscriminate attacks and should be investigated as war crimes*". Both air strikes were carried out with US-made JDAMs. Am-

141. Tabikha, K. (October 22, 2023). Israel strikes West Bank using F-16 fighter jets in 'unprecedented escalation'. *The National News*. Available at: <https://www.thenationalnews.com/mena/palestine-israel/2023/10/22/israel-strikes-west-bank-using-f-16-fighter-jets-marking-unprecedented-escalation/>. Accessed September 12, 2024.

142. First International JDAM Sale: Boeing to Integrate Weapon on Israeli Aircraft (June 1, 2000). *Boeing* (Press Release). Available at: <https://boeing.mediaroom.com/2000-06-01-First-International-JDAM-Sale-Boeing-to-Integrate-Weapon-on-Israeli-Aircraft>. Accessed September 12, 2024.

143. Israel/OPT: US-made munitions killed 43 civilians in two documented Israeli air strikes in Gaza – new investigation (December 5, 2023). *Amnesty International*. Available at: <https://www.amnesty.org/en/latest/news/2023/12/israel-opt-us-made-munitions-killed-43-civilians-in-two-documented-israeli-air-strikes-in-gaza-new-investigation/>. Accessed September 12, 2024.

144. Amnesty International USA: Submission to NSM-20. Unlawful use of us-made munitions and violations of international law by Israel since January 2023 (April 2024). *Amnesty International*. Available at: <https://www.amnestyusa.org/wp-content/uploads/2024/04/4.29.2024-NSM-20-AIUSA-submission-re-Israel.pdf>. Accessed September 12, 2024.

nesty International mentions that ground-based evidence proves that the bomb hitting the home of the al-Najjar family was a *GBU-32*, and the one hitting the home of the Abu Mu'eileq family was a *GBU-31*. In both cases, they were equipped with a *JDAM* kit.¹⁴⁵ The same report informs that in May 2023, before the October 7 offensive, the Israeli military had already employed *JDAM* kits and *GBU-39* bombs in an air strike on a housing build in the Jabalia refugee camp north of Gaza. The strike caused the death of 10 civilians and 20 wounded.

Another case in the same refugee camp occurred on October 31. Israel bombed the camp, causing the death of at least 56 people, including 12 women and 23 children. The strike leveled around 2,500m², destroying 10 buildings and damaging 10 more. OHCHR considers this attack a probable war crime.¹⁴⁶ A visual analysis by *The Guardian*¹⁴⁷ identifies at least five craters that various experts conclude were produced by the use of multiple *JDAMs* and *GBU-31* or *GBU-56* bombs.¹⁴⁸ Actually, the IAF themselves posted photos on Twitter/X of how they loaded *GBU-31* bombs onto fighters. The UN is outspoken in its analysis of this strike and others: "Monitoring by OHCHR strongly indicates that the Israeli Defense Forces have systematically failed to comply with the following fundamental principles of international humanitarian law in its conduct of hostilities in Gaza since 7 October: the principle of distinction, the prohibition of indiscriminate attacks, the principle of proportionality and the principle of precautions in attack." In mid-November, Israel had launched 208 2,000-pound (907kg) bombs south of the Gaza Strip in areas "where Israel had ordered civilians to move for safety."¹⁴⁹

In July, two notable attacks took place, causing several civilian casualties. On July 10, in Khan Younis, the Israeli military bombed a school, causing the

death of 27 people and wounding 57.¹⁵⁰ According to a statement from Philippe Lazzarini, the Commissioner-General of the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), four schools were hit in the settlement in the last four days.¹⁵¹ Three days later, on July 13, a strike "targeting" Hamas' second-in-command in the settlement (Mohamed Deif) caused the death of 90 people and 300 wounded.¹⁵² This happened in the supposedly safe zone of Al-Mawasi. AFP videos of the strike display a white mushroom cloud spreading over a busy street, leaving behind a huge crater strewn with scrapped tents and a shattered building. Two arms experts declared to AFP¹⁵³ that an ammunition piece that appeared in a video of the explosion site on the internet was from a tail fin from a *JDAM*, probably with a 450 or 900kg payload. One month later, on August 10, the IDF targeted another school, the Al-Tabieen school in Gaza City. The Media Office of the Government of Gaza confirmed that over 100 displaced Palestinians died in the massacre. CNN reported that the lethal attack used at least one precision-guided bomb produced in the US, according to arms experts. CNN images reveal parts of an explosive device identified as fragments from a *GBU-39* SDB —equipped with a *JDAM*.¹⁵⁴ In the context of the same offensive, we must highlight another *JDAM* strike, which took place in Lebanon and not Gaza. In March, the IAF attacked the emergency center in Habbariyeh, causing the death of 7 civilian volunteers. According to HRW,¹⁵⁵ it represents an "illegal strike against civilians in which the necessary precautions were not fulfilled" and "it must be investigated as a possible war crime". It is worth noting that just as Israel has systematically targeted journalists, it has also targeted volunteers and humanitarian workers. As of August 2024, more than 250 humanitarian workers have been killed since October

145. U.S.-Made Weapons Used by Government of Israel in Violation of International Law and U.S. Law. (April 29, 2024). *Amnesty International*. Available at: <https://www.amnestyusa.org/press-releases/u-s-made-weapons-used-by-government-of-israel-in-violation-of-international-law-and-u-s-law/>. Accessed September 12, 2024.

146. Thematic Report - Indiscriminate and disproportionate attacks during the conflict in Gaza (October-December 2023) (June 19, 2024). *ACNUDH*. Available at: <https://www.ohchr.org/sites/default/files/documents/countries/opt/20240619-ohchr-thematic-report-indiscrim-disprop-attacks-gaza-oct-dec2023.pdf>.

147. Graham-Harrison, E., Ganguly, M, y Morresi, E. (November 1, 2023). Cratered ground and destroyed lives: piecing together the Jabalia camp airstrike. *The Guardian*. Available at: <https://www.theguardian.com/world/2023/nov/01/jabalia-camp-airstrike-gaza>. Accessed September 12, 2024.

148. The OHCHR analysis (op. cit) estimates that at least four *GBU-32* bombs were used, although the use of *GBU-31* is not ruled out.

149. Stein, R. et. al. (December 21, 2023). A Times Investigation Tracked Israel's Use of One of Its Most Destructive Bombs in South Gaza. *The New York Times*. Available at: <https://www.nytimes.com/2023/12/21/world/middleeast/israel-gaza-bomb-investigation.html>. Accessed September 12, 2024.

150. Salman, A. et. al. (July 10, 2024). Israeli airstrike kills at least 27 people at school complex near Khan Younis, Gaza Health Ministry says. *CNN*. Available at: <https://edition.cnn.com/2024/07/09/middleeast/israeli-airstrike-school-khan-younis-intl-latam/index.html>. Accessed September 12, 2024. The article does not explicitly mention the use of *JDAM* but does indicate that it was a "precision munitions" bombing, which would fit very well with the use of *JDAM*.

151. Middle East updates: Israel calls for Gaza City evacuation (July 10, 2024). *DW News*. Available at: <https://www.dw.com/en/middle-east-updates-israel-calls-for-gaza-city-evacuation/live-69611850>. Accessed September 12, 2024.

152. At least 90 killed in Israeli attack on al-Mawasi 'safe zone' in south Gaza (July 13, 2024). *Al Jazeera*. Available at: <https://www.aljazeera.com/news/2024/7/13/at-least-50-killed-in-israeli-strike-on-al-mawasi-safe-zone-in-south-gaza>. Accessed September 12, 2024.

153. What we know about the bomb Israel used on Gaza 'safe zone' (July 16, 2024). *France 24 (AFP)*. Available at: <https://www.france24.com/en/live-news/20240716-what-we-know-about-the-bomb-israel-used-on-gaza-safe-zone>. Accessed September 12, 2024.

154. Mayadeen, A. (August 11, 2024). 'Israel' used US-made precision-guided bomb in Gaza school strike: CNN. *Al Jazeera*. Available at: <https://english.almayadeen.net/news/politics/-israel--used-us-made-precision-guided-bomb-in-gaza-school-s>. Accessed September 12, 2024.

155. Israel: US Arms Used in Strike that Killed Lebanon Aid Workers (May 7, 2024). *HRW*. Available at: <https://www.hrw.org/news/2024/05/07/israel-us-arms-used-strike-killed-lebanon-aid-workers>. Accessed September 12, 2024.

7, according to the UN.¹⁵⁶



GBU-31 (MK-84), GBU-32 (MK-83), GBU-38 (MK-82)

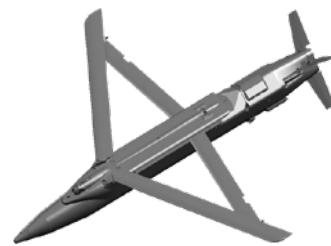
General Dynamics (US), Boeing (US)

GBUs are high-precision guided bombs launched from the air. Their weight varies depending on the model (Mk82, Mk83 and Mk84). **General Dynamics** is one of the US companies producing the steel bomb bodies for the Mk-80 series. The MK and BLU naming reflect differences in the type of explosive used. When these bombs are transformed into guided munition through **Boeing JDAM** kits, they are known as *GBU-38* (227kg), *GBU-32* (454kg) or *GBU-31* (907kg). They are developed by combining the so-called dumb bombs due to their lack of precision and the JDAM guidance kits described above. Their explosions cause "instant death" for people within a specific radius, depending on the model, and are designed to penetrate concrete bunkers and ship hulls, among other targets.

It is not the first time Israel has launched these bombs on Gaza. Before October 7, on May 12, 2023, an Israeli fighter attacked the Al Matayna neighborhood in Deir al-Balah, in the center of Gaza, with what seemed to have been a *GBU-32* or *GBU-31* bomb, destroying or damaging 23 housing buildings and a medical center.¹⁵⁷ Since October 7, these bombs have been extensively used in the Gaza offensive. A CNN analysis¹⁵⁸ reports that Israel launched over 500 *GBU-31* bombs in the northern part of the Gaza Strip and over 200 in the southern part until November, in just about a month. A situation CNN qualifies as "never seen since Vietnam". The analysis pinpoints over "500 craters larger than 12 meters, that match those caused by 900kg bombs, 4 times as powerful as most of the bombs dropped by the US in the war against ISIS in Syria and Iraq".¹⁵⁹

One of these strikes took place on the morning of October 9 without previous warning over the Al-Trance street market in the Jabalia refugee camp north of Gaza, in a densely populated area. The bombing destroyed two large buildings and killed 42 people, including 14 children and women. Due to the damage extension and the terrain collapse, one or two *GBU-31* bombs were probably dropped by the IAF.¹⁶⁰ In October, four more attacks display evidence of having used *GBUs*: the strike south of Wasi on October 10 and 22, where 43 civilians were killed and which Amnesty International has reported; the October 31 strike on Jabalia, where at least 56 people died and has been reported by the OHCHR (cases reviewed in the *JDAM*¹⁶¹ section); the October 25 strike over Gaza City in which 105 people were killed, including 32 women and 47 children after the bombing of the Taj3 Tower. Following the assessment of destroyed infrastructure and crater size, it is likely that several rounds of *GBU-31* bombs were dropped, indicating attribution to the IAF, also according to the OHCHR report.¹⁶²

In December, the Israeli military destroyed 15 buildings in the Ash Shujai'yeh neighborhood, a densely populated area in Gaza City, after a strike that caused the death of at least 70 individuals. According to the OHCHR, 9 *GBU-31* were used.¹⁶³ In July, we can also report the attack on the Al-Mawasi area, also mentioned in the *JDAM* section, in which at least 92 people were killed and over 300 wounded. The area had been declared a safe zone by Israel, which almost took it off the map with the bombing and filling nearby hospitals with victims.¹⁶⁴



GBU-39 SMALL DIAMETER BOMB

Boeing (US)

The *GBU-39 SDB* are inexpensive, high-precision guided bombs capable of quadrupling the effectiveness of the payload. It is a small-sized device that can hold

156. Abdulrahim, R. (June 17, 2024). Gaza Is World's Deadliest Place for Aid Workers, UN Says. *The New York Times*. Available at: <https://www.nytimes.com/2024/06/17/world/middleeast/gaza-aid-workers-un.html>. Accessed September 12, 2024.

157. ACNUDH, *op. cit.*

158. Qiblawi, T., et al. (December 22, 2023). 'Not seen since Vietnam': Israel dropped hundreds of 2,000-pound bombs on Gaza. *CNN*. Available at: <https://edition.cnn.com/gaza-israel-big-bombs/index.html>. Accessed September 12, 2024.

159. *Ibid.*

160. ACNUDH, *op. cit.*

161. The OHCHR report details how "the attack completely obliterated an area of at least 2,500 m² and destroyed 10 structures. It struck along an approximate diagonal of 75 m, causing damage to at least 10 other buildings. Considering the level of damage and the size of the craters, it is likely that at least four *GBU-32s* were involved in the attack, although the larger *GBU-31* cannot be ruled out."

162. *Ibid.*

163. *Ibid.*

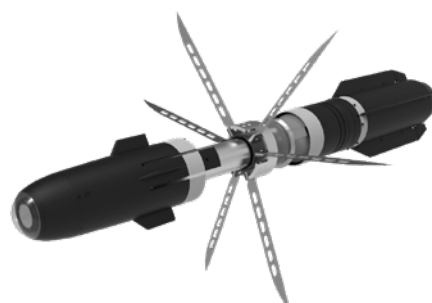
164. France 24 (AFP), 16 de July, *op. cit.*

several bombs. It is installed on fighters, bombers, or unmanned aircraft. Its small size means it can carry multiple payloads on board, and thanks to its *glide*¹⁶⁵ system, it can be guided for a great range. Launched from the air, it can penetrate through several concrete layers. As we have already mentioned, Amnesty International¹⁶⁶ reports their use in the Gaza offensive since May 2023 in a strike that destroyed a building in the Jabalia refugee camp, killing 10 civilians and wounding 20.

Several documented cases prove they have been used after October 7. For example, in the Al Bureij camp on November 2. The Israeli military bombed a residential area, destroying 12 buildings and killing at least 15 individuals (9 children and 5 women). At least four *GBU-39s* were deployed, according to the June 2024 OHCHR report.¹⁶⁷ A few days later, on November 10, they also bombed the Al Buraq school, where displaced people were seeking refuge, causing at least 34 deaths. The IAF probably used two *GBU-39s*, according to the OHCHR.¹⁶⁸

Between December and January 2024, four IDF bombings were reported over Rafah after the end of the humanitarian pause, resulting in the death of 95 civilians, including 42 children, with no evidence of legitimate military targeting (according to Amnesty International¹⁶⁹). Of the four bombings, the January 9 bombing on five buildings property of the Nofal family in Tel Al-Sultan killed 18 civilians. According to Amnesty International arms experts who reviewed the images and fragments on the ground, these were caused by one *GBU-39* bomb.¹⁷⁰ On May 26, the IDF launched another significant bombing over Rafah, on a camp hosting displaced civilians. The strike caused the death of 45 people, who were burned alive in the fire caused by the bombing. A further 249 individuals were wounded. A *Times* virtual analysis¹⁷¹ discovered between the rubble the remains of *GBU-39* munition. Another well-documented case is the bombing of the Al-Awda school in Khan Younis between July 9 and 10. Again, the school was being used as a refuge for displaced people. The strike killed at least 27 and 53 were wounded. CNN reporters recorded a

video, and the consulted Armament Research Services experts confirmed —after analyzing the images of the fragments— that it was the work of a *GBU-39* bomb.¹⁷²



AGM-114R9X HELLFIRE MISSILES

Lockheed Martin (US), Boeing (US), Northrop Grumman (US)

Initially designed to penetrate tank armor, these missiles are now used for precision drone strikes and from other platforms (air, sea, land). Their first use in an Israeli operation was in 2001 from an *Apache* helicopter against a Lebanese plane. In 2018, it was once again used, this time against an Iranian drone. According to AFSC, it is one of the main types of missiles used in the air strikes against Gaza, probably launched from the *Apache* attack helicopter.¹⁷³ Los misiles *AGM-114 Hellfire* para los helicópteros *Apache* de Israel, uno de los principales tipos de armas utilizadas en los ataques aéreos sobre Gaza desde el inicio del conflicto.¹⁷⁴ Between October and November, there were several attacks on the Al-Shifa hospital complex where tens of thousands were seeking refuge (doctors, patients and displaced people). The most significant were the November 9¹⁷⁵ and 10¹⁷⁶ bombings with *AGM-114R9X Hellfire* missiles. We should mention that the *AGM-114R9X* is a non-explosive missile, but lethal due to its rotary blades which cut through anyone within 3 feet. The minimum/maximum fire range is 1.5/8km. The missile dispersed blades throughout

165. It is a glide system for bombs, with flight control surfaces that give it a flatter flight path than a conventional bomb without such surfaces.

166. Amnistia Interancional (USA), April 2024, *op. cit.*

167. ACNUDH, *op. cit.*

168. *Ibid.*

169. Amnistia Interancional (USA), April 2024, *op. cit.*

170. *Ibid.*

171. Stein, R., Triebert, C. y Willi H. (May 29, 2024). Israel Used U.S.-Made Bombs in Strike That Killed Dozens in Rafah. *The New York Times*. Available at: <https://www.nytimes.com/2024/05/29/world/middleeast/israel-us-rafah-bombs.html>. Accessed September 12, 2024.

172. Mezzofiore, G., Schmitz, A. y Goodwin, A. (July 10, 2024). US-made munitions used in deadly Israeli strike on school complex near Khan Younis, CNN analysis finds. *CNN*. Available at: <https://edition.cnn.com/2024/07/10/middleeast/israel-us-munitions-school-strike-khan-younis-intl-latam/index.html>. Accessed September 12, 2024.

173. AFSC, *op. cit.*

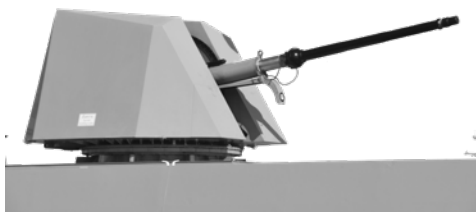
174. *Ibid.*

175. Damon, A. (November 9, 2023). Israel bombs three hospitals after Biden says "no prospect" of ceasefire. *WSWS*. Available at: <https://www.wsws.org/en/articles/2023/11/10/ilog-n10.html>. Accessed September 12, 2024.

176. Jammal Hussain, G. (November 12, 2023). US Hellfire missiles used to strike Gaza Al-Shifa Hospital: Sources. *Press TV*. Available at: <https://www.presstv.ir/Detail/2023/11/12/714488/US-Hellfire-missiles-used-to-strike-main-Gaza-hospital--Reports>. Accessed September 12, 2024.

the area, slashing and amputating limbs and leaving pools of blood.¹⁷⁷ Likewise, on the 9th, a *Hellfire R9X* missile produced by **Lockheed Martin** was reported to impact journalists near said hospital.¹⁷⁸

SHIPS



76 MM OTO MELARA 76/62 *Leonardo (IT)*

The *OTO Melara 76mm* gun, marketed as *OTO 76/62*, is a naval autocannon with a system compact enough to be installed on relatively small warships. Its high rate of fire and the availability of several types of ammunition make it capable of short-range anti-missile point defense, anti-aircraft, anti-surface, and ground support. Ammunition includes armor-piercing, incendiary, directed fragmentation effects, and a guided projectile capable of destroying maneuvering anti-ship missiles. In Israel, it is installed on the *Sa'ar* ships, formerly on models 3 and 4, and currently on the *Sa'ar 4.5-class missile boat* and the *Sa'ar 6-class corvette*.

In October 2023, the IDF carried out multi-domain strikes on the Gaza Strip, converging maritime, air and land resources. For the first time, the IDF deployed the *Sa'ar 6 class corvette* to target a Hamas arms-producing facility, as well as combat equipment, facilities and observation posts. The IDF published images showing the *OTO Melara 76mm* gun of the involved warship pointing towards Gaza from the Mediterranean Sea.¹⁷⁹ On February 24, 2024, it was reported that the Israeli Navy attacked a Palestinian fishing vessel near the Khan Yunis coast. The fisherman tried to escape the fire and bring the boat ashore, but the continued Israeli gunfire seriously damaged the

177. Damon, A. *op. cit.*

178. The Permanent Observer Mission of the State of Palestine (2024). The role of industry in responsible arms trade. (Working paper February 23, 2024). Available at: <https://www.thearmstradetreaty.org/hyper-images/file/State%20of%20Palestine%20Working%20Paper%20-%20The%20role%20of%20industry%20in%20responsible%20arms%20transfers/State%20of%20Palestine%20Working%20Paper%20-%20The%20role%20of%20industry%20in%20responsible%20arms%20transfers.pdf>.

179. Israeli Navy uses *Sa'ar 6-Class* corvettes for first live combat against Hamas (October 19, 2023). *Global Defense News*. Available at: <https://www.armyrecognition.com/news/navy-news/2023/israeli-navy-uses-sa-ar-6-class-corvettes-for-first-live-combat-against-hamas>. Accessed September 12, 2024.

vessel before it could reach land.¹⁸⁰ A relevant note is that before the last war, the Israeli military imposed a nautical boundary for Gaza's fishermen, confining them to a small and depleted fishing area. This limit forces fishermen to cross the border in search of fish, resulting in warning or live gunfire from the Israeli Navy, which seized their vessels. Now, this policy has escalated to the full destruction of Gazan fishing vessels. The army has destroyed all vessels stationed at the port, leaving hundreds of families bereft of food and increasing the risk of famine for over two million people in the settlement.¹⁸¹

ARTILLERY



M107 155MM *General Dynamics (US)*

The *M107 155mm* artillery shells are made of a hollow steel shell, non-guided with high impact. According to an HRW 2007 report¹⁸², it is the ammunition of choice for the FDI howitzers. **Israel Military Industries** produces the *M107* shell, although Israel has also imported 155mm shells from the US company **General Dynamics**. The *M107* shell weighs about 44kg and is around 60.5cm long and 155mm in diameter at its widest point. It has an 18km range. If loaded with TNT, the shell spreads around 2,000 fragments in all directions. Some shells do not explode and become unexploded ordnances. *M107* shells are extremely lethal weapons. The lethal radius of a 155mm high-explosive shell is between 50 and 150 meters, and the radius of victims is between 100 and 300 meters. IDF civil servants have declared that the error radius of a 155mm shell is usually 25m. Therefore, when launching shells within

180. Imane Kouachi, I. (February 24, 2024). *Fuerzas navales israelíes atacan una embarcación pesquera palestino frente a la costa del sur de Gaza. Anadolu Ajansı*. Available at: <https://www.aa.com.tr/es/mundo/fuerzas-navales-israel%C3%ADes-atacan-una-embarcaci%C3%B3n-pesquera-palestino-frente-a-la-costa-del-sur-de-gaza/3146763>. Accessed September 12, 2024.

181. Mir de Francia, R. (November 5, 2023). Israel multiplica la destrucción de los medios de vida en Gaza atacando su flota pesquera. *El Periódico*. Available at: <https://www.elperiodico.com/es/internacional/20231105/israel-multiplica-destruccion-medios-vida-gaza-ataque-flota-pesquera-94237467>. Accessed September 12, 2024.

182. Indiscriminate Fire. Palestinian Rocket Attacks on Israel and Israeli Artillery Shelling in the Gaza Strip (June 30, 2007). *HRW*. Available at: <https://www.hrw.org/report/2007/06/30/indiscriminate-fire/palestinian-rocket-attacks-israel-and-israeli-artillery>. Accessed September 12, 2024.

100m of populated areas, as air force policies allow, or even closer as happens sometimes, the probability of inflicting civilian casualties greatly increases.¹⁸³

We can find various documented examples of their use in Gaza for years. In June 2006, the IDF launched shells in response to rocket attacks against Sderot and other Israeli communities. In various incidents investigated by HRW,¹⁸⁴ Israel's use of 155mm shells in response to these attacks could have violated international humanitarian law because it did not differentiate between military and civilian objectives. Three years later, in April 2009, they were used again in the operation *Cast Lead*, which lasted 22 days and was examined by a UN investigation committee.¹⁸⁵ According to an Amnesty International report,¹⁸⁶ there is proof that IDF artillery fire caused the explosion of three *M107* 155mm shells in the local office of the UN-RWA, in addition to eight *M825A1* 155mm smoke-producing shells with white phosphorus.



M109-52 HOWITZER

BAE Systems Inc (US subsidiary of BAE, UK) / Rheinmetall (DE)

The *M109* is a US self-propelled 155mm howitzer. It is the most common Western weapon for indirect fire support of the combat brigades of mechanized and armored infantry units. It can weigh up to 50,000kg and reach a maximum speed of over 40km/h. Israel has at least 250 units of the *M109A5* model and 30 *M109A2*¹⁸⁷. It is produced by **BAE Systems**, the seventh biggest arms producer in the world. Since December 2023, **BAE Systems** introduced a new *M109* version by integrating the *Rheinmetall L52* 155mm, 52-cal-

iber cannon system.¹⁸⁸ The *M109* is a self-propelled 155mm artillery system widely used by the Israeli military, firing tens of thousands of 155mm shells into the Gaza Strip.¹⁸⁹ Some of these bombs contain white phosphorus, which is forbidden in densely populated civilian areas and may represent a war crime.¹⁹⁰

Studying their use in Gaza since October 7, we see that army sources openly discuss their extensive deployment. In an interview by *The Jerusalem Post*,¹⁹¹ an IDF commander mentions that "*all the brigade has launched around 10,000 shells and each battalion around 3,500. Each M109 might have fired between 400 and 500 shells [...] The 155mm shells fired by these cannons are being used at an astounding rate worldwide due to the Ukraine war*".

A concrete example is their use with white phosphorus in Gaza between October 9 and 11: the IDF stationed *M109 155mm howitzers* near Sderot, 1km from the border with Gaza. According to an Amnesty International report,¹⁹² verified images were published of *M825* and *M825A1* artillery shells, also labeled D528 (code of the *US Department of Defense Identification Code -DODIC-* for white phosphorus). From Sderot, *M109s* can reach the northern half of Gaza. Several videos, analyzed by an Amnesty International team of experts, confirm the use of these shells. It was possible to verify at least one attack on the Port of Gaza and nearby hotels with this ammunition. Other available videos prove artillery shells exploding in the air and liberating dense white smoke particles, matching *M825* and *M825A1* artillery shells.

These were also used on Lebanon, near the Israel border on October 10 and 16. Amnesty International¹⁹³ documented four cases of white phosphorus use by the IDF in the towns of Dhayra, al-Mari and Ayta ash Shab, causing at least nine wounded. Israel fired tens of thousands of 155mm shells produced by **General Dynamics** from *M109* in Gaza and some may have been

183. Anadolu Ajansi, February 2024, *op.cit.*

184. *Ibid.*

185. The UN Human Rights Council established an independent commission of inquiry in 2009, which found that Israeli forces were responsible for 8 of the 9 attacks investigated.

186. Israel/Gaza: Operation 'Cast Lead': 22 days of death and destruction (July 2009). *Amnesty International*. Available at: <https://www.amnesty.org/en/wp-content/uploads/2021/06/mde150152009en.pdf>.

187. International Institute for Strategic Studies (2024). *The Military Balance 2024*. Taylor & Francis.

188. M109-52 Self-Propelled Howitzer (n.d.). *BAE Systems*. Available at: <https://www.baesystems.com/en/product/m109-52-self-propelled-howitzer>. Accessed September 12, 2024.

189. Israel is using these US-made weapons in its genocidal war on Gaza (June 2024). *TRTWorld*. Available at: <https://www.trtworld.com/middle-east/israel-is-using-these-us-made-weapons-in-its-genocidal-war-on-gaza-18170208>. Accessed September 13, 2024.

190. AFSC, *op. cit.*

191. Frantzman, S. J. (November 25, 2023). Israel-Hamas war: Meet the IDF artillery key to the Gaza war. *The Jerusalem Post*. Available at: <https://www.jpost.com/israel-news/defense-news/article-774833> (enlace alternativo). Accessed September 13, 2024.

192. Arms, A. y Ristic, M. (October 13, 2023). Israel/OPT: Identifying the Israeli army's use of white phosphorus in Gaza - Citizen Evidence Lab. *Amnesty International*. Available at: <https://citizenevidence.org/2023/10/13/israel-opt-identifying-the-israeli-armys-use-of-white-phosphorus-in-gaza/>. Accessed September 13, 2024.

193. Lebanon: Evidence of Israel's unlawful use of white phosphorus in southern Lebanon as cross-border hostilities escalate (31 October 2023). *Amnesty International*. Available at: <https://www.amnesty.org/en/latest/news/2023/10/lebanon-evidence-of-israels-unlawful-use-of-white-phosphorus-in-southern-lebanon-as-cross-border-hostilities-escalate/>. Accessed September 17, 2024.

M825 and M825A1 white phosphorus shells. AFP images taken on October 18 in the area show 155mm white phosphorus shells lined up next to M109 howitzers from the Israeli military. These shells have a recognizable pale green color with red and yellow stripes, as well as visible marks reading M825A1 and D528. A *Washington Post* article published on December 11, 2023, tracked all the attacks and reported fragments from three 155mm artillery shells that matched the US production codes in Louisiana and Arkansas in 1989 and 1992. According to weapons experts, the pale green color and other marks printed on the fragments, such as "WP" (white phosphorus), match with white phosphorus shells.¹⁹⁴



M795 155MM

General Dynamics (US)

It is a 155mm standard high explosive shell for 155mm howitzers (such as the M109), designed to be more lethal than the M107. It is broadly used by the IDF. The M795 shells are launched from the M109-52 howitzer. As mentioned above, each M109 can fire hundreds of shells.¹⁹⁵ Symbolically, it was precisely a M795 missile where the former US Ambassador to the UN, Nikki Haley, wrote: "Finish them! US loves Israel. Always, Nikki Haley". The viral image was published by Danny Danon, an Israeli member of parliament and former Israel Ambassador to the UN.¹⁹⁶ These shells have been extensively used in Gaza. In fact, as Oxfam points out in an October 2023 report¹⁹⁷ warning on the transfer of this ammunition to Israel, "155mm shells are a weapon of choice in Israel's ground operation in Gaza, which will cause untold harm to civilians as it intensifies further". And it adds, "Israel's use of this munition in past conflicts demonstrates that its use would be virtually assured to be indiscriminate, unlawful, and devastating to civilians in Gaza".

194. Ibid

195. Frantzman S. J., *The Jerusalem Post*, *op. cit.*

196. Pérez Gallardo, M. (May 29, 2024). "Acaben con ellos": el mensaje que Nikki Haley escribió en un misil israelí. *France 24*. Available at: <https://www.france24.com/es/medio-oriente/20240529-acaben-con-ellos-el-pol%C3%A9mico-mensaje-que-nikki-haley-escribi%C3%B3-en-un-misil-israel%C3%AD>. Accessed September 13, 2024.

197. Oxfam Policy Brief, *op. cit.*



M830A1 120MM

Day & Zimmerman (US)

These shells are designed to be used in the M256 120mm tank gun of M1A1 and M1A2 Abrams tanks. Regarding its use in Gaza, Israeli tanks fired against a UNRWA school in November. As the well-known writer who was killed in a December strike, Refaat Alareer posted on Twitter/X,¹⁹⁸ and as reported by AFSC, fragments from an M830A1 shell showed a serial number identifying these were US-made, produced by **IAAP by Mason & Hanger** in 1990. Also according to AFSC,¹⁹⁹ Israeli tanks fired M830A1 shells in the attack that killed six-year-old Hind Rajab, her six family members and the doctors from the Palestine Red Crescent Society (PRCS) who were trying to rescue her. The events happened in the Gazan neighborhood of Tel al-Hawa, on January 29. This case received close media attention. An M830A1 fragment was found at the scene of the attack next to the PRCS ambulance.²⁰⁰ According to Euro-Med Human Rights Monitor, the case could represent a "serious and complex crime that included multiple grave violations and war crimes", among which "the planned unlawful killing of unarmed civilians in a civilian car in broad daylight", "the refusal to give urgent medical assistance to injured people when they discovered that a wounded child was still alive" and "intentional unlawful killing of PRCS paramedics on a humanitarian assistance mission, despite their use of the Red Crescent emblem, which is protected by international humanitarian law"²⁰¹.

198. See teit thread here: <https://x.com/itranslate123/status/1729111762237096275>

199. Israeli Violations Tracker (May 7, 2024). *American Friends Service Committee*. Available at: <https://afsc.org/israeli-violations>. Accessed September 13, 2024.

200. Hind Rajab: Were Israeli troops around where the six-year-old was killed? (February 26, 2024). *Al Jazeera*. Available at: <https://www.aljazeera.com/news/2024/2/26/hind-rajab-were-israeli-troops-in-the-area-where-6-year-old-was-killed>. Accessed September 13, 2024. Photograph from Euro-Med Human Rights Monitor (11 February 2024) with image of M830A1 fragment found on site (twit link with photograph). Accessed September 13, 2024.

201. Gaza: Initial findings show Israeli army purposefully kills a child, uses an American-made missile to target her rescue crew (February 12, 2024). *Euro-Med Human Rights Monitor*. Available at: <https://euromedmonitor.org/en/article/6152/Gaza:-Initial-findings-show-Israeli-army-purposefully-kills-a-child,-uses-an-American-made-missile-to-target-her-rescue-crew>. Accessed September 13, 2024.



RHEINMETALL RH-120

Rheinmetall (DE)

The *Rheinmetall Rh-120* is a smoothbore 120mm tank gun. Production began in 1974, with the gun's first version, known as L/44 for its 44mm caliber used in the German tank *Leopard 2* and soon produced under the US *M1A1 Abrams* license for other tanks. In 1990, the advanced 120mm L/55 gun was developed. It is noteworthy to mention the indiscriminate tank ammunition use in Gaza against civilians and civilian infrastructure, including health centers,²⁰² aid convoys,²⁰³ and shelters,²⁰⁴ since October 2023, which has been well documented.²⁰⁵ This has also happened in Lebanon. On December 7, a strike near the border killed a journalist and wounded five. They were part of an international group covering the fighting between

202. Al Jazeera (November 20, 2023). Israeli tanks besiege Gaza's Indonesian Hospital. *Al Jazeera*. Available at: <https://www.aljazeera.com/news/2023/11/20/israeli-tanks-surround-gazas-indonesian-hospital-after-killing-12-people>. Accessed September 12, 2024. See also, Tondo, L. (March 23, 2024). Medics trapped by Israeli gunfire at two Gaza hospitals, says Red Crescent. *The Guardian*. Available at: <https://www.theguardian.com/world/2024/mar/24/medics-trapped-by-israeli-gunfire-at-two-gaza-hospitals-says-red-crescent>. Accessed September 12, 2024. See also, Forensic Architecture (December 20, 2023). Destruction of Medical Infrastructure in Gaza. Available at: <https://forensic-architecture.org/investigation/destruction-of-medical-infrastructure-in-gaza>. Accessed September 12, 2024.

203. Médecins Sans Frontières (December 1, 2023). MSF convoy attacked in Gaza: all elements point to Israeli army responsibility. Available at: <https://www.msf.org/msf-convoy-attacked-gaza-all-elements-point-israeli-army-responsibility>. Accessed September 12, 2024; Médecins Sans Frontières (February 27, 2024). Attacks on humanitarian workers in Gaza make vital assistance nearly impossible. Available at: <https://www.msf.org/attacks-humanitarian-workers-gaza-make-vital-assistance-nearly-impossible>. Accessed September 12, 2024.

204. Al Jazeera (January 24, 2024). At least 9 killed in Israeli attack on UN shelter in southern Gaza. Available at: <https://www.aljazeera.com/news/2024/1/24/several-killed-in-israeli-attack-on-un-shelter-housing-800-in-southern-gaza>. Accessed September 12, 2024. See also, Médecins Sans Frontières (February 21, 2024). MSF strongly condemns Israeli attack on MSF shelter in Al-Mawasi which kills two and injures six. Available at: <https://www.msf.org/msf-strongly-condemns-deadly-israeli-attack-msf-shelter-gaza>. Accessed September 12, 2024. See also, Médecins Sans Frontières (February 9, 2024). Gaza: MSF condemns strike on shelter that killed staff member's five-year-old daughter. Available at: <https://www.msf.org/gaza-msf-condemns-strike-shelter-killed-staff-members-five-year-old-daughter>. Accessed September 12, 2024.

205. Forensic Architecture (2023), *op. cit.*

Hezbollah and the IDF; they were wearing clear identification.²⁰⁶ They were killed by tank shells, as reported by the United Nations Interim Force in Lebanon, which concluded this represented a violation of international law.²⁰⁷

ARMORED LAND VEHICLES



NAMER 1500 & EITAN APC

Oshkosh Defense (EEUU)

Two last-generation armored personal carriers (APC). The *Namer 1.500* is a light armored fighting vehicle designed for carrying infantry. It is equipped with a 12.7mm heavy machine gun. It uses 30mm *Stretch MK44* chain guns exported by **Northrop Grumman**. It can reach 60km/h and carry 12 passengers (three crew members and nine soldiers).²⁰⁸ Additional features were integrated based on the Israeli military experiences after the 2014 Gaza War.²⁰⁹ The *Eitan APC* is also a last-generation light armored fighting vehicle that can be equipped with heavy machine guns, automatic firearms and *ATGMs*. The *Eitan* is lighter than the *Namer* and can reach speeds of 90km/h while carrying the same number of passengers as the *Namer*. Israel is using the *Eitan* in Gaza, putting it in service months before it was 100% operational. An image

206. Abdul-Ahad, G. (October 13, 2023). Shelling on south Lebanon border kills one journalist and injures six. *The Guardian*. Available at: <https://www.theguardian.com/world/2023/oct/13/shelling-on-south-lebanon-border-kills-one-journalist-and-injures-six>. Accessed September 12, 2024. See also, Graham-Harrison, E. (December 7, 2023). Reuters journalist Issam Abdallah 'killed by Israeli tank shell'. *The Guardian*. Available at: <https://www.theguardian.com/world/2023/dec/07/journalist-issam-abdallah-killed-by-israeli-tank-firing-in-quick-succession>. Accessed September 12, 2024.

207. *The Guardian* (March 13, 2024). Israel broke international law with tank shelling that killed journalist, UN finds. *The Guardian*. Available at: <https://www.theguardian.com/world/2024/mar/13/israel-broke-international-law-journalist-killed>. Accessed September 12, 2024.

208. Figueredo, E. (n.d.). El Namer: el blindado en que confía Israel para entrar en Gaza. *La Vanguardia*. Available at: <https://www.lavanguardia.com/internacional/20231017/9304111/namer-vehiculo-blindado-transporte-tropas-israel-gaza.html>. Accessed September 12, 2024.

209. Manuel, R. (June 28, 2023). *The Defense Post*, *op. cit.*

published by the FDI shows the distinguished armored vehicle *Eitan* taking part in operations in Gaza on November 5. An IDF spokesperson confirmed they are involved in Gaza²¹⁰ since October 7.



FMTV A2 MEDIUM TACTICAL VEHICLE & ARMORED JOINT LIGHT TACTICAL VEHICLES (AJLTV)

Oshkosh Defense (US)

The FMTV A2 is a vehicle used to move troops and supplies, recover vehicles and weapon systems, and haul equipment wherever the mission requires. This family of vehicles boasts 12 truck variants, 4 chassis, and 3 trailer options that offer increased troop protection, additional carrying payload, and better ride quality and mobility. The FMTV A2 retains compatibility with fielded FMTV trailers and a spectrum of kits and weapons systems. The JLTV, known and marketed under Oshkosh development as L-ATV (*Light Combat Tactical All-Terrain Vehicle*), is a light utility/combat multi-role vehicle. The base L-ATV does not have a standard armament, however, it can be fitted with a selection of weapons, including light, medium, and heavy machine guns, automatic grenade launchers, or anti-tank guided missiles (ATGMs), depending on user requirements.

210. Rommen, R. (November 12, 2023). Israel's new Eitan APC spotted in combat against Hamas in Gaza. The IDF prematurely rushed the high-tech armor into service. Business Insider. Available at: <https://www.businessinsider.com/israel-new-hi-tech-eitan-apc-spotted-in-gaza-battle-rushed-into-service-2023-11>. Accessed September 12, 2024.

It has been extensively used in Gaza to support logistics operations, as has been the case in the West Bank for decades. However, there are flagrant examples linked to possible war crimes, for instance, the December 7 Al-Shifa hospital attack. The Israeli military captured dozens of Palestinians in Gaza and moved them to Israel to interrogate them. They stripped them and publicly humiliated them for hours in what may constitute a violation of international humanitarian law.²¹¹ Although Israeli media stated that they were all Hamas members, an Israeli military spokesperson suggested that they arrested anyone they encountered.²¹² Some were moved in medium tactical vehicles (e.g. the Oshkosh FMTV).²¹³ Another recent example is from the end of August when Israel launched a macro military operation with incursions into various cities in the West Bank with hundreds of tactical vehicles, helicopters, and massive support from drones. The size of the operation was comparable to those from the Second Intifada 20 years before. Armed vehicles blocked entry and exit points, access to hospitals and other buildings, while bulldozers destroyed roads.^{214,215} After six days of operation, at least 27 Palestinians were dead and over 100 wounded.²¹⁶

211. Beaumont, P. (December 8, 2023). Footage shows IDF parading scores of Palestinian men around in underwear. The Guardian. Available at: <https://www.theguardian.com/world/2023/dec/08/footage-idf-israel-military-parading-palestinian-men-around-in-underwear>. Accessed September 12, 2024.

212. *Ibid.*

213. Video posted on X/Twitter on December 7 showing IDF vehicles with naked and blindfolded prisoners. Source: <https://x.com/ErezNeumark/status/1732848695400435943>.

214. Krauss, J. (August 29, 2024). What to know about Israel's large-scale military operation in the occupied West Bank. ABC News. Available at: <https://abcnews.go.com/International/wireStory/israels-large-scale-military-operation-occupied-west-bank-113250291>. Accessed September 12, 2024.

215. Duwaji, O. (August 30, 2024). Israel begins military operations in the West Bank. The World. Available at: <https://theworld.org/stories/2024/08/30/israel-begins-military-operations-in-the-west-bank>. Accessed September 12, 2024. See also, Fabian, E. (2 September 2024). In longest West Bank raid in 20 years, IDF aims to set stage for future, smaller ops. The Times of Israel. Available at: <https://www.timesofisrael.com/in-longest-west-bank-raid-in-20-years-idf-aims-to-set-stage-for-future-smaller-ops/>. Accessed September 12, 2024.

216. France 24 (3 September 2024). Israel presses West Bank raids that Palestinians say killed 27. France24.com. Available at: <https://www.france24.com/en/live-news/20240903-israel-presses-west-bank-raids-that-palestinians-say-killed-27>. Accessed September 12, 2024.

Table 2. Examples of weapons used in Israeli attacks on Gaza, the companies that produce them, the impacts they cause, and the banks that finance them

WEAPON CATEGORY	WEAPON NAME	MANUFACTURER	USE EXAMPLES (chronological order, main sources in parenthesis)	SPANISH ARMED BANKING FINANCING
Aircraft	AH-64 Apache	Boeing (US), AgustaWestland International Limited (Leonardo's UK subsidiary)	<ul style="list-style-type: none"> - SuperNova Festival, October 7, 2023: attack on combatants and civilians, unknown number of civilian casualties caused by Apache (Zeyton, Y.). - Rafah, June 13, 2024: attacks on occupied residential buildings ; dozens of dead (Who Profits Research Center). - Gaza City, June 25, 2024: attack on Ismail Haniyeh and his family in the Shati refugee camp; at least 13 dead (La Razón). 	Santander: \$1.218B Boeing, \$198M Leonardo BBVA: \$933M Boeing, \$198M, Leonardo; Caixabank: \$110M Boeing
	F-15EX Eagle II	Boeing (US), BAE Systems (UK)	<ul style="list-style-type: none"> - Gaza and other regions: Israel has dozens of F-15 in operation for decades in Gaza, they can carry and launch JDAM missiles (Duggal, H. et. al., Tejedor, A.) - Hudaydah (Yemen), July 2, 2024: 20 F-15 and F-35 fighters strike the Hudaydah port; several dead and at least 80 wounded (Shoval, L.; Federman, J. & Wakin, M.). 	Santander: \$1.218B Boeing; BBVA: \$1.218B Boeing; Caixabank: \$110M Boeing
	F-35A Lightning-II F-35I version	Lockheed Martin (US), BAE Systems (UK), Leonardo (IT), Logistiek Centrum Woensdrecht (NED), Elbit Systems subsidiary)	<ul style="list-style-type: none"> - Gaza, since October 7: The 140 Squadron of F-35 have attacked hundreds of targets, including tunnels and Hamas hideouts in the Gaza Strip during the war; undetermined number of dead (Stone, J.; AOAV). - Hudaydah (Yemen), July 21, 2024 * (Shoval, L.; Federman, J. & Wakin, M.) 	Santander: \$198M Leonardo; BBVA: \$198M Leonardo
	F-16I 'Sufa'	Lockheed Martin (US), Rafael (ISR), Elbit Systems (ISR)	<ul style="list-style-type: none"> - Jenin, October 22, 2023: F-16 bombing on the refugee camp which destroyed a mosque and a building: 2 dead (Tabikha, K.). 	--
Missiles / guided bombs	JDAM (Joint Direct Attack Munition)	Boeing (US)	<ul style="list-style-type: none"> - Jabalia, May 2023: strike (with JDAM kits and GBU-39 bombs) on a residential building; 10 civilians dead and at least 20 wounded (Graham-Harrison, E., Ganguly, M. & Morresi, E.; OHCHR) - Wasi, October 10 and 22, 2023: bombings in an area where the military had ordered the relocation of displaced civilians.; 43 civilians dead, 19 were children (Amnesty International, December 5, 2023; Amnesty International USA). - Jabalia, October 31, 2023: strike on the refugee camp, leveling 2,500m², destroying/damaging 20 buildings; 56 dead, incl. 23 children (Graham-Harrison, E., Ganguly, M. & Morresi, E.; OHCHR) - Khan Younis, July 10, 2024: striking on a school; 27 people dead and at least 53 wounded (Mezzofiore, G., Schmitz, A. & Goodwin, A.) - Al-Mawasi, July 13, 2024: attack "targeting" Hamas' Second-in-command in the "safe zone"; 92 dead and 300 wounded (France 24) - Gaza City, August 10, 2023: attack with a guided bomb on the Al-Tabieen school; 100 dead (Mayadeen, A.) - Lebanon, March 27, 2024: attack on the Habbarieh emergency center; 7 civilian volunteers dead (HRW, May 7, 2024) 	Santander: \$1.218B Boeing; BBVA: \$933M Boeing; Caixabank: \$110M Boeing
	GBU-31 (Mk-84), GBU-32 (Mk-83), GBU-38 (Mk-82)	General Dynamics (US), Boeing (US)	<ul style="list-style-type: none"> - Deir al Balah, May 12, 2023: a fighter attacked the Al Matayna neighborhood, damaging 23 residential buildings and a medical center. (OHCHR). - Jabalia, October 9, 2023: strike on the refugee camp, 2 large buildings destroyed; 42 dead, incl. 14 children and women (OHCHR) - Wasi, October 10 and 22, 2023 * (Amnesty International). - Jabalia, October 31, 2023 * (Graham-Harrison, E., Ganguly, M. & Morresi, E.; OHCHR) - Gaza City, October 25, 2023: strike on the Ta3j Tower; 105 dead, including 32 women and 47 children (OHCHR) - Gaza City, December 2, 2023: a bombing destroys 15 buildings in the Ash Shujai'yeh neighborhood; 60 dead (OHCHR) - Al-Mawasi, July 13, 2024 * (France 24) 	Santander: \$1.218B Boeing; BBVA: \$933M Boeing, \$345M General Dynamics; Caixabank: \$110M Boeing

WEAPON CATEGORY	WEAPON NAME	MANUFACTURER	USE EXAMPLES (chronological order, main sources in parenthesis)	SPANISH ARMED BANKING FINANCING
Missiles / guided bombs (cont.)	GBU-39 Small Diameter Bomb(SBD)	Boeing (US)	<ul style="list-style-type: none"> - Jabalia, May 2023 * (Graham-Harrison, E., Ganguly, M. & Morresi, E.; OHCHR) - Al Bureij Camp, November 2, 2023: strike on a residential area, 12 buildings destroyed; 15 dead, incl. 9 children (OHCHR) - Al Buraq, November 10, 2023: strike on a school sheltering displaced people; 34 dead (OHCHR) - Rafah, December/January 2024: 4 strikes on Rafah without clear military targets; 95 dead, incl. 42 children (Amnesty International USA). - Rafah, May 26, 2024: strike on a camp sheltering displaced civilians; 45 dead and 249 wounded (Stein, R., Triebert, C. & Willi H.) - Khan Younis, July 9-10, 2024 * (Mezzofiore, G., Schmitz, A. & Goodwin, A.) 	Santander: \$1.218B Boeing; BBVA: \$933M Boeing; Caixabank: \$110M Boeing
	AGM-114R9X Hellfire missiles	Lockheed Martin (US), Boeing (US), Northrop Grumman (US)	<ul style="list-style-type: none"> - Al-Shifa Hospital, November 9-10, 2024: strike in an area with thousands of refugees (medics, patients and displaced people), at least 13 dead and several wounded. (Al Jazeera, November 10, 2023 and Ammas Hussain, G.) 	Santander: \$1.218B Boeing; BBVA: \$933M Boeing; Caixabank: \$110M Boeing
Ships	76 mm Oto Melara 76/62	Leonardo (IT)	<ul style="list-style-type: none"> - Gaza, since October 2023: use of the Sa'ar 6 corvette to attack combat equipment, facilities and observation posts, etc. (Global Defense News). 	Santander: \$198M Leonardo; BBVA: \$198M Leonardo
Artillery	M107 155mm	General Dynamics (US)	<ul style="list-style-type: none"> - Gaza Strip since September 2005: 155mm artillery attacks in response to Hamas attacks without differentiating between military and civilian targets (HRW). - Gaza Strip, April 2009: 22-day 'Cast Lead operation', fire against the UNRWA local office; a UN worker and two civilians were wounded (ONU, Amnesty International). 	BBVA \$345M General Dynamics
	M109-52 howitzer	BAE Systems Inc (US subsidiary of BAE, UK) / Rheinmetall (Ger)	<ul style="list-style-type: none"> - Gaza, October 9-11, 2023: strike on the Port of Gaza and nearby hotels. M825 and M825A1 shells (labeled D528, white phosphorus) are found (AI, October 13, 2023). - Lebanon (Dhayra, al-Mari y Aita al-Chaab), October 10-16, 2023: Four examples of white phosphorus use by the IDF, firing of tens of thousands of 155mm shells; 9 wounded (AI, October 31, 2023). 	Santander: \$1.18M Rheinmetall; BBVA: \$16.89M Rheinmetall; EDM Group: \$8.82M Rheinmetall; Ibercaja: \$2.53M Rheinmetall; Banco Caminos: \$0.25M Rheinmetall; Dux Inversores: \$0.17M; Renta 4 banco: \$0.56M; GVC Gaesco Group: \$0.41M
	M795 155mm	General Dynamics (US)	<ul style="list-style-type: none"> - Israel, 2024: A M795 missile where the former US Ambassador to the UN, Nikki Haley, wrote: "Finish them!" (Pérez Gallardo, M., May 29, 2024). - An Oxfam report warns of massively using these shells, based on the Israeli use in previous conflicts. (Oxfam, October 2023). 	BBVA \$345M General Dynamics
	M830A1 120mm	Day & Zimmerman (US)	<ul style="list-style-type: none"> - Tel al-Hawa, January 29, 2024: Israeli tanks fire M830A1 shells, killed six-year-old Hind Rajab, her six family members and the PRCS doctors trying to rescue her. (AFSC, May 7, 2024; Al Jazeera, February 26, 2024; Euro-Med Rights, February 11, 2024). 	Santander: \$58.33M
Artillery (cont.)	Rheinmetall Rh-120	Rheinmetall (DE)	<ul style="list-style-type: none"> - Gaza, since October 2023: indiscriminate tank ammunition use against Palestinian civilians and civilian infrastructure, including health centers, aid convoys, and shelter (Al Jazeera, November 20, 2023 and January 24, 2024; Forensic Architecture, December 20, 2023; MSF, December 1, 2023, February 9, 2024, February 21 and 27, 2024 ; Tondo, L., March 23 2024). - Lebanon-Palestine border, December 7, 2023: attack with tank ammunition in an area with clearly identified journalists; 1 dead and 5 wounded. (Abdul-Ahad, G., October 13, 2023; and Graham-Harrison, E., December 7, 2023). 	Santander: \$1.18M Rheinmetall; BBVA: \$16.89M Rheinmetall; EDM Group: \$8.82M Rheinmetall; Ibercaja: \$2.53M Rheinmetall; Banco Caminos: \$0.25M Rheinmetall; Dux Inversores: \$0.17M Rheinmetall; Renta 4 banco: \$0.56M Rheinmetall; GVC Gaesco Group: \$0.41M

WEAPON CATEGORY	WEAPON NAME	MANUFACTURER	USE EXAMPLES (chronological order, main sources in parenthesis)	SPANISH ARMED BANKING FINANCING
Armored land vehicles	<u>Namer 1500 & Eitan APC</u>	Oshkosh Defense (US)	<p>- Al-Shifa Hospital, December 7, 2024: after the attack on the hospital, the Israeli military captured and transferred in Oshkosh medium tactical vehicles (e.g. FMTV) dozens of Palestinians, most were civilians. They stripped them and publicly humiliated them for hours in what may constitute a violation of international humanitarian law (Beaumont, P., December 8, 2023).</p> <p>- West Bank, August 2024: Israel launched a macro military operation with incursions into various cities in the West Bank with hundreds of tactical vehicles, helicopters, and massive support from drones. Armed vehicles blocked entry and exit points, access to hospitals and other buildings, while bulldozers destroyed roads. After a week of operation, at least 27 Palestinians were dead and over 100 wounded (Krauss. J. (August 29, 2024).</p>	Santander: \$12.01M Oshkosh Defense; BBVA: \$0.42M Oshkosh Defense



4. WHO FINANCES THE COMPANIES PRODUCING THE ARMS THAT THE ISRAELI MILITARY USES IN GAZA? THE ROLE OF ARMED BANKING IN THE GENOCIDE

In this last chapter, we present part of the information gathered on the financing channeled by financial institutions to companies shipping arms to Israel, emphasizing the role played by actors based in Spain and their relationship with the arms financed in Gaza.

As previously mentioned, we have partnered with Profundo and PAX to collect data on 14 arms companies: **BAE Systems, Boeing, Day & Zimmerman, Elbit Systems, General Dynamics, Israel Aerospace Industries, Leonardo, Lockheed Martin, Nammo, Navantia, Oshkosh Corp, Rafael Advanced Defense Systems, Rheinmetall, Rolls-Royce and RTX Corp**, formerly **Raytheon Technologies**. To compose this chapter, we have considered **3,606 financial opera-**

tions executed between 2011 and 2024. These operations can be divided into four categories: **revolving loans, corporate loans, bond underwriting, and share purchases**. It should be noted that this period is so extensive because some loans are still active or expired not that long ago or even this year. However, over 85% of operations have been executed these last four years, as portrayed in the corresponding tables.

As we usually do in publications from this research line, we have produced a ranking with the largest institutional and private financiers and investors of armed banking jointly responsible for the Gaza genocide. Among financial institutions that appear in the ranking, we find the usual suspects: large investment and pension fund managers, insurance companies and banks, mainly from the EU and the US. Regarding Spanish financial institutions, the companies that stand out are once again the large Spanish banks: **Banco Santander and Banco Bilbao Vizcaya Argentina (BBVA)**.

4.1 THE SPANISH ARMED BANKING AND ITS TIES WITH THE GENOCIDE

The data we have collected for this report shows how **12 Spanish financial institutions** have granted loans or have invested part of their funds in seven companies producing arms shipped to Israel, which could potentially be involved in perpetrating the current genocide in Palestine. These seven companies are **Boeing, Day & Zimmerman, General Dynamics** and **Oshkosh Corp.**, from the US, **Leonardo** from Italy, and **Rheinmetall** and **MTU Friedrichshafen** from Germany. This last one is owned by the British company **Rolls-Royce**, which was previously acquired by **BMW**.

To begin the analysis, it is convenient to ask ourselves how armed banking offers financial support to these companies. As we can observe in **Table 3**, the distribution by financing category is unequal. The volume of these operations totals over **\$4 billion**. **BBVA, Banco Santander** and **Caixabank** have provided over

Table 3. Distribution by financing and investment categories of Spanish armed banking in arms companies exporting to Israel

Financing category	Import
Loans	\$3,417,308,029,69
Corporate loans	\$770,580,523,42
Banco Santander	\$614,127,274,06
La Caixa Group	\$110,675,000,00
Banco Bilbao Vizcaya Argentaria (BBVA)	\$45,778,249,36
Revolving loans	\$2,646,727,506,27
Banco Santander	\$1,544,540,019,16
Banco Bilbao Vizcaya Argentaria (BBVA)	\$1,102,187,487,11
Bond underwriting	\$660,188,000,00
Banco Bilbao Vizcaya Argentaria (BBVA)	\$392,438,000,00
Banco Santander	\$267,750,000,00
Shares	\$111,234,615,65
Bestinver	\$65,980,000,00
Banco Bilbao Vizcaya Argentaria (BBVA)	\$17,619,342,40
Banco Santander	\$15,605,970,25
EDM Group	\$8,825,467,93
Ibercaja Group	\$2,533,778,17
Banco Caminos	\$254,968,93
Dux Inversores	\$177,369,69
Abaco Capital	\$110,000,00
Renta 4 Banco	\$56,200,38
GVC Gaesco Group	\$41,517,90
Banca March	\$30,000,00
Total	\$4,188,730,645,34

Source: Original table based on Profundo data from Bloomberg and Refinitiv Eikon financial databases.

\$3.4 billion in **revolving loans** and **corporate loans granted to these companies**. They have also invested over \$660 million in **bond underwriting** operations for these arms companies. The commitment to acquiring shares in these companies is also noticeable. Eleven of the twelve institutions listed in the ranking have purchased shares from one of the companies reported, mainly from **Rolls-Royce** or **Rheinmetall**. This is why we highlight commercial banks such as **Ibercaja Group** or **Banca March** and investment banks such as **EDM Group** or **Renta 4 Banco**. In terms of equity investments, the investment fund **Bestinver** leads the ranking with around \$66 million invested in **Rolls-Royce**, surpassing **BBVA's** 17.6 million and **Banco Santander's** 15.6 million.

Below, we analyze in further detail the role of the main financial institutions. **Table 4** showcases the Spanish armed banking ranking we have drafted with available information. As in other reports we have presented for over a decade,²¹⁷ two names are at the top of the ranking, **Banco Santander** and **BBVA**, the first and third Spanish banks in volume of assets. Between the two, they account for over 95% of the total volume of documented financing and investments for arms companies exporting to Israel in the analyzed period, reaching nearly \$4 billion. In 2023, **BBVA** and **Banco Santander** achieved record annual profits, and BBVA returned pre-

217. For example, in the latest Banca Armada report of the Centre Delàs (2023), BBVA and Santander lead the Spanish ranking of armed banking, including the financing of companies that contribute to the militarization of bodies and wars. See: Centre Delàs (2023). Report 59: Financing militarization and border warfare in the Mediterranean. Available at: <https://centredelas.org/publicacions/quienfinancialaguerradefronteras/?lang=en>.

Table 4. Ranking of Spanish armed banking linked to the genocide

	Financial institution	Import
1	Banco Santander	\$2,442,023,263,47
2	Banco Bilbao Vizcaya Argentaria (BBVA)	\$1,558,023,078,87
3	La Caixa Group	\$110,675,000,00
4	Bestinver	\$65,980,000,00
5	EDM Group	\$8,825,467,93
6	Ibercaja Group	\$2,533,778,17
7	Banco Caminos	\$254,968,93
8	Dux Inversores	\$177,369,69
9	Abaco Capital	\$110,000,00
10	Renta 4 Banco	\$56,200,38
11	GVC Gaesco Group	\$41,517,90
12	Banca March	\$30,000,00
	Spanish armed banking total	\$4,188,730,645,34

Source: Original table based on Profundo data from Bloomberg and Refinitiv Eikon financial databases.

cisely \$4 billion to its shareholders.²¹⁸ It is a huge figure allocated to arms companies that are profiting, among others, from the Gaza genocide.

These figures place them at the top of the national ranking and among the top 100 companies worldwide that have provided the most financial support to the arms companies selected for this report. Specifically, **Banco Santander** ranks 36 and **BBVA** 41 in the international ranking (see **Table 9**) we analyze in the next section. Before we examine the rest, we will take a closer look at the roles of these two banks.

BANCO SANTANDER

Table 5 details the financial operations and investments executed by Banco Santander during the studied period, categorized by company and type. A more detailed analysis reveals the close collaboration the bank has established with two companies. Firstly, the aerospace multinational **Boeing** (\$1.218 billion), with which it maintains a significant financial connection, as revealed by successive reports from the *Don't Bank on the Bomb* project.²¹⁹ In this case, the amount has been channeled mostly through revolving loans to facilitate the company's liquidity, with which **Banco Santander** has partnered since at least 2013. Furthermore, we point to the bond underwriting valued at 267 millions in 2021 from **Rolls-Royce** (\$953 million). For years, Rolls-Royce has been denounced for manufacturing engines and components for military aircraft and has also been granted revolving loans and negotiating corporate loans with this bank since 2011. The US company **Day & Zimmerman** appears in second place for contracting a revolving loan of \$58 million in 2021. This company provides integrated security services such as mobile, installation and intelligence security for the US Government. Additionally, it manufactures various types of ammunition²²⁰ for the US and its allies, such as the **M830A1** 120 shells. In November 2023, these shells were fired by Israeli tanks at the family of six-year-old Hind Rajab and the medics aiding them, in Gaza's Tel al-Hawa neighborhood. **Banco Santander** also has revolving loans valued at \$198 million to provide liquidity to the Italian company **Leonardo**, a relevant member of the European military complex.

218. Gutiérrez, H. & Sobrino, R. (January 30, 2024). BBVA pulveriza su récord anual de beneficios en 2023: ganó 8.019 millones, un 26% más. Cinco Días. Available at: <https://cincodias.elpais.com/companias/2024-01-30/bbva-pulveriza-su-record-anual-de-beneficios-en-2023-gano-8019-millones-un-26-mas.html>. Accessed September 13, 2024.

219. To learn more visit the official Don't Bank on the Bomb website: <https://www.dontbankonthebomb.com/>. Accessed September 13, 2024.

220. Section of the official website of Day and Zimmerman where all the categories of ammunition they develop and manufacture are described; direct, indirect, warhead and melee. Available at: <https://www.dayzim.com/services-and-products/munitions>. Accessed September 13, 2024.

Table 5. Banco Santander financing to companies exporting arms to Israel which are being used in Gaza

Financial institution	Import
Santander:	\$2,442,023,263
Boeing	\$1,218,779,010
Bond underwriting	\$267,750,000
2021	\$267,750,000
Revolving loans	\$951,029,010
2013	\$697,251
2015	\$57,406,964
2019	\$199,999,938
2021	\$214,999,935
2022	\$357,887,924
2023	\$120,037,000
Day & Zimmerman	\$58,333,333
Revolving loans	\$58,333,333
2021	\$58,333,333
Leonardo	\$198,686,842
Revolving loans	\$198,686,842
2018	\$111,150,000
2021	\$87,536,842
Oshkosh Corp	\$12,014,561
Shares (2024)	\$12,014,561
Rheinmetall	\$1,181,409
Shares (2023)	\$1,181,409
Rolls-Royce	\$953,028,107
Corporate loans	\$614,127,274
2020	\$224,910,026
2021	\$343,438,999
2022	\$45,778,249
Shares (2023)	\$2,410,000
Revolving loans	\$336,490,833
2011	\$144,675,000
2018	\$175,187,500
2022	\$16,628,333

Source: Original table based on Profundo data from Bloomberg and Refinitiv Eikon financial databases.

BBVA

BBVA is the other usual representative of Spanish armed banking. **Table 6** shows how it has maintained open revolving loans with **Boeing** over the last decade while raising the available amount in recent years, in total, \$933 million. It was also involved in the company's bond underwriting in 2021 (\$135 million). **BBVA's** commitment to **General Dynamics** is remarkable. the underwriting of convertible bonds from the 2021

Table 6. BBVA financing to companies exporting arms to Israel which are being used in Gaza

Financial institution	Import
BBVA	\$1,558,023,079
Boeing	\$933,413,588
Bond underwriting	\$257,438,000
2021	\$257,438,000
Revolving loans	\$675,975,588
2013	\$697,251
2015	\$57,406,964
2019	\$233,333,927
2021	\$116,666,924
2022	\$267,870,523
General Dynamics	\$345,896,723
Bond underwriting	\$135,000,000
2021	\$135,000,000
Revolving loans	\$210,896,723
2022	\$210,896,723
Leonardo	\$198,686,842
Revolving loans	\$198,686,842
2018	\$111,150,000
2021	\$87,536,842
Oshkosh Corp	\$421,395
Shares (2024)	\$421,395
Rheinmetall	\$16,897,947
Shares (2023)	\$16,897,947
Rolls-Royce	\$62,706,583
Corporate loans	\$45,778,249
Shares (2023)	\$300,000
Revolving loans (2022)	\$16,628,333

Source: Original table based on Profundo data from Bloomberg and Refinitiv Eikon financial databases.

issuance and the opening of a revolving loan, **BBVA** engages with one of the most influential companies in the US military-industrial complex. **General Dynamics** offers security and defense solutions mainly to the US but also to its allies like Israel. It provides a range of military and technological equipment deployed in missions, as well as nuclear submarines, and building and maintenance of surface combat and auxiliary warships. **General Dynamics** is also a worldwide leader in the design, development, production, support and maintenance of military land equipment with continuous track or wheels, such as the well-known *Abrams* tanks. The same happens with the Italian

arms company **Leonardo**. Since 2018, **BBVA** has provided liquidity to the company through revolving loans (\$198 million).

BBVA AND SANTANDER: OSHKOSH CORP, RHEINMETALL AND ROLLS-ROYCE SHAREHOLDERS

After October 7, both **BBVA** and **Santander** became shareholders of **Oshkosh Corp**, a US corporation owned by **Oshkosh Defense**,²²¹ which produces heavy electric vehicles and intelligent technological solutions. Through its defense division, it has recently manufactured the *Eitan APC* vehicle. Israel is using the *Eitan* in Gaza, putting it in service months before it was 100% operational. An image published by the IDF shows the distinctive *Eitan* armored vehicle engaged in operations in Gaza on November 5.

The same has occurred in the case of **BBVA** and **Banco Santander** with **Rheinmetall**, one of the main German arms producers. Before the end of 2023, both banks became shareholders. Since October 2023, reports confirm the indiscriminate use of tank ammunition fired from the *Rheinmetall Rh-120* gun against Palestinians and critical civilian infrastructures in Gaza, including medical centers, aid convoys and civilian shelters. This gun has been produced since 1974 and used in *Leopard 2* and *M1A1 Abrams* tanks.

BBVA AND SANTANDER: FINANCING THE BOMBS DROPPED ON GAZA

In recent years, **BBVA** and **Santander** have financed two companies responsible for producing the guided bombs that keep striking Gaza: **Boeing** and **General Dynamics**. Numerous documented cases involve ammunition equipped with *JDAM* kits, which transform free fall *Mk-80* series bombs —whose casings are exclusively produced by **General Dynamics**— into guided bombs, implicating these companies in the massacres. *JDAM* kits and *GBU* bombs have been deployed in attacks, causing the death of hundreds of civilians, including women and children. One such strike on October 31, 2023, in Jabalia, leveled 2.500m² and resulted in the death of 56 people, including 23 children. The lethality of these strikes was also horrifying in Khan Younis, where, on July 10, 2024, 27 people were killed and at least 57 wounded. Similarly, in Al-Mawasi that same month, an attack supposedly targeting Hamas' second-in-command killed 92 people and wounded 300 in a designated safe zone.

The *GBU-39 SDB* produced by **Boeing** have also been repeatedly and indiscriminately used in attacks on ci-

221. Web corporativa de Oshkosh Defense. Available at: <https://oshkoshdefense.com/>. Accessed September 13, 2024.

Table 7. Financing of other Spanish banks to companies exporting arms to Israel which are being used in Gaza

3	La Caixa Group	\$110,675,000
	Boeing	\$110,675,000
	Corporate loans	\$110,675,000
4	Bestinver	\$65,980,000
	Rolls-Royce	\$65,980,000
	Shares (2023)	\$65,980,000
5	EDM Group	\$8,825,468
	Rheinmetall	\$8,825,468
	Shares (2024)	\$8,825,468
6	Ibercaja Group	\$2,533,778
	Rheinmetall	\$2,533,778
	Shares (2023)	\$2,533,778
7	Banco Caminos	\$254,969
	Rheinmetall	\$254,969
	Shares (2023)	\$254,969
8	Dux Inversores	\$177,370
	Rheinmetall	\$177,370
	Shares (2023)	\$177,370
9	Abaco Capital	\$110,000
	Rolls-Royce	\$110,000
	Shares (2023)	\$110,000
10	Renta 4 Banco	\$56,200
	Rheinmetall	\$56,200
	Shares (2024)	\$56,200
11	GVC Gaesco Group	\$41,518
	Rheinmetall	\$41,518
	Shares (2023)	\$41,518
12	Banca March	\$30,000
	Rolls-Royce	\$30,000
	Shares (2023)	\$30,000
	Spanish armed banking total	\$4,188,730,645

Source: Original table based on Profundo data from Bloomberg and Refinitiv Eikon financial databases.

vilians. On November 2, 2023, a strike on the Al Bureij refugee camp destroyed 12 buildings and caused 15 dead, including 9 children. On November 10, an attack on Al Buraq impacted a school hosting displaced people, leaving 34 dead. In Rafah, between December 2023 and January 2024, four strikes with no clear military objectives killed 95 people, including 42 children.

Another attack on May 26, 2024, caused 45 dead and 249 wounded. In Khan Younis, on July 9-10, 2024, a strike on the Al-Awda school used as a shelter left 27 dead and 53 wounded.

All these examples illustrate the centrality and connection of the companies manufacturing these weapons, the countries authorizing their sale, and the financial institutions fueling the arms production and sales cycle. Together, they enable Israel's military offensive on Gaza, currently under investigation by the International Criminal Court.

CAIXABANK AND OTHER SPANISH FINANCIAL INSTITUTIONS

As we can observe in **Table 7**, 10 more well-known Spanish financial institutions are listed in the ranking, for instance, **CaixaBank**, **Ibercaja** and **Banca March**. The largest bank on this list is **CaixaBank**, which granted a \$110 million corporate loan to **Boeing**. Fourth, we find **Bestinver**, an independent investment and pension fund manager that relies on the support of **Acciona**²²², which became part of **Rolls-Royce's** shareholders in 2023. Two positions below is **Grupo Ibercaja**, which purchased **Rheinmetall** shares in 2023, just as **Banco Caminos**, **Dux Inversores** and **Renta 4 Banco**. Lastly, there is **Banca March**, which, as **Bestinver**, also purchased **Rolls-Royce** shares in 2023.

4.2 INTERNATIONAL FINANCIAL INSTITUTIONS AND THEIR TIES WITH THE GENOCIDE

Table 8 gathers available data on the **25 financial institutions** that have channeled more financing and investment toward **10 arms companies** that are being deployed in the Gaza genocide. Among the first 5, we find some of the most recognizable institutional investors and financial institutions, such as the investment fund manager **Vanguard**, which leads the list, followed by the financial services and bank holding company **State Street**, and the investment funds managers **Capital Group** and **BlackRock**. The **Bank of America** closes the top 5. The first 14 positions are occupied by large US firms. The first non-US institution is the French Bank **BNP Paribas** in 15th, with almost \$7 billion. In 18th and 19th, other noticeable European banks and institutions are listed, such as **Crédit Agricole** (\$6.016 billion), **Barclays** (\$4.950 billion), and **Deutsche Bank** (\$4.801 billion) in 21st. The Swiss bank **UBS** (\$4.111 billion) closes the top 25.

222. Bestinver web page. Available at: <https://www.bestinver.es/sobre-nosotros/bestinver/>. Accessed September 13, 2024.

Table 8. First 25 organizations from the Top 100 international armed banking jointly responsible for the Gaza genocide

Rank	Financial institution	Import
1	Vanguard	\$41,107,646,437
2	State Street	\$38,620,307,584
3	Capital Group	\$31,603,984,570
4	BlackRock	\$30,570,643,275
5	Bank of America	\$18,909,583,617
6	JPMorgan Chase	\$15,744,237,065
7	Citigroup	\$15,009,912,186
8	Newport Group	\$10,835,310,000
9	Wells Fargo	\$10,436,991,381
10	Morgan Stanley	\$10,398,946,951
11	Wellington Management	\$9,776,252,797
12	Fidelity Investments	\$9,716,079,557
13	Geode Capital Holdings	\$8,344,872,687
14	Goldman Sachs	\$6,973,060,625
15	BNP Paribas	\$6,969,393,401
16	Mizuho Financial	\$6,637,902,956
17	Raven's Wing Asset Management	\$6,086,330,000
18	Crédit Agricole	\$6,016,536,516
19	Barclays	\$4,950,268,571
20	Mitsubishi UFJ Financial	\$4,876,039,087
21	Deutsche Bank	\$4,801,740,496
22	Franklin Resources	\$4,669,998,475
23	SMBC Group	\$4,663,006,120
24	Royal Bank of Canada	\$4,360,359,918
25	UBS	\$4,111,768,356

Source: Original table based on Profundo data from Bloomberg and Refinitiv Eikon financial databases.

The first Spanish bank, **Banco Santander**, ranks 36th with \$2.442 billion (see the *Top 100* institutions in **Table 9** in the Annex). At a certain distance, in 51st, is **BBVA**, which has been moving over \$1.5 billion to finance these arms-producing companies. **ING** also appears in the ranking. This bank has a significant market share in Spain and has granted loans to **Oshkosh** for over \$200 million in recent years. The last one was a revolving loan worth \$40 million. The presence of **Banco Mediolanum** in this list is also noteworthy. At the end of 2023, the bank acquired **Rheinmetall** shares worth \$8 million.



5. CONCLUSIONS AND RECOMMENDATIONS

The situation in Gaza, the world's largest open-air prison and now also the world's largest open-air mass grave, is not new. However, the dimension and brutality of the current massacre are hard to cope with. We must add to the ongoing offensive over 76 years of illegal military occupation, settler colonialism and an ethnic cleansing process accelerated in the last years, especially after October 7. Not surprisingly, a growing number of agents (official bodies, states and civil society) qualify the Israeli offensive on Gaza as genocide in which all kinds of war crimes are being committed.

A wide and diverse cast of actors is responsible for this situation to different degrees, directly or indirectly. First and foremost, there are the states that support, militarily collaborate and trade arms with Israel. Then come arms companies profiting from producing weapons and ammunition used by the Israeli military in Gaza, the West Bank and Golan Heights, and in oth-

er regions. Other key players are financial institutions that profit from providing essential financial mechanisms —bonds, shares, loans— to produce and market the arms used in Gaza.

The organizations financing the arms companies analyzed in this report, known as armed banking, play a crucial role in facilitating this genocide. They are likely aware of it as the situation unfolds in real time, with details reported minute by minute. However, despite widespread awareness of the consequences of the Israeli offensive over Gaza and the documentation of countless attacks on civilians and war crimes of various kinds, the role of financial institutions remains largely unknown. This investigation sheds light on some of the financial actors, particularly Spanish but also international, that are profiting the most from financing some of the companies producing weapons and ammunition used against the Palestinian people.

We want to highlight the following aspects of the connections between arms companies, financial institutions and the impact of deployed weapons:

- This report documents and exposes the direct link between the financing of 15 international arms companies, their production of weapons and the sale of some of these to Israel. We also outline how Israel uses these arms in Gaza, causing the death of thousands of civilians, including many children. The analyzed companies are recognizable organizations from the military-industrial complex, such as **Boeing**, **Lockheed Martin**, **Raytheon-RTX**, **General Dynamics**, **Oshkosh**, **Leonardo** and **Rheinmetall**.
- We have examined over 4,000 financial operations between 2011 and 2024, centering on the ones executed in the last five years, to pinpoint who is financing these arms companies. The analysis reveals the implication of the usual international suspects of armed banking: US banks and investment funds lead the *Top 100* ranking. In Spain, **Banco Santander** and **BBVA** are the main banks involved in the Gaza genocide, along with 10 other institutions. **Banco Santander** ranks 36th and **BBVA** 51st. Together, they finance over \$4 billion to arms companies exporting to Israel.
- Among exported weapons, we identify various guided bombs and missile imports from US companies such as **Boeing** and **General Systems**, specifically *JDAM* kits to guide *GBU-31*, *GBU-32*, *GBU-38* and *GBU-39 SDB* bombs. In parallel, we have exposed specific strikes in which these bombs have been used across the region, both in Gaza and the Lebanon border, causing hundreds of deaths and wounded people when hitting residential areas, schools, hospitals and other spots. These strikes are documented and reported by distinguished international organizations (like Amnesty International) and United Nations committees. Episodes such as the Jabalia massacre on October 9 and 31, in which strikes destroyed 22 buildings and killed at least 98 people besides dozens of wounded, are only a sample of the various similar attacks documented in reports from organizations such as OHCHR or Amnesty International. We must underline that **BBVA** has financed **Boeing** and **General Dynamics** with nearly **\$1.3 billion**, while **Boeing** has also received over **\$1.2 billion** from **Banco Santander** and **\$110 million** from **Caixabank**.
- The same has happened with other kinds of weapons and ammunition. In terms of aircraft, we have identified the export of several types of helicopters and fighters. For example, **Boeing's Apache** helicopters have been used in several attacks on the Gaza Strip, such as the June strikes on Rafah and Gaza City, where dozens of civilians died. Additionally, *F-35s* produced by **Lockheed Martin**, **BAE Systems** and **Leonardo**, among others, and *F-15s* manufactured by **Boeing** and **BAE Systems** were engaged in various operations in Gaza and other regions from October 7 (and from decades before), firing *JDAM* missiles and causing countless victims. An example is the Hudaydah bombing in Yemen, resulting in various deaths and at least 80 people wounded. **Leonardo** has received **\$198 million** from **BBVA** and **Banco Santander**.
- The report highlights several examples of artillery arms and ammunition deployed produced by US companies such as **General Dynamics** and **Day & Zimmerman**, the German **Rheinmetall** and the British **BAE Systems**. The *M109-52* howitzer, loaded with white phosphorus shells (**BAE Systems** and **Rheinmetall**), was used in the October strike on the Port of Gaza and nearby hotels, as well as in Lebanon. This attack is currently under scrutiny for war crimes and investigated by Amnesty International. Furthermore, **Rheinmetall Rh-120** tank ammunition has also been used indiscriminately against Palestinian civilians and civilian infrastructure, including health centers, aid convoys, and shelters, as well as on clearly identified journalists at the Lebanon border, resulting in at least one dead and several wounded. **Rheinmetall**, besides having a production plant in Spain, has received funding from Spanish financial institutions: **Santander** (\$1.8 million), **BBVA** (\$16.89 million), **EDM Group** (\$8.82 million), **Ibercaja** (\$2.53 million), **Banco Caminos** (\$0.25 million), **Dux Inversores** (\$0.17 million), **Renta 4 banco** (\$0.56 million) and **GVC Gaesco Group** (\$0.41 million).
- **General Dynamics** manufactures the *M107* 155mm self-propelled gun and *M795* shell. The first has been extensively used in artillery strikes on Gaza without differentiating between military or civilian objectives, for example, in 2005. In 2009, it was used to strike a local UNRWA office. Moreover, Oxfam condemns the risk of massively using the second kind of shells in the current offensive based on the consequences it has had on civilians in previous conflicts. We cannot forget how the former US Ambassador to the UN, Nikki Haley, wrote: "*Finish them!*" on an *M795* shell. In January, **Day & Zimmerman M830A1** shells were fired from Israeli tanks, killing a six-year-old girl, her family, and the medics aiding them. **General Dynamics** has been financed by **BBVA** with \$345,896,723 million and **Day & Zimmerman** by **Santander** with \$58 million.
- Lastly, we analyzed the financing and exporting of **Leonardo** and **Oshkosh Defense** vehicles. The first company produces ships and naval artillery, such as the *76mm Oto Melara 76/62* gun, which is installed on the *Sa'ar 6* corvette and capable of targeting various land objectives from the sea. As

already mentioned, **Leonardo** has been financed by **BBVA** and **Banco Santander**. On its part, **Oshkosh** has produced various armored vehicles used in the land invasion of Gaza, such as the *Namer 1500* or the brand-new *Eitan*. Another vehicle is the *JLTV* armored patrol, of which Israel ordered 100 units in 2023. This vehicle carried dozens of arrested civilians after the December Al-Shifa Hospital attack. During this transfer, potential violations of international humanitarian law were reported, as they were stripped and humiliated for hours. Again, **BBVA** and **Santander** are listed as financiers of this company, providing \$12.01 and \$0.42 million respectively.

At this point, we briefly review the most relevant aspects of armed banking:

- The support of **Banco Santander**, **BBVA**, **CaixaBank**, **Ibercaja**, **Banco Caminos** and **Banca March**, together with other Spanish and international financial institutions, has happened before, during and after October 7. It involves thousands of financial operations through revolving loans, corporate loans, bond underwriting and share purchases to arms companies. This support constitutes a necessary contribution to perpetuating the situation of violence, violation of human rights and genocide in Gaza.
- Globally, large institutional investors, led by US and EU organizations, massively support the arms industry, proving once again that financial insti-

tutions are a main pillar of the military-economic cycle that perpetuates armed conflicts and human rights violations worldwide.

- Spanish armed banking, with **Santander** and **BBVA** at the forefront, has financed \$2.442 and \$1.5 billion, respectively, to arms companies supplying weapons to the Israeli military, thereby contributing to the violence and international humanitarian law violations in Gaza. These investments, also executed by other Spanish institutions such as **CaixaBank**, sustain the suffering and destruction in the region, making these banks jointly responsible for attacks against civilians.

Facing this situation, we can conclude that ethical finance is the only real alternative to armed banking, which is complicit in genocide. Ethical financing organizations reject investments in arms-producing companies and advocate for a model focused on reducing inequalities, promoting social justice, achieving effective equality, ensuring non-discrimination of vulnerable groups, fostering a culture of peace, and respecting human rights. All these values aim to build a future for humanity free from armed conflicts and genocides like the one currently happening in Gaza. The CSR policies financial institutions like **BBVA** and **Banco Santander** tout do not effectively prevent the harmful investments outlined in this report. While, in theory, these investments should be restricted by their own policies due to their direct link to human rights violations, war crimes and breaches of international humanitarian law, they continue to take place.

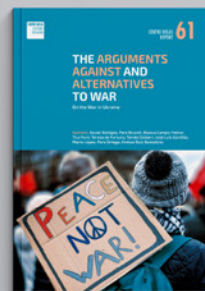
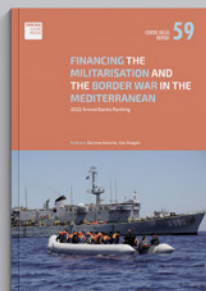
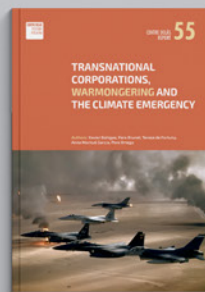
Table 9. Top 100 international armed banking jointly responsible for the Gaza genocide

Rank	Financial institution	Import	Rank	Financial institution	Import
1	Vanguard	\$41,107,646,437	43	Riyad Bank	\$1,972,464,808
2	State Street	\$38,620,307,584	44	Fisher Investments	\$1,891,370,000
3	Capital Group	\$31,603,984,570	45	HSBC	\$1,800,201,217
4	BlackRock	\$30,570,643,275	46	PNC Financial Services	\$1,768,244,715
5	Bank of America	\$18,909,583,617	47	European Investment Bank	\$1,676,509,500
6	JPMorgan Chase	\$15,744,237,065	48	Sanders Capital	\$1,675,040,000
7	Citigroup	\$15,009,912,186	49	First Abu Dhabi Bank	\$1,657,634,411
8	Newport Group	\$10,835,310,000	50	Toronto-Dominion Bank	\$1,598,743,921
9	Wells Fargo	\$10,436,991,381	51	Banco Bilbao Vizcaya Argentaria (BBVA)	\$1,558,023,079
10	Morgan Stanley	\$10,398,946,951	52	Aristotle Capital Management	\$1,500,384,160
11	Wellington Management	\$9,776,252,797	53	Bank of New York Mellon	\$1,398,769,958
12	Fidelity Investments	\$9,716,079,557	54	Standard Chartered	\$1,392,378,414
13	Geode Capital Holdings	\$8,344,872,687	55	Dimensional Fund Advisors	\$1,250,287,783
14	Goldman Sachs	\$6,973,060,625	56	DBS	\$1,240,770,876
15	BNP Paribas	\$6,969,393,401	57	Causeway Capital Holdings	\$1,229,186,732
16	Mizuho Financial	\$6,637,902,956	58	Affiliated Managers Group	\$1,219,075,037
17	Raven's Wing Asset Management	\$6,086,330,000	59	T. Rowe Price	\$1,006,368,207
18	Crédit Agricole	\$6,016,536,516	60	ANZ	\$997,149,984
19	Barclays	\$4,950,268,571	61	Silchester International Investors	\$993,350,000
20	Mitsubishi UFJ Financial	\$4,876,039,087	62	Equitable Holdings	\$929,031,489
21	Deutsche Bank	\$4,801,740,496	63	Skandinaviska Enskilda Banken	\$921,040,080
22	Franklin Resources	\$4,669,998,475	64	Intesa Sanpaolo	\$773,194,653
23	SMBC Group	\$4,663,006,120	65	Westpac	\$745,716,344
24	Royal Bank of Canada	\$4,360,359,918	66	Truist Financial	\$690,166,309
25	UBS	\$4,111,768,356	67	Bank of China	\$670,089,807
26	Northern Trust	\$4,012,173,941	68	Mawer Investment Management	\$648,023,418
27	Government Pension Fund Global (GFGG)	\$4,000,047,366	69	BayernLB	\$647,754,325
28	Charles Schwab	\$3,836,024,007	70	Two Sigma Investments	\$645,902,487
29	Groupe BPCE	\$3,300,517,064	71	Scotiabank	\$619,383,163
30	Invesco	\$3,222,409,958	72	BMO Financial Group	\$606,969,298
31	Dodge & Cox	\$3,200,670,000	73	Janus Henderson	\$592,304,505
32	Sun Life Financial	\$2,865,977,890	74	First Eagle Investment Management	\$590,460,000
33	TIAA	\$2,828,344,462	75	NatWest	\$558,357,477
34	Société Générale	\$2,724,159,023	76	Fifth Third Bancorp	\$545,438,122
35	Lloyds Banking Group	\$2,480,072,988	77	Orbis Group	\$524,340,000
36	Banco Santander	\$2,442,023,263	78	Crédit Mutuel	\$472,298,317
37	Commerzbank	\$2,432,465,228	79	Exor	\$464,080,000
38	Ameriprise Financial	\$2,371,280,426	80	M&G	\$450,733,065
39	US Bancorp	\$2,226,956,003	81	Fidelity International	\$448,625,477
40	Legal & General	\$2,008,144,454	82	Orix Corporation	\$441,125,779
41	UniCredit	\$1,983,315,399	83	Artisan Partners	\$436,310,000
42	Government Pension Investment Fund (GPIF)	\$1,982,240,629			

Rank	Financial institution	Import
84	State Bank of India	\$431,955,344
85	Banco BPM	\$350,150,227
86	Greenhaven Associates	\$309,291,899
87	Government Pension Fund Global (GPF)	\$304,562,875
88	Prudential Financial (US)	\$298,937,824
89	BPER Banca	\$295,923,457
90	Brandes Investment Partners	\$280,970,000
91	LSV Asset Management	\$243,404,291
92	Industrial and Commercial Bank of China	\$242,732,551
93	Abrams Capital Management	\$223,000,000
94	Cassa Depositi e Prestiti	\$221,250,000
95	ING Group	\$216,420,000
96	Commonwealth Bank of Australia	\$213,285,701
97	Deka Group	\$206,366,765
98	Aware Super	\$201,798,840
99	Power Corporation of Canada	\$192,475,554
100	Bessemer Group	\$188,448,886

Source: Original table based on Profundo data from Bloomberg and Refinitiv Eikon financial databases.

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