



Controversial Arms Trade and investments of Dutch Pension Funds

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Acronyms

ABM	Anti-Ballistic Missile
AC	Aircraft
AD	Air Defence
AEW&C	Airborne Early-Warning and Control
AFSV	Armoured Fire Support Vehicle
APC	Armoured Personnel Carrier
ASM	Air to Surface Missile
ASW	Anti-Submarine Warfare
ATT	Arms Trade Treaty
BVRAAM	Beyond-Visual Range Air-to-Air Missile
ESG	Environmental, Social, Governance
EO	Electro-Optical
EU	European Union
FGA	Fighter / Ground Attack
IFV	Infantry Fighting Vehicle
MRL	Multiple Rocket Launcher
SAM	Surface to Air Missile
SSM	Surface to Surface Missile
SRAAM	Short-Range Air-to-Air Missile
UAE	United Arab Emirates
UAV	Unmanned Aerial Vehicle
UN	United Nations

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Samenvatting

In Nederland zijn miljoenen mensen via hun werkgever aangesloten bij een pensioenfonds. Pensioenfondsen beleggen in bedrijven om rendement te behalen, en zullen daarbij dus afwegen of een investering winst of verlies oplevert. In deze tijd zou je ook mogen verwachten dat pensioenfondsen afwegen of investeringen maatschappelijk verantwoord zijn. Is er bijvoorbeeld sprake van kinderarbeid, milieuvervuiling of schending van mensenrechten?

We sparen allemaal voor ons pensioen, maar we hebben doorgaans maar weinig zicht op waar ons geld in wordt belegd. Daarom heeft de Eerlijke Pensioenwijzer onderzocht hoe de tien grootste bedrijfstakpensioenfondsen in Nederland omgaan met investeringen in wapenbedrijven, in het bijzonder als die bedrijven wapens leveren aan foute regimes: controversiële wapenhandel.

Landen

Uit dit onderzoek blijkt dat van de tien grootste pensioenfondsen van Nederland, negen fondsen investeren in veertien wapenproducenten die militaire goederen leveren aan landen waar mensenrechten ernstig worden geschonden. Deze landen voldoen aan een of meer van de volgende zes criteria:

1. Het land staat onder een wapenembargo
2. In het land worden mensenrechten ernstig geschonden
3. Het land is betrokken bij een ernstig conflict
4. Het land is zeer corrupt
5. Het land is zeer fragiel
6. Het land geeft te veel uit aan defensie

Uit een groot aantal onderzoeken komt naar voren dat een aantal landen daadwerkelijk betrokken is bij ernstige schendingen van mensenrechten of het internationaal oorlogsrecht. Het optreden van vooral Saoedi-Arabië en de Verenigde Arabische Emiraten (VAE) in Jemen laat zien wat de gevolgen zijn van de verkoop van wapens aan staten die weinig oog hebben voor mensenrechten en menselijke waardigheid. In Jemen zijn onder leiding van beide landen ziekenhuizen, scholen en woonwijken aangevallen. In totaal heeft de oorlog in Jemen intussen aan 100.000 mensen het leven gekost.

Bedrijven

Bij de verkoop van wapensystemen zouden producenten moeten nagaan of het land dat de systemen wil kopen betrokken is bij ernstige schendingen van mensenrechten of in conflict is. Maar uit ons onderzoek blijkt dat veertien van de grootste wapenbedrijven ter wereld de afgelopen vijf jaar wapensystemen leverden aan foute landen. Het gaat om de volgende bedrijven:

Table 1 Bedrijven die wapens leverden aan de landen in deze studie

Airbus	Raytheon
Boeing	Rheinmetall
General Electric	Rolls-Royce
Honeywell	Saab
Leonardo	Textron
Lockheed Martin	Thales
Northrop Grumman	United Technologies Corporation

Twaalf van de veertien bedrijven hebben wapens geleverd aan Saoedi-Arabië, dat betrokken is bij de oorlog in Jemen.

Wapenleveranciers

Van deze veertien bedrijven hebben de pensioenfondsen het meest geïnvesteerd in de wapenbedrijven General Electric, Rolls-Royce en United Technologies Corporation. Alle drie de bedrijven produceren vooral motoren voor militaire vliegtuigen of oorlogsschepen en zijn ook uitgebreid betrokken bij onderhoud van deze motoren. Onderstaande tabel geeft aan welke wapensystemen door deze bedrijven de afgelopen jaren zijn geleverd aan Saoedi-Arabië, de VAE en Egypte. Deze landen zijn betrokken bij de oorlog in Jemen.

Table 2 Leveringen aan Saoedi-Arabië, de VAE en Egypte vanaf 2015

Bedrijf	Land	Aantal en type	Systeem	Onderdeel van..
General Electric	Egypte	1 LM-2500	Motor	Fregatten
	Saoedi-Arabië	±6 CF-6/F-103	Motor	Transportvliegtuigen
	Saoedi-Arabië	± 20 F110	Motor	F-15 gevechtsvliegtuigen
Rolls Royce	VAE	24 MTU-595	Motor	Fregatten
	Egypte	4 MTU-595	Motor	Korvetten
	Egypte	4 MTU-4000	Motor	Fregatten
United Technologies Corporation	Egypte	±36 PW100	Motor	Transportvliegtuigen
	Saoedi-Arabië	8 PW100	Motor	Transportvliegtuigen
	Saoedi-Arabië	±55 PT6	Motor	Trainingsvliegtuigen
	VAE	±24 PT6	Motor	Archangel gevechtsvliegtuigen
	Saoedi-Arabië	±10 DB-110	Radar	F-15 gevechtsvliegtuigen

Er is een groot risico dat deze wapensystemen voor oorlogshandelingen, zoals die in Jemen, worden gebruikt. Alleen al om die reden zouden pensioenfondsen niet meer moeten investeren in deze wapenbedrijven, tenzij zij deze bedrijven ervan kunnen overtuigen te stoppen met de verkoop van wapensystemen aan landen die in oorlog zijn of mensenrechten ernstig schenden.

Pensioenfondsen

In dit onderzoek is nagegaan in hoeverre de tien grootste pensioenfondsen ook investeren in deze veertien wapenfabrikanten. Aan de pensioenfondsen is gevraagd of zij in gesprek gaan met de wapenleveranciers om hun verkoopbeleid te beïnvloeden.

PMT is het enige pensioenfonds dat niet investeert in een van de veertien wapenbedrijven. De overige negen pensioenfondsen investeren gezamenlijk ruim 1 miljard euro in een of meerdere wapenbedrijven. ABP, het fonds dat de pensioenen verzorgt voor ambtenaren, onderwijzers, politieagenten en militairen, investeert het grootste bedrag: 569 miljoen euro. Pensioenfonds Vervoer blijkt op basis van de overzichten die het publiceert te investeren negen van de veertien bedrijven, maar is niet transparant over de waarde van deze beleggingen. StiPP is niet transparant over beleggingen, uit eigen onderzoek weten we echter dat de vermogensbeheerder van dit fonds in een aantal van de onderzochte bedrijven investeert. Daarmee concluderen we dat het bedrag dat de negen fondsen gezamenlijk investeren in de veertien bedrijven hoger is dan 1 miljard euro.

Uit een eerder onderzoek van de Eerlijke Pensioenwijzer bleek dat alle onderzochte pensioenfondsen onvoldoende (publiek) beleid hebben rond investeringen in de wapensector. De Eerlijke Pensioenwijzer roept de pensioenfondsen dan ook op om beleid te maken en te publiceren. De fondsen zouden daarbij moeten nagaan aan welke landen wapenbedrijven wapens leveren, en daarbij de zes risico criteria zoals hierboven genoemd in acht nemen.

Als blijkt dat bedrijven wapens verkopen aan foute regimes, moeten fondsen zich ervoor inzetten het beleid en het gedrag van deze wapenbedrijven te beïnvloeden. Mochten wapenleveranciers hier geen gehoor aan geven dan kunnen pensioenfondsen er alsnog voor kiezen om hen uit te sluiten.

Table 3 Overzicht van de investeringen van tien Nederlandse pensioenfondsen in de veertien bedrijven

	Airbus	Boeing	General Electric	Honeywell	Leonardo	Lockheed Martin	Northrop Grumman	Raytheon	Rheinmetall	Rolls-Royce	Saab	Textron	Thales	UTC	Total (in million €)	Number of companies
ABP			374											195	569	2
bpfBouw			56.7											42.3	99.0	2
BPL Pensioen (landbouw)			39.1												39.1	1
Pensioenfonds Detailhandel	14.3	5.3	29.1	15.2	1.8	30.8		10.5		4.0	0.4	0.8	1.0	11.0	124.2	12
PFZW			65.4							12.0	1.4			76.8	155.6	4
Pensioenfonds Horeca en Catering			6.4						0.3		0.2				6.9	3
PME	2.3	4.4	37.1	42.9		23.6	14.2	16.2		11.5				49.8	202	9
PMT															0	0
StiPP															NDA	NDA
Pensioenfonds Vervoer	X	X	X	X		X		X		X		X		X	NDA	9
Total	16.6	9.7	607.8	58.1	1.8	54.4	14.2	26.8	0.3	27.5	2.0	0.8	1.0	374.9	1,195.8	14

Summary

In the Netherlands, millions of working people are saving for their pension through a pension fund. These funds invest the savings partly in companies and will when doing so take into account whether such an investment is likely to turn a profit or not. In this age, one should also expect that investors like pension funds are socially responsible. Are the companies the fund invests in, involved in for instance child labor, environmental degradation or violations of human rights?

We all save for our retirement, but usually have a limited overview over what our savings are invested in. This is why the Fair Pension Guide has investigated how the ten largest pension funds in the Netherlands deal with investments in arms companies, specifically if these companies supply weapon systems to regimes that are in armed conflict or violate human rights: controversial arms trade.ⁱ

States

This study shows that of the ten largest pension funds in the Netherlands, nine have investments in arms producers which supply weapon systems to states where human rights are violated. These countries meet one or more of the following criteria:

1. An arms embargo applies to the country
2. Severe human rights violations take place in the country
3. The country is involved in armed conflict
4. The country has high rates of corruption
5. The country is unstable (fragile)
6. The country overspends on defense

A significant number of studies indicate some countries are in fact involved in serious violations of human rights or international humanitarian law. The conduct of primarily Saudi Arabia and the United Arab Emirates (UAE) in Yemen show the possible consequences of arms sales to states with little attention for human rights and human dignity. Over the past years both states have been involved in the bombing of hospitals, schools and residential areas. Recent estimates say the war in Yemen has cost 100.000 lives.

Companies

When selling weapon systems, producers should do due diligence to verify whether the country that wants to purchase the systems is involved in serious violations of human rights or in armed conflict. However, our study shows that fourteen of the largest arms producers in the world have in the past five years supplied weapon systems to states involved in armed conflict and/ or human rights violations. These are the following companies:

Table 4 Companies that supplied weapon systems to 'states at risk'

Airbus	Raytheon
Boeing	Rheinmetall
General Electric	Rolls-Royce
Honeywell	Saab

ⁱ This report used the terms 'arms', 'weapons', 'weapon systems' and 'military goods' interchangeably. All military goods listed in this report are either weapons or (part of) military vehicles, aircraft or vessels.

Airbus	Raytheon
Leonardo	Textron
Lockheed Martin	Thales
Northrop Grumman	United Technologies Corporation

Twelve of the fourteen companies have supplied weapon systems to Saudi Arabia, which is involved in the war in Yemen.

Arms companies

Of the fourteen companies in this report, Dutch pension funds have invested most in the companies General Electric, Rolls-Royce and United Technologies Corporation. All three companies produce engines for fighter jets and warships and are also heavily involved in maintaining these systems once in operation. Table 5 shows which weapon systems these three companies have supplied to Saudi Arabia, the UAE and Egypt. All three countries are involved in the war in Yemen, the table shows the systems they received since the start of the war in Yemen in 2015.

Table 5 Arms supplies to Saudi Arabia, the UAE and Egypt since 2015

Company	Country	Number and type	System	Part of...
General Electric	Egypt	1 LM-2500	Engine	Frigates
	Saudi Arabia	±6 CF-6/F-103	Engine	Transport aircraft
	Saudi Arabia	± 20 F110	Engine	F-15 fighter jets
Rolls Royce	UAE	24 MTU-595	Engine	Frigates
	Egypt	4 MTU-595	Engine	Corvettes
	Egypt	4 MTU-4000	Engine	Frigates
United Technologies Corporation	Egypt	±36 PW100	Engine	Transport aircraft
	Saudi Arabia	8 PW100	Engine	Transport aircraft
	Saudi Arabia	±55 PT6	Engine	Transport aircraft
	UAE	±24 PT6	Engine	Archangel fighter jets
	Saudi Arabia	±10 DB-110	Radar	F-15 fighter jets

There is a very large risk that these weapons systems are or will be used in military actions, like those taking place in Yemen. For that reason alone, the pension funds should no longer invest in these companies, unless they succeed in convincing these companies to stop the sale of weapon systems to countries that severely violate human rights or are in armed conflict.

Pension funds

This study investigated whether the ten largest pension funds invest in the fourteen companies. We asked the pension funds to indicate whether they engage arms companies to positively change their policy on arms sales.

PMT is the only pension fund that has no investments in any of the fourteen arms companies. The other nine funds combined invest over 1 billion euro in one or more arms companies. ABP, the largest pension fund which services civil servants, teachers, policy officers and the military, invests the largest amount: 569 million euro. Pensioenfond Vervoer indicates it invests in nine of the fourteen companies, but is not transparent about the value of their investments. StiPP is not transparent about its investments, however based on our research we know that the asset manager of this fund has investments in some of the fourteen companies. We therefore conclude that total amount the nine funds invest in the fourteen companies is in fact higher than 1 billion euro.

In other research by the Fair Pension Guide, published in March 2019, we showed that all ten pension funds that we assessed have insufficient (public) policy around investments in the arms sector. The Fair Pension Guide calls on the pension funds to draft and publish stronger policies on this issue. In these policies, the funds should address the issue of arms sales by arms companies, and take the six risk-criteria listed above into account.

If it becomes clear that companies sell weapon systems to states at risk of violating human rights or international humanitarian law, pension funds should try to influence policy and practice of these companies. If the arms company in question does not change its behavior, pension funds should decide to exclude this company from investments.

Table 6 Overzicht van de investeringen van tien Nederlandse pensioenfondsen in de veertien bedrijven

	Airbus	Boeing	General Electric	Honeywell	Leonardo	Lockheed Martin	Northrop Grumman	Raytheon	Rheinmetall	Rolls-Royce	Saab	Textron	Thales	UTC	Total (in million €)	Number of companies
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PME	2.3	4.4	37.1	42.9		23.6	14.2	16.2		11.5				49.8	202	9
PMT															0	0
StiPP															NDA	NDA
Pensioenfond Vervoer	X	X	X	X		X		X		X		X		X	NDA	9
Total	16.6	9.7	607.8	58.1	1.8	54.4	14.2	26.7	0.3	27.5	2.0	0.8	1.0	374.9	1,195.8	14

Chapter 1 Introduction

This report is composed as follows: this chapter introduces the subject of international arms trade and lists the main regulatory standards in this field. Chapters 2, 3 and 4 are the chapters in which the main research is presented. Each chapter presents one pillar of the research:

- Chapter 2 explains for which states the risks of arms sales to the state is high. Based on six criteria, a list of fifty states is composed to which military goods should, given the risks, not be sold.
- Chapter 3 lists the companies that have sold military goods to one or several of the states listed in Chapter 2.
- Chapter 4 presents which Dutch pension funds invest in any of these companies, and for how much.

Chapter 5 presents the main conclusions and recommendations on the development of policy and practice around investments in arms producers.

1.1 The issue

Global military expenditure, in 2018, grew to US\$ 1,822 billion.¹ The global arms production by the top 100 arms producers worldwide amounted to US\$ 412 billion in 2017.² That is more than the GDP of Israel, New Zealand or Portugal. These figures provide some indication of the size of international arms trade.

Each individual weapon system is designed to apply violence: to kill or destroy. A significant number of states purchases and uses weapons or other military goods to defend its territories. Some states actively contribute to United Nations (UN) missions worldwide, attempting to bring stability and order to regions suffering from violence and disorder.

However, in many countries and regions, states use weapons for oppression or aggression, within or outside their borders. Their use of weapon systems threatens human security: the freedom of civilians to live without fear for their lives. Companies should not sell weapon systems to states that use weapons in ways that endanger human security.

Arms producers have a responsibility for the impact their products have worldwide. They should not produce weapons for states that use these weapons against human security. While certainly in Russia and China most arms producing companies are state-owned, elsewhere many others are privately held, often listed at a stock exchange. Investors can contribute to the capital of the company, as shareholder, to ensure and expand production. Investors can also lend money to arms producers. Investors thus profit from the business of the arms producer.

Investors have a responsibility to avoid investments in companies which products are used to endanger human security. If they fail to do so, their profit is made at the cost of civilians that suffer from the violence caused by these weapons.

Investors can avoid that they invest in arms companies that supply military goods to states at risk of endangering human security. They can exclude arms producers, or engage with arms producers to change their behaviour.

1.2 International standards

States, naturally, have a significant responsibility in the area of arms control. They set the rules for the export of military goods and grant export licences for these goods. Two international standards in particular provide a framework for this role of the state: the Arms Trade Treaty (1.2.1) and the EU Common Position on Arms Export Controls (1.2.2). These standards contain clear norms to guide states in the decision-making process for arms export applications. Despite the clear norms many states grant export licences that appear to clearly violate these norms.³ Moreover, many states are not part of these control regimes, and therefore do not necessarily feel bound by them. For investors, the norms laid down in the international standards should provide the basis for development of investment policies and due diligence.

1.2.1 Arms Trade Treaty

The Arms Trade Treaty (ATT) is a multilateral treaty that regulates the international trade in conventional arms. On 2 April 2013 the General Assembly of the United Nations adopted the ATT with a large majority of votes. After fifty states had ratified, the treaty entered into force on 24 December 2014.⁴ The ATT requires states-parties to establish common international standards that must be met before arms exports are authorized, and requires annual reporting of imports and exports. In particular, the treaty:

requires that states “establish and maintain a national control system, including a national control list” and “designate competent national authorities in order to have an effective and transparent national control system regulating the transfer of conventional arms”;

prohibits arms transfer authorizations to states if the transfer would violate “obligations under measures adopted by the United Nations Security Council acting under Chapter VII of the Charter of the United Nations, in particular arms embargoes” or under other “relevant international obligations” or if the state “has knowledge at the time of authorization that the arms or items would be used in the commission of genocide, crimes against humanity, grave breaches of the Geneva Conventions of 1949, attacks directed against civilian objects or civilians protected as such, or other war crimes”;

requires states to assess the potential that the arms exported would “contribute to or undermine peace and security” or could be used to commit or facilitate serious violations of international humanitarian or human rights law, acts of terrorism, or transnational organized crime; to consider measures to mitigate the risk of these violations; and, if there still remains an “overriding risk” of “negative consequences,” to “not authorize the export”.⁵

The ATT could in the future be amended to include other military technologies as well.⁶

At the time of writing, 102 states are party to the ATT, including all EU member states. However, major exporting and importing states, such as the United States, Russia, China, India and Pakistan as well as most of the Middle East and North Africa are not yet party to the ATT.

1.2.2 EU Common Position on Arms Export Controls

Years before the ATT was concluded, the EU had recognized the need for a common system to control arms transfers. Its 1998 Code of Conduct was transformed in 2008 into a legally binding Common Position on Arms Export Controls “defining common rules governing control of exports of military technology and equipment”.⁷ It contains eight criteria, aimed at, among others, preventing military exports likely to be used in the country of final destination for internal repression, in internal or international conflicts.⁸ The EU arms export policy also contains measures to facilitate implementation by the member states and to improve cooperation between them. The EU criteria can be summarized as:

1. Respect for international commitments of Member States, in particular sanctions decreed by the UN Security Council and the EU, as well as agreements on non-proliferation and other international obligations;
2. The respect for human rights and international humanitarian law in the country of destination;

3. The internal situation in the country of final destination, as a function of the existence of tensions or armed conflicts;
4. Preservation of regional peace, security and stability;
5. The national security of the Member States and of territories whose external relations are the responsibility of a Member State, as well as that of friendly and allied countries;
6. The behavior of the buyer country with regard to the international community, as regards in particular its attitude to terrorism, the nature of its alliances and respect for international law;
7. The risk that equipment will be diverted within the buyer country or re-exported under undesirable conditions;
8. The compatibility of the arms exports with the technical and economic capacity of the recipient country, taking into account the desirability that states should achieve their legitimate needs of security and defense with the least diversion for armaments of human and economic resources, e.g. through considering the recipient country's relative levels of military and social spending.

All EU Member States are bound to embed these principles in their export licence policy and practice, although decisions on individual arms export licences remain a national responsibility.

Chapter 2 operationalizes these international standards further, to establish a list of states 'at risk' of endangering human security if supplied with military goods.

1.3 International human rights standards and arms trade

Besides the standards specifically designed for the international arms trade, other international standards have significance for the sector as well. The ATT and the EU Common Position focus on the role of states in regulating companies involved in arms production, and their exports. Aiming to guide the behaviour of companies specifically around the risk of human rights violations, several international standards were developed over the past years. The United Nations Guiding Principles (UNGPs, 2011)⁹ were endorsed by the UN Human Rights Council. The OECD updated its guidelines for responsible business behaviour in the OECD Guidelines for Multinational Enterprises, partly to bring these in line with the UNGPs.

Amnesty International conducted a study in 2018 and 2019, to establish whether arms companies had incorporated these guidelines in their internal policies. The study elaborates on the obligations of arms producers under the international standards. The report found that while some arms companies do reference adherence to international human rights standards, this reference is often 'fleeting', and focuses on the company's suppliers and the conditions of its employees, rather than the impact of its arms sales on human rights.¹⁰

Amnesty International sent letters to 22 arms companies to inquire about their human rights policies and processes. Only eight companies responded, and the response mostly focused on compliance with national export licensing procedures and requirements. This is also the experience of PAX, with letters sent to a largely similar selection of companies for this report.

Amnesty International points out that the UNGPs require arms companies to conduct risk assessments on the impact of their products and services on human rights. This should be done both before agreeing to contracts to supply military equipment and services, as well as after supply has taken place. The report explains how the UNGPs require arms companies to conduct due diligence on an ongoing basis to identify whether they may be causing, contributing to or directly linked to adverse human rights impacts.

Investors in arms companies have a responsibility, under the same international standards, to take action if a company does not itself. Under certain circumstances, failing to do so might lead an investor to be responsible to contribute to remediation of the harm inflicted by the weapon systems used in the human rights violations.

Chapter 2 States at risk

This chapter establishes to which states the supply of weapons should be considered ‘controversial’. In order to select companies in the arms sector which are involved in controversial arms trade, this study looks at sales of weapons by major arms producers to destinations where there is a risk of these weapons being used in violation of human rights and International Humanitarian Law. The list of controversial states is based on six indicators, which are explained further below. This chapter then operationalizes these indicators by linking them to specific indices. Each of the indices used is compiled by authoritative organizations working on the issue at hand. At the end of the chapter, a table provides an overview of states at risk, to which we consider arms sales as controversial.

2.1 Indicators

Table 77 provides an overview of the principles on arms trade the Fair Finance Guide International suggest as relevant for investors in the arms industry. Principles not related to arms trade but to controversial weapons production, dual-use goods or responsibility for the whole chain of production, are not listed here. These responsible investment principles take into account the international standards listed in chapter 1. The Fair Pension Guide expects pension funds to use these criteria in their due diligence and to take action if arms producers in their investment universe supply military goods to states that meet the criteria. For this study, to establish the list of states meeting these criteria, each principle is operationalised into a selection criteria.

Table 7 Responsible investment principles and selection criteria

Investment principle	Link with international standard	Criterion
Supply of arms and weapon systems, military transport systems, and other military goods to countries that are under a United Nations or relevant multilateral arms embargo, is unacceptable.	EU Common Position (criterion 1), Arms Trade Treaty	Arms embargo
Supply of arms and weapon systems, military transport systems, and other military goods is unacceptable if there is an overriding risk that the arms will be used for serious violation of international human rights and humanitarian law.	EU Common Position (2, 3, 4, 6), Arms Trade Treaty	Armed conflict
Supply of arms and weapon systems, military transport systems, and other military goods to countries that severely violate human rights, is unacceptable.	EU Common Position (2), Arms Trade Treaty	Human Rights violations
Supply of arms and weapon systems, military transport systems, and other military goods to parties involved in conflict is unacceptable, unless to parties acting in accordance with a UN Security Council resolution.	EU Common Position (3, 4)	Armed conflict
Supply of arms and weapon systems, military transport systems, and other military goods to countries that are sensitive to corruption, is unacceptable.	EU Common Position (7, 8)	Corruption
Supply of arms and weapon systems, military transport systems, and other military goods to countries having a failed or fragile state, is unacceptable.	EU Common Position (3, 7)	Fragile states

Investment principle	Link with international standard	Criterion
Supply of arms and weapon systems, military transport systems, and other military goods to countries that spend a disproportionate part of their budget on purchases of arms, is unacceptable.	EU Common Position (8)	Poverty and military spending

Note that the fifth criterion in the EU Common Position is not operationalized. This criterion is broadly formulated, and its operationalization is not the focus of this study.

For a viable due diligence that prioritizes the most eminent risks, we distinguish between 'primary criteria' and 'support criteria'. Table 8 shows which criteria fall in which category and how the elements lead to selection of a state on the list of states that should not be supplied with weapons.

Table 8 Role of the six criteria

	Primary criteria	Support criteria
	Arms embargo Human Rights violations Armed conflict	Corruption Fragile states Poverty and military spending
How the criteria lead to selection:	Surpass the threshold on any criterion = selection	Surpass the threshold on all three criteria = selection

Their use as support for the first four criteria does not limit the value of the last three principles as part of a responsible investment framework. These principles do point at important risks associated with investments in the arms sector. However, in a prioritization of risks the first three principles are a focus. The table at the end will show that most states that were selected based on the first four criteria, also score on the last three criteria. The following paragraphs provide details on the states at risk, based on the selection criteria.

Note that for the following paragraphs, the most up to date information at the time when the research was conducted, was retrieved from several indices. In some cases, newer information might be available at the time of publication of this report.

2.1.1 Primary criterion: Arms embargoes

The first criterion selects the countries that were under an arms embargo of the EU or the UN during (part of) the research period from January 2014 to December 2018. While there are more organisations that have arms embargoes, we consider UN/EU embargoes as most authoritative. They may cover both governments and non-governmental forces (NGF), or only NGF.

Table 9 Entities under an arms embargo by the EU and/or UN 2014-01 until 2018-12

Country/entity	Embargo EU	Embargo UN	Remarks
Belarus	Yes		EU: since 20 June 2011

Country/entity	Embargo EU	Embargo UN	Remarks
Central African Republic	Yes	Yes	EU: since 23 December 2013; UN: since 5 December 2013
China	Yes		
Cote d'Ivoire	Yes	Yes	EU: lifted June 9, 2016 UN: lifted April 28, 2016
DRC	Yes	Yes	EU: NGF since 2003
Egypt	Yes		EU: since 21 August 2013
Eritrea	Yes	Yes	EU: since 1 March 2010. UN: lifted November 14 2018
Iran	Yes	Yes	
Iraq	Yes	Yes	EU and UN: NGF since 2004
Lebanon	Yes	Yes	EU and UN: NGF
Liberia	Yes	Yes	EU: lifted June 20 2016. UN: lifted May 26 2016
Libya	Yes	Yes	
Myanmar (Burma)	Yes		
North Korea (DPRK)	Yes	Yes	
Russia	Yes		EU: since 31 July 2014
Somalia	Yes	Yes	
South Sudan	Yes		
Sudan	Yes	Yes	UN: Darfur region
Syria	Yes		
Taliban		Yes	
Ukraine	Yes		EU: 20 February 2014 until 16 July 2014
Venezuela	Yes		EU: since November 13 2017
Yemen	Yes	Yes	EU: since June 8 2015 (NGF). UN: since April 14 2015 (NGF)
Zimbabwe	Yes		

Table 1 is based on: <https://www.sipri.org/databases/embargoes> (viewed December 2018)

There are six states that have not been under an arms embargo for the whole period of January 2014 to December 2018: Cote d'Ivoire, Liberia, Russia, Ukraine, Venezuela, and Yemen. Because the embargoes against Russia, Venezuela and Yemen are still in place at the time of writing, these states have been incorporated in the final selection.

For Ukraine, Cote d'Ivoire and Liberia, an existing embargo was lifted during the research period. For these countries an arms embargo is not considered an absolute criterion, based on which it is placed in the final selection. However, if these states also meet three out of three criteria in section 2.1.4 to 2.1.6, they have still been incorporated in the final selection.

2.1.2 Primary criterion: Unfree countries

The second criterion selects the most unfree countries in the world. Our assessment is based on the Freedom House Index and the Democracy Index by the Economist Intelligence Unit.

Freedom House is a US based non-profit organization; its annual report “Freedom in the World” assesses more than 200 countries and territories with regard to their political and to their civil rights, which receive a score each. The two scores (for political rights and for civil rights) are based on a scale from 1 to 7, and then averaged. The most unfree countries scored a 6.5 or 7 on political and civil rights in the 2018 edition.¹¹

The Economist Intelligence Unit’s Democracy Index provides a snapshot of the state of democracy worldwide for 165 independent states and two territories. This covers almost the entire population of the world and the vast majority of the world’s states (micro states are excluded). The Democracy Index is based on five categories:¹²

- electoral process and pluralism;
- civil liberties;
- the functioning of government;
- political participation; and
- political culture.

Countries are designated one of four types of regimes: full democracies, flawed democracies, hybrid regimes, and authoritarian regimes. In this research we will focus on the countries with a score below four: these are considered authoritarian regimes.

To create a selection of countries that is as comprehensive as possible, these two indices are combined. The countries that have been incorporated in the final selection score both an average of 6.5 or 7 on political and civil rights in the 2018 edition of the Freedom in the World Index, and are considered authoritarian states, according to the Democracy Index of 2017.

The selection of countries based on the two indices has been incorporated in the final selection of countries. This concerns the 26 states presented in Table 1010.

Table 10 Selected unfree states as defined by the Freedom in the World Index and the Democracy Index

Azerbaijan	Eritrea	Sudan
Bahrein	Ethiopia	Swaziland
Burundi	Laos	Syria
Central African Republic	Libya	Tajikistan
Chad	North Korea	Turkmenistan
China	Russia	United Arab Emirates
Cuba	Saudi Arabia	Uzbekistan
Democratic Republic of Congo	Somalia	Yemen
Equatorial Guinea	South Sudan	

2.1.3 Primary criterion: Armed conflict

The third criterion selects states in armed conflicts. Two datasets are used for the selection of countries. The first dataset used is that of The Global Peace Index of the Institute for Economics and Peace (IEP), an Australian research institute. The IEP is an independent institute, which works with the OECD, UN, World Bank and a long list of other partners.ⁱⁱ The Global Peace Index assesses the extent to which states are in peace or are caught up in conflicts by using twenty-two indicators for its assessments. The index categorises the overall score into five levels of peacefulness, namely very high, high, borderline, low and very low.¹³ A score over 2.300 falls in the category 'low', any state scoring over 2.300 was selected for a second check on armed conflict.

The second step checked whether the states above the threshold were in armed conflict in one or more years during the research period from 2014 to 2018. We used the Uppsala Conflict Data Program of the Uppsala University, to establish whether a country was in conflict. At the time we did the research for this study (end of 2018), Uppsala did not yet release the conflict data for 2018. The research therefore does not look at conflicts that took place in 2018.¹⁴

For this case study, the selected countries have both a 'low' or 'very low' (>2.300) state of peace according to the Global Peace Index 2018, *and* are mentioned in the Uppsala Conflict Data Program as a country involved in conflict in the years 2014, 2015, 2016 or 2017. An assessment of the two indices results in the selection of the following states presented in Table 1111.

ⁱⁱ In the 2015 the IEP used its portal 'Vision of Humanity' to publish its index. Therefore, the 2015 Fair Insurance Guide report referred to the Global Peace Index as 'from VoH'. The index however has not changed.

After the study for the Fair Insurance Guide was published in 2015, the relevant principle in the FFGI methodology was slightly modified to include that involvement in armed conflicts should be acceptable if this is in accordance with a United Nations Security Council resolution. Therefore, the final list will only contain states involved in armed conflict that are not part of UN-mandated missions. We will operationalise this as follows: we will consider actions as ‘in accordance’ with a UNSC resolution if:

- the resolution contains a mandate under Chapter VII of the UN Charter
- the state participates in a UN mission
- we will check this passively: so only for states in armed conflict, a check will establish whether this should lead to selection, or not since the participation is based on a UNSC resolution.

If a state was found to be participating in an armed conflict in the research period, but its participation matches the criteria above, the years of participation are followed by ‘UN’. Some states participated in armed conflict both within and outside the criteria listed here, in these cases the same year is listed twice, once with ‘UN’ and once without.

Table 11 Selected states in armed conflict

Afghanistan	Egypt	Libya	Somalia
Bahrein	Eritrea	Mali	South Sudan
Burundi	Ethiopia	Myanmar	Sudan
Cameroon	India	Nigeria	Syria
Chad	Iran	Pakistan	Turkey
Colombia	Iraq	Philippines	Ukraine
Congo Br.	Israel	Russia	Yemen
DRC	Lebanon	Saudi Arabia	

2.1.4 Support criterion: Corruption

The fourth criterion selects states where the risk is high that the purchase of military goods is marred by corruption. Corruption in the purchase of military goods presents three risks. First, public funds are more likely to be wasted, instead of being spent for the benefit of society. Second, corruption in the purchase of military goods increases the risk of the purchased goods being irrelevant or faulty, which is an issue when actual security threats arise. Third, corruption in the purchase of military goods is likely to create a dynamic in which these purchases become a goal in themselves, serving the benefit of a few.

Transparency International's (TI) Government Defence Anti-Corruption Index measures the risk of corruption in the purchase of military goods. TI is an international non-profit organization that campaigns against the destructive influence corruption has on the lives of people all over the world. The Government Defence Anti-Corruption Index is the first global analysis of corruption risk in defence establishments worldwide. The index assesses and compares levels of corruption risk and vulnerability across countries. Hereby, it placed the countries in six different categories to indicate their level of corruption risk. The categories range from very low, low and moderate to high, very high and critical. In this research we focus on the countries with highest risk levels: very high or critical corruption risk.¹⁵ The last update of the index was in 2015, no newer update was available.

The 64 countries with a 'very high' or 'critical' corruption risk are presented in Table 12. Note that only if a state met the threshold for this criterion as well as for the other two supporting criteria, it will be listed in Table 43 with the final selection of countries.

Table 12 States with very high or critical corruption

Afghanistan	Central African Republic	Gabon	Madagascar	Qatar	Tanzania
Algeria	Chad	Gambia	Malawi	Rwanda	Thailand
Azerbaijan	China	Guinea	Mali	Saudi Arabia	Togo
Bahrein	Comoros	Guinea-Bissau	Mauritania	Senegal	Uganda
Bangladesh	Congo (Br.)	Iran	Morocco	Sierra Leone	United Arab Emirates
Botswana	Cote d'Ivoire	Iraq	Mozambique	Somalia	Uzbekistan
Burkina Faso	Democratic Republic of Congo	Jordan	Myanmar	South Sudan	Yemen
Burundi	Egypt	Kuwait	Niger	Sri Lanka	Zambia
Brazil	Equatorial Guinea	Lebanon	Nigeria	Sudan	Zimbabwe
Cambodia	Eritrea	Liberia	Oman	Swaziland	
Cameroon	Ethiopia	Libya	Pakistan	Syria	

2.1.5 Support criterion: Fragile states

The fifth criterion lists countries with a fragile state. According to the Fragile States Index 2018, thirty-two countries can be identified as fragile states. This index is published by Foreign Policy magazine and the Fund for Peace, an American research institute. The Fragile States Index 2018 assesses 178 states, using twelve social, economic, political and military indicators in order to determine which states are most vulnerable to violent internal conflicts and social decline. The Index differentiates eleven categories from very sustainable to very high alert.¹⁶

The selected countries are those countries crossing the critical boundary of 90 (out of 120) points and fall in three worst categories: alert, high alert or very high alert. According to the Fragile States Index, the countries in these categories can be considered a fragile state. These countries are presented in Table 13.13.

Table 13 States considered fragile

Afghanistan	Democratic Republic of Congo	Liberia	Pakistan
Bangladesh	Eritrea	Libya	Somalia
Burundi	Ethiopia	Mali	South Sudan
Cameroon	Guinea	Mauritania	Sudan
Central African Republic	Guinea Bissau	Myanmar	Syria
Chad	Haiti	Niger	Uganda
Cote d'Ivoire	Iraq	Nigeria	Yemen
Congo (Br.)	Kenya	North Korea	Zimbabwe

2.1.6 Support criterion: Poverty and military spending

The sixth criterion selects low development countries, which spend a large share of their national budget on arms. The risk we want arms suppliers to pay attention to is that the purchase of military goods is out of proportion and hence threatens the economic and social development of a country. There is no international standard to define the threshold percentage above which governments' spending on military equipment harms the sustainable development of a country. We therefore combine two indices.

The development of a country is based on the Human Development Index of the United Nations Development Program.¹⁷ In this context all low development countries have been pre-selected.

To determine military spending, data have been used from the Stockholm International Peace Research Institute (SIPRI), an internationally recognised research institute. Among many other things, they publish data on levels of relative military spending. To establish which countries spend a disproportionately large share of their government budget on military equipment, the SIPRI military expenditure list has been used.¹⁸ A relatively high threshold of 7% of total government spending has been used.ⁱⁱⁱ

The countries that are both characterized as low development countries, *and* have a military expenditure over 7% of their total government spending are considered at risk. This holds for the seventeen countries presented in Table 14. They are selected if they meet the two other support criteria as well. States included in the final selection can be found in Table 43.

Table 14 Selected states for poverty and military spending

Burundi	Mali	Sudan
Central African Republic	Niger	Uganda
Chad	South Sudan	Zimbabwe
Guinea		

2.1.7 Final selection

In total, fifty countries to which arms supplies can be considered controversial because they meet one or more of the criteria described in section 2.1.1 (arms embargoes) 2.1.2 (human rights violations) or 2.1.3 (armed conflict) have been identified, or all three of the criteria described in sections 2.1.4, 2.1.5 and 2.1.6.

An extended table with detailed scores per state can be found in Annex 1.

Table 15 Final selection of states for the case study

Afghanistan	Congo (Br)	Iraq	North Korea	Tajikistan
Azerbaijan	Cuba	Israel	Pakistan	Turkey
Bahrain	Democratic Republic of Congo	Laos	Philippines	Turkmenistan
Belarus	Egypt	Lebanon	Russia	Uganda
Burundi	Equatorial Guinea	Libya	Saudi Arabia	Ukraine

ⁱⁱⁱ At the time of publication of this case study the 2018 data will be available in the SIPRI database. During the study the data of 2017 is used.

Cameroon	Eritrea	Mali	Somalia	United Arab Emirates
Central African Republic	Ethiopia	Mauritania	South Sudan	Uzbekistan
Chad	Guinea	Myanmar (Burma)	Sudan	Venezuela
China	India	Niger	Swaziland	Yemen
Colombia	Iran	Nigeria	Syria	Zimbabwe



Figure 1: map with states at risk marked

2.1.8 Account of changes to the methodology for the selection of states

In a report on this issue in 2015, using the same methodology, 38 countries were considered ‘at risk’.¹⁹ In comparison with the 2015 study on controversial arms trade (carried out for the Fair Insurance Guide), the following changes were made to the methodology:

- The lead criterion ‘unfree countries’ is now called ‘human rights violations’, as this better reflects the issue that is measured.
- In the 2015 study, the three support criteria only served to provide clarity if the first criterion (on embargoes) was inconclusive. A state passing the threshold on all three support criteria would then be included in the study. For this study, this last rule was applied in general: all states passing the threshold on all three support criteria, were included in the study.

- In the 2015 study, the third criterion, ‘armed conflict’ selected states regardless of the background of the conflict. It is impossible as well as undesirable to take into account the background of all conflicts in this analysis. Nevertheless, in accordance with the FFGI methodology 2018, we have not selected states that were listed as in conflict if that conflict was based on a UN resolution with a Chapter VII mandate.

2.1.9 Case: the war in Yemen

The war in Yemen is an ongoing and stark illustration of the consequences of arms sales to states at risk of violating human rights and/or international humanitarian law. In 2011, the then president of Yemen, Saleh, was forced by an uprising to cede power, after which his deputy, Hadi, took power. Hadi struggled to keep Yemen under his control, and became increasingly challenged by the Houthi minority population, culminating in a siege of the presidential palace in January 2015. President Hadi then fled Yemen in March 2015. An international coalition led by Saudi Arabia and the UAE decided to intervene, aiming to restore the government of president Hadi. The conflict also reflects competition between Iran and Saudi Arabia.²⁰ The US, UK and France support the Saudi-led coalition with logistics and intelligence.²¹

The following events illustrate how different types of military goods have been deployed by especially Saudi Arabia and the UAE, and what the consequences have been for civilians in Yemen:

- Blockade: since early on in the war, the Saudi/UAE-led coalition has blocked access to Houthi administered areas, significantly limiting the influx of supplies such as fuel, food and medicine to these areas. In the summer of 2015, UN agencies reported over 20 million people in Yemen were in urgent need of food, water and medical aid, access to which was severely hampered by the blockade.²²
- The intervention of the Saudi-led coalition is based on ground troops and a naval blockade, but relies heavily on air strikes. UN experts stated that several air strikes appear to have violated international humanitarian law. For instance, an attack on October 8, 2016 hit a funeral service, killing an estimated 114 people while injuring over 600. There is significant doubt over the proportionality of this attack: whether the military target aimed for justified the number of civilian deaths which could be anticipated. Also, the first bomb was followed by a second, three to eight minutes later. UN monitors state that this second attack violated the principle in IHL that those wounded or out of combat (e.g. medical personnel) should not be targeted.²³
- A report of Yemeni human rights organization Mwatana, the US University Network for Human Rights and PAX documents a number of attacks on civilian targets in Yemen. ‘Day of Judgement’ provides photographs of bomb fragments found on the sites of these attacks, and links these bomb fragments to their manufacturers. A small selection of the attacks described in this report:
 - On 26 May and 9 October, 2015, a primary school in the At-Tuhayat district was attacked by the Saudi-led coalition. No-one was killed in the attack, but the attacks completely destroyed the school, depriving around 200 students from primary education. Around 60 of the students previously attending the school now receive education in a local mosque. The first attack, on May 26, consisted of four separate bombs, and destroyed civilian houses as well. No-one was killed because the inhabitants of the houses struck had gone outside after the first bomb hit the school. The researcher could not identify any military targets in the area, and considered this attack indiscriminate.
 - On September 14, 2015, a farm in the Bilad Ar-Rus district was attacked, killing eight, including two children. Researchers from Mwatana did not identify any military targets in the area, and consider this attack to be indiscriminate, as it seems to have targeted a civilian structure.

- On September 21, 2016, the Saudi-led coalition attacked a residential neighbourhood in the Hawak District. At the moment of the attack, a funeral was taking place in the area. Twenty-three people were killed, including five children. A presidential palace about one kilometer away from the area had been attacked shortly before the funeral. Civilians in the area figured they were not in grave danger as their houses were in a clearly residential area. Remnants of a laser guided bomb were found on the site. Mwatana researchers consider this attack indiscriminate. The attack may have been part of an attack against the presidential palace, but clearly failed to distinguish military targets from civilian structures.
- On April 22, 2018, a civilian home where a wedding was taking place was bombed. The attack took place in the Bani Qais District, Hajjah Governorate. Twenty-one people were killed, including 11 children. The Coalition investigated this attack and claimed that there were Houthi military experts in the area. Mwatana found no evidence of this. The nearest military structure, a checkpoint, was 25 kilometer away from the house that was bombed.²⁴

Saudi Arabia has committed grave human rights violations for decades. A report by PAX on investments in controversial arms trade in 2015, and in 2017, already listed Saudi Arabia as a 'state at risk', and warned investors that investments in companies that supplied Saudi Arabia with weapon systems, were at risk of exposure to significant violations of international humanitarian law and human rights.²⁵

International response

There have been a number of responses from the international community and individual countries, as well as civil society in a number of states, in the context of arms trade with the coalition led by Saudi Arabia and the UAE. A few examples:

- In September 2019, the UN Group of International and Regional Eminent Experts on Yemen published a report in which it spoke of '*a host of possible war crimes committed by various parties to the conflict over the past five years, including through airstrikes, indiscriminate shelling, snipers, landmines, as well as arbitrary killings and detention, torture, sexual and gender-based violence, and the impeding of access to humanitarian aid in the midst of the worst humanitarian crisis in the world.*' It also stated '*that the governments of Yemen and the United Arab Emirates and Saudi Arabia, as well as the Houthis and affiliated popular committees have enjoyed a "pervasive lack of accountability" for violations of international humanitarian and human rights law.*'²⁶
- The Court of Appeals in the United Kingdom, prompted by a case brought by amongst others the Campaign Against Arms Trade (CAAT), ruled British arms sales to Saudi Arabia 'unlawful'. The judges states that they found that three government ministers (Boris Johnson, Jeremy Hunt and Liam Fox) had in 2016 illegally signed off on arms exports without properly assessing the risk to civilians.²⁷
- The Dutch government banned practically all arms exports to Saudi Arabia early in 2016.²⁸ Late 2018, the Dutch government also put all arms exports to the UAE and Egypt under a presumption of denial, only granting an export licence for cases where it could be shown that weapons would not be used in Yemen.²⁹

Chapter 3 Selection of companies

3.1 Guidance for the selection of companies

This chapter contains an overview of the selected arms companies and their links to the fifty states at risk listed in Table 1515. For these countries, more than one thousand arms transfers were identified. In total, some 150 companies were involved in one or multiple arms transfers. To keep this study feasible, the selection of arms companies was limited to the largest fourteen companies for which financial links with Dutch pension funds could be established. Therefore, this list cannot be considered a comprehensive list of companies involved in controversial arms trade.

To select the companies most relevant for this study, the following selection criteria were applied:

- The company has delivered arms to at least one of the fifty controversial countries.
- The research focuses on arms deliveries in the period from January 2014 to December 2018. Arms deals of which it is not yet clear whether arms have been delivered already by the end of 2018 or if the delivery is scheduled in 2019, are therefore not taken into account. However, for companies selected for a 2014 to 2018 delivery, scheduled deliveries for 2019 (and onwards) are listed as additional information.
- Arms deliveries based on military aid for the fifty controversial countries are included in the study.
- Deliveries in the period from January 2014 to December 2018 to embargoed countries (see subsection 2.1.1) which took place outside the embargo period are only included as additional information if the involved company is already included in the study for other deliveries.
- In case of second hand arms deliveries, the producer is not included in the study, as the producer is not directly responsible for second hand trade. However, it should be noted that arms deliveries to countries known to resell arms to controversial countries should be prevented.
- In case of second hand arms deliveries, the company known to be involved in refurbishing or reselling the arms is included in the research.
- Companies were only included if in 2017, they had arms sales - to controversial and non-controversial countries together - of more than US\$ 1 billion.³⁰
- A company with more financials links with the selected financial institutions, was selected over a company with fewer links.
- A company higher in the SIPRI top 100 of arms companies was selected over a company ranked lower in the SIPRI top 100.

This led to the selection of the following 14 companies.

Table 16 Arms producers selected in this study

Airbus	Raytheon
Boeing	Rheinmetall
General Electric	Rolls-Royce
Honeywell	Saab
Leonardo	Textron
Lockheed Martin	Thales
Northrop Grumman	United Technologies Corporation

For the presentation of the companies, we used the following rules:

- The company list consists of parent companies. If a subsidiary or joint venture is involved in controversial arms trade, the parent company is held accountable.
- If a deal is executed by a joint venture company with no majority shareholder, this is listed as additional information if the involved companies are already included in the study for other deliveries.

3.2 Engagement with arms producers

PAX, as part of the Fair Pension Guide, sent the arms producers listed below a letter, included in Annex II. The letter asked the companies three questions:

1. If you are of the view that the listing of arms transfers by your company [the report] is incorrect, could you please provide us with relevant documentation to elaborate your view?
2. Does your company have any policy in place to prevent arms transfers to countries that meet (some of) the criteria listed above and could you elaborate on that policy?
3. If not, is your company planning to put in place a policy in order to refrain from arms transfers to such countries in the future?

The companies Leonardo, Raytheon and Rolls-Royce replied to our letter. A description of their response is provided in paragraphs 3.8 and 3.11 respectively.

3.3 Airbus

Airbus Group is an aerospace and defence corporation based in among others France, Germany and Spain and registered in the Netherlands. The military products of Airbus consist among others of fighter aircraft, transport aircraft, unmanned aircraft, attack helicopters and missiles.³¹

In the year ending 31 December 2018, Airbus Group generated revenues of € 75 billion, resulting in a net income of € 3.05 billion.³² According to the SIPRI list of top 100 arms-producing companies of 2017, Airbus Group ranked seventh with total arms sales of US\$11.2 billion (€9,9 billion), accounting for 15% of its total sales that year.³³

The involvement of Airbus Group in controversial arms deals, in the period from January 2014 to December 2018, is summarized in Table 17

Table 17 Sales of military goods to states at risk 2014-2018 by Airbus

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
China	ASW helicopter	? AS565S Panther	1989-2018	±47+432
China	transport helicopter	55 SA-321 Super Frelon	2001-2016	±55
Egypt	Transport aircraft	6+8+4 C-295	2013-2016	6+8+4
Egypt	Anti-ship missile/SSM	± 50 MM-40-3 Exocet	2017	±10
Egypt	BVRAAM	±100 MICA	2017	±25
Egypt	BVRAAM	±150 MICA	2015-2018	±150
Egypt	Anti-ship missile/SSM	± 15 MM-40-3 Exocet	2015	±15
Egypt	SAM	± 25 ASTER-15 SAAM	2015	±25
India	anti-tank missile	±22, 250 MILAN	1984-2018	± 22,000

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
India	light helicopter	±20 SA-315B Lama	2015-2016	± 20
India	anti-ship missile	±36 SM-39 Exocet	2017	± 6
India	BVRAAM	±493 MICA	2014-2018	± 319
India	BVRAAM/SRAAM	±384 ASRAAM	2017	± 384
Laos	helicopter	±2 AS365/565 Panther	2015	2
Lebanon	Anti-tank missile	±48 MILAN	2015	48
Mali	transport aircraft	1 C-295W	2016	1
Pakistan	light helicopter	10AS-350/550 Fennec	2013-2014	± 10
Philippines	transport ac	3 C-295	2015-2016	3
Saudi Arabia	Light helicopter	23 EC145	2017-2018	± 23
Saudi Arabia	Tanker/transport ac	3 A-330 MRTT	2014-2015	3
Saudi Arabia	Transport aircraft	2 C-295	2015-2017	2
Saudi Arabia	MP aircraft	2 C-295MPA	2018	2
Saudi Arabia	FGA aircraft	24 Typhoon Block-20	2015-2017	24
Saudi Arabia	FGA aircraft	48 Typhoon Block-8	2009-2015	± 48
Saudi Arabia	anti-tank missile	±100 MILAN	2014	± 100
Saudi Arabia	Mobile AD system	±49 MPCV	2013-2015	± 49
Saudi Arabia	Portable SAM	±130 Mistral	2016-2017	± 130
Saudi Arabia	ASM	±1000 Brimstone	2016-2018	± 700
Saudi Arabia	Portable SAM	±800 Mistral	2013-2015	± 800
Saudi Arabia	BVRAAM	±250 MICA	2018	± 100
Saudi Arabia	SAM system	±5 VL-MICA	2018	± 2
Saudi Arabia	ASM	±100 Storm Shadow/SCALP	2016-2017	± 100
Saudi Arabia	BVRAAM	Meteor	2018	± 20
Turkey	Transport aircraft	10 A400M Atlas	2014-2018	7
Turkmenistan	Portable SAM	±28 Mistral	2013-2017	± 28
Turkmenistan	anti-ship missile	±25 Marte-2	2015-2017	± 25
UAE	Anti-ship MI/SSM	150 MM-40-3 Exocet	2010-2016	± 150
UAE	Anti-ship missile	±100 Marte-2	2013-2015	± 100

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
UAE	Anti-ship missile	±50 Marte-2	2018	± 25

Information (except company name) from the Stockholm International Peace Research Institute (SIPRI), <https://www.sipri.org/databases/armstransfers>

3.4 Boeing

Boeing, based in the US, is the world's largest aerospace company and a leading manufacturer of jetliners and military, space and security systems. The military products of Boeing consist among others of fighter aircraft, transport aircraft, unmanned aircraft, attack helicopters and missiles.³⁴

In the financial year ending 31 December 2018, Boeing reported revenues of US\$ 101.1 billion (€ 89.8 billion), resulting in an operating income of US\$ 11.98 billion (€ 10.64 billion) and a net income of US\$ 10.46 billion (€ 9.29 billion).³⁵ According to the SIPRI list of top 100 arms-producing companies of 2017, Boeing ranked second with total arms sales of US\$26,9 billion (€23,9 billion), accounting for 29% of its total sales that year.³⁶

The involvement of Boeing in controversial arms deals, in the period from January 2014 to December 2018, is summarized in Table 18.

Table 18 Sales of military goods to states at risk 2014-2018 by Boeing

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
Afghanistan	UAV	65 ScanEagle	2016-2018	± 65
Cameroon	UAV	±2 ScanEagle	2016	± 2
Egypt	Anti-ship MI/SSM	25 RGM-84L Harpoon-2	2013-2015	± 25
Egypt	Anti-ship Missile/SSM	20 RGM-84L Harpoon-2	2017	± 10
India	ASW ac	8 P-8A Poseidon	2012-2015	8
India	Heavy transport ac	10+1 C-17A Globemaster-3	2013-2014	10
India	Anti-ship Missile/SSM	12+ ±21 RGM-84L Harpoon-2	2018 + 2014	33
Iraq	mobile AD system	8 Avenger	2013-2014	± 8
Iraq	UAV	±10 ScanEagle	2014	± 10
Israel	Guided bomb	±3450 GBU-39 SDB	2015-17	± 3450
Israel	Guided bomb	±4100 GBU-39 SDB	2018	± 1300
Israel	Guided bomb	±2701 JDAM	2014-2015	± 2701
Israel	Guided bomb	3000 JDAM	2015-2016	± 3000
Israel	Guided bomb	100 JDAM	2016	± 100
Pakistan	UAV	15 ScanEagle	2015	± 15
Philippines	UAV	6 ScanEagle	2018	6

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
Saudi Arabia	Combat helicopter	12 AH-64E Apache Guardian	2014-2015	± 12
Saudi Arabia	Combat helicopter	± 24 AH-64E Apache Guardian	2015-2016	± 24
Saudi Arabia	FGA aircraft	84 F-15SG	2016-2018	± 54
Saudi Arabia	FGA aircraft	70 F-15SG	2016	2
Saudi Arabia	Combat helicopter	12 AH-64E Apache Guardian	2015	± 12
Saudi Arabia	Guided bomb	600 JDAM	2016	± 600
Saudi Arabia	Anti-ship Missile/SSM	±400 RGM-84L Harpoon-2	2016-2018	± 220
Saudi Arabia	ASM	±650 AGM-84H SLAM-ER	2016-2018	± 210
Saudi Arabia	Guided bomb	1000 GBU-39 SDB	2017-2018	± 400
Saudi Arabia	Combat helicopter	24 AH-6S	2016-2018	± 24
Saudi Arabia	Guided bomb	±2645 JDAM	2018	± 2645
Turkey	AEW&C aircraft	4 Boeing-737 AEW&C	2014-2015	4
Turkey	Transport helicopter	6 CH-47F Chinook	2016	6
Turkey	Transport helicopter	4 CH-47F Chinook	2018	± 4
Turkey	Guided bomb	±1300+100 JDAM	2017-2018	± 1300+100
Turkey	ASM	±48 AGM-84H SLAM-ER	2016-2017	48
UAE	Transport helicopter	±12 CH-47F Chinook	2012-2015	± 12
UAE	Guided bomb	±5000 GBU-39 SDB	2015-2018	± 4000
UAE	Guided bomb	3600 JDAM	2015-2016	± 3600
UAE	Heavy transport ac	2 C-17A Globemaster-3	2015	2
UAE	Guided bomb	±3504 JDAM	2017-2018	± 3504
UAE	Guided bomb	1500 JDAM	2018	± 1500

Information (except company name) from the Stockholm International Peace Research Institute (SIPRI), <https://www.sipri.org/databases/armstransfers>

3.5 General Electric

General Electric, based in the US, provides industrial products in the areas of power, healthcare, oil and gas, aviation, transportation and lighting amongst others.³⁷ The military products of General Electric consist among others of engines and other components for combat aircraft, transport aircraft, helicopters, unmanned aircraft, land vehicles and warships.³⁸

GE is actively involved in servicing its engines once they are in operation. For example, the company states on its website that it partners with Saudi partner organisations in establishing engine overhaul capabilities within Saudi Arabia.³⁹

In the financial year ending 31 December 2018, General Electric reported revenues of US\$ 121,6 billion (€ 108,6 billion), and full-year earnings from continuing operations of \$19,8 billion (€ 17,7 billion).⁴⁰ According to the SIPRI list of top 100 arms-producing companies of 2017, General Electric ranked twenty-second with total arms sales of US\$3,8 billion (€3,4 billion), accounting for 3% of its total sales that year.⁴¹

The involvement of General Electric in controversial arms deals, in the period from January 2014 to December 2018, is summarized in Table 19.

Table 19 Sales of military goods to states at risk 2014-2018 by General Electric

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
Egypt	Gas turbine	1 LM-2500	2015	1
India	Turbofan	24 F-404	2016-2018	± 9
Philippines	Turbofan	±12 F404	2015-2017	12
Saudi Arabia	Turbofan	±6 CF-6/F-103	2014-2015	± 6
Saudi Arabia	Turbofan	±25 F110	2017-2018	± 20
Turkey	Gas turbine	2 LM-2500	2018	1

Information (except company name) from the Stockholm International Peace Research Institute (SIPRI), <https://www.sipri.org/databases/armstransfers>

3.6 Honeywell

Honeywell International, based in the US, “operates as a diversified technology and manufacturing company”. The company’s business units are aerospace, building technologies, safety and productivity solutions and performance materials and technologies.⁴² The military products of Honeywell consist among others of equipment for military aircraft.⁴³

In the financial year ending 31 December 2017, Honeywell International generated revenues of US\$ 40.5 billion (€33.8 billion), resulting in an operating income of US\$ 6.9 billion (€ 5.8 billion) and a net income of US\$ 1.7 billion (€ 1.4 billion).⁴⁴ According to the SIPRI list of top 100 arms-producing companies of 2017, Honeywell ranked sixteenth with total arms sales of US\$4,4 billion (€3.9 billion), accounting for 11% of its total sales that year.⁴⁵

The involvement of Honeywell in controversial arms deals, in the period from January 2014 to December 2018, is summarized in Table 20.

Table 20 Sales of military goods to states at risk 2014-2018 by Honeywell

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
India	Turboprop	±28 TPE-331	2013-2016	± 28
Turkey	Turboshaft	± 188 T-800	2014-2018	± 90
Israel	Turbofan	60 F-124	2014-2016	± 60

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
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Information (except company name) from the Stockholm International Peace Research Institute (SIPRI), <https://www.sipri.org/databases/armstransfers>

3.7 Leonardo

Leonardo, based in Italy, develops products and services in the fields of aerospace, military and security.⁴⁶ The company changed its name from Finmeccanica to Leonardo in April 2016.⁴⁷ The military products of Leonardo consist among others of attack and transport helicopters, unmanned systems, turrets for land vehicles, naval guns and combat systems as well as large calibre ammunition.⁴⁸

In the financial year ending 31 December 2017, Leonardo generated revenues of € 11.5 billion, resulting in an operating income of € 397 million and a net profit of € 274 million.⁴⁹ According to the SIPRI list of top 100 arms-producing companies of 2017, Leonardo ranked ninth with total arms sales of US\$8,7 billion (€7.8 billion), accounting for 68% of its total sales that year.⁵⁰

The involvement of Leonardo in controversial arms deals, in the period from January 2014 to December 2018, is summarized in Table 2121.

Table 21 Sales of military goods to states at risk 2014-2018 by Leonardo

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
Bahrain	fire control radar	6 Orion RTN-25X	2018	2
Chad	transport aircraft	2 C-27J Spartan	2014	± 2
Colombia	naval gun	1 Compact 76mm	2017	1
Colombia	guided shell	±200 DART	2014	± 200
Egypt	Naval gun	3 Super Rapid 76mm	2013-2015	3
Egypt	Naval gun	1 Super Rapid 76mm	2015	1
Egypt	Naval gun	4 Super Rapid 76mm	2017	1
Egypt	Naval gun	1 Super Rapid 76mm	2015	1
India	naval gun	±20 Super Rapid 76mm	2013-2017	10
Israel	Trainer/combat ac	30 M-346 Master	2014-2016	± 30
Lebanon	UAV	±3 Falco	2014	± 3
Mauritania	light helicopter	2 A-109/AW109 Power	2014	2
Pakistan	helicopter	5+3+15 AW139	2016-2018	± 23
Philippines	Light helicopter	8+2 A-109K	2015	10
Saudi Arabia	Air search radar	2 RAT-31S	2015	± 2
Saudi Arabia	Air search radar	6 RAT-31S	2016-2017	± 6
Turkey	Combat helicopter	50 A-129C Mangusta	2016-2018	± 36
Turkey	Combat helicopter	9 A-129C Mangusta	2014-2015	± 9

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
Turkey	Naval gun	16 Compact 40L70	2011-2015	16
Turkey	Naval gun	2+4 Super Rapid 76mm	2018	2
Turkey	Recce satellite	1 Göktürk-1	2016	1
Turkmenistan	light helicopter	±4 A-109K	2016	± 4
Turkmenistan	naval gun	8 Compact 40L70	2013-2016	8
UAE	Naval gun	6 Super Rapid 76mm	2012-2016	6
UAE	Fire control radar	6 Orion RTN-25X	2011-2016	6
UAE	Helicopter	±9 AW139	2015	± 9

Information (except company name) from the Stockholm International Peace Research Institute (SIPRI), <https://www.sipri.org/databases/armstransfers>

3.7.1 Leonardo's reply to the letter sent by PAX

Leonardo replied to our letter with a general overview of Leonardo's responsible business conduct. Leonardo refers to the applicable (Italian) regulations and internal mechanisms that ensure compliance with these regulations. The regulations referred to include risks that this report also considered in the selection of states at risk. A company representative indicates that *'All the activities related to import/export of military goods have been authorized by relevant national and, if the case, international authority'*.⁵¹

Leonardo further emphasizes that some of the goods that Leonardo, according to this report, sold to states at risk, while being military goods, should not be considered weapons. A list is provided by means of example, which includes military helicopters and vehicles.

- PAX and the Fair Pension Guide recommend Leonardo to develop policies to prevent that the company supplies military goods if the risk is significant that these goods will be used to violate human rights. A compliance policy with national legislation is not sufficient to avoid this risk. The criteria used in this report are an example of how to develop such policy.
- Furthermore, the distinction between military goods and weapons is not very practical. In reality, military equipment (both goods and weapons) are part of a bigger system in which the weapons couldn't be used without the military goods.

3.8 Lockheed Martin

Lockheed Martin, based in the US, focuses on aeronautics, space systems, electronic systems and information systems. Its most important divisions are aerospace and defense, information technology and new technologies.⁵² The military products of Lockheed Martin consist among others of fighter aircraft, attack helicopters, unmanned aircraft, air defence systems, bombs and warships.⁵³

In the financial year ending 31 December 2018, it generated revenues of US\$ 53.8 billion (€47.7 billion), resulting in net earnings of US\$ 5.0 billion (€4.4 billion).⁵⁴ According to the SIPRI list of top 100 arms-producing companies of 2017, Lockheed Martin ranked first with total arms sales of US\$44,9 billion (€44,5 billion), accounting for 88% of its total sales that year.⁵⁵

The involvement of Lockheed Martin in controversial arms deals, in the period from January 2014 to December 2018, is summarized in Table 1722.

Table 22 Sales of military goods to states at risk 2014-2018 by Lockheed Martin

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
Bahrain	Guided rocket	24 GMLRS	2017	± 24
Egypt	FGA aircraft	20 F-16C Block-50/52	2013-2015	20
Egypt	Aircraft EO system	±12 AAQ-33 Sniper	2013-2015	± 12
Egypt	Anti-tank missile	±356 AGM-114K HELLFIRE	2016-2017	± 356
India	transport ac	6 C-130J-30 Hercules	2017	6
Iraq	FGA aircraft	18 F-16C Block-50/52	2014-2015	± 18
Iraq	Aircraft EO system	±20 AAQ-33 Sniper	2015	± 20
Iraq	FGA aircraft	18 F-16C Block-50/52	2016-2017	± 18
Iraq	Anti-tank missile	±5000 AGM-114K HELLFIRE	2015-2017	± 5000
Iraq	Anti-tank missile	1500±175 AGM-114L HELLFIRE	2013-2014	1675
Israel	FGA aircraft	19 F-35A JSF	2016-2018	± 15
Israel	transport aircraft	3 C-130J Hercules	2013-2015	3
Israel	transport aircraft	4 C-130J Hercules	2016	± 3
Israel	guided rocket	±1000 GMLRS	2017-2018	± 1000
Lebanon	Anti-tank missile	±50 AGM-114K HELLFIRE	2015	± 50
Lebanon	Anti-tank missile	±100+100 AGM-114K HELLFIRE	2014-2015	± 100+100
Pakistan	Aircraft EO system	15 AAQ-33 Sniper	2015-2016	± 15
Saudi Arabia	Combat ac radar	±193 AAQ-13 LANTIRN	2016-2018	± 64
Saudi Arabia	Aircraft EO system	±158 AAQ-33 Sniper	2016-2018	± 56
Saudi Arabia	Tanker/transport ac	2 KC-130J Hercules	2016	2
Saudi Arabia	Anti-tank missile	±2592+2176 AGM-114L HELLFIRE	2013-2016	± 2176
Saudi Arabia	Helicopter	24 S-70/UH-60L	2014-2015	± 24
Saudi Arabia	ASW helicopter	10 MH-60R Seahawk	2018	± 5
Saudi Arabia	Helicopter	12 S-70/UH-60L	2013-2014	± 12
Saudi Arabia	Helicopter	8 S-70/UH-60L	2017	± 8
Saudi Arabia	Helicopter	40 S-70/UH-60L	2018	± 10
Turkey	FGA aircraft	±100 F-35A JSF	2018	2
Turkey	Naval SAM system	4 Mk41	2013-2014	± 4

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
Turkey	ASW helicopter	17 S-70B/SH-60B Seahawk	2012-2014	± 17
UAE	Guided rocket	390 GMLRS	2017	± 390
UAE	Self-propelled MRL	12 M-142 HIMARS	2017	± 12
UAE	SSM	124 MGM-140B ATACMS	2017-2018	± 124
UAE	Anti-tank missile	±1000 AGM-114K HELLFIRE	2018	± 10000

Information (except company name) from the Stockholm International Peace Research Institute (SIPRI), <https://www.sipri.org/databases/armstransfers>

3.9 Northrop Grumman

Northrop Grumman, based in the US, provides products, services and solutions in the military aerospace, electronics, information systems and shipbuilding sectors.⁵⁶ The military products of Northrop Grumman consist among others of autonomous systems, strike aircraft, naval systems, missiles and ammunition.⁵⁷

In the financial year ending 31 December 2017, Northrop Grumman generated revenues of US\$ 30.1 billion (€ 26.7 billion), resulting in an operating income of US\$ 3.8 billion (€ 3.4 billion) and net earnings of US\$ 3.2 billion (€ 2.8 billion).⁵⁸ According to the SIPRI list of top 100 arms-producing companies of 2017, Northrop Grumman ranked fifth with total arms sales of US\$22,4 billion (€19,9 billion), accounting for 87% of its total sales that year.⁵⁹

The involvement of Northrop Grumman in controversial arms deals, in the period from January 2014 to December 2018, is summarized in Table 1723.

Table 23 Sales of military goods to states at risk 2014-2018 by Northrop Grumman

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
Colombia	air search radar	±4 TPS-70	2015	4
Iraq	Combat ac radar	4 APG-68	2015	± 4
Pakistan	combat ac radar	±35+10 APG-68	2012-2014	± 45
Turkey	Combat ac radar	±163 APG-68	2009-2015	± 163

Information (except company name) from the Stockholm International Peace Research Institute (SIPRI), <https://www.sipri.org/databases/armstransfers>

3.10 Raytheon

Raytheon, based in the US, provides mainly military electronics, mission systems integration and other capabilities in the areas of sensing and command, control, communications and intelligence systems as well as a broad range of mission support services.⁶⁰ The military products of Raytheon consist among others of missiles and air defence systems.⁶¹

In the financial year ending 31 December 2018, Raytheon generated revenues of US\$ 27.1 billion (€ 24.0 billion), resulting in an operating income of US\$ 2.9 billion (€ 2.6 billion).⁶² According to the SIPRI list of top 100 arms-producing companies of 2017, Raytheon ranked third with total arms sales of US\$23,9 billion (€21,3 billion), accounting for 94% of its total sales that year.⁶³

In October 2019, the shareholders of UTC and Raytheon approved a merger between UTC's aerospace business with Raytheon. The companies indicated that the new company, Raytheon Technologies Corporation would create a "premier systems provider with advanced technologies to address rapidly growing segments within aerospace and defence." The merger will finalize mid-2020, pending approval by regulatory bodies in the US.⁶⁴

The involvement of Raytheon in controversial arms deals, in the period from January 2014 to December 2018, is summarized in Table 24.24.

Table 24 Sales of military goods to states at risk 2014-2018 by Raytheon

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
Bahrain	BVRAAM	25 AIM-120C AMRAAM	2015	25
Bahrain	Anti-tank missile	±264 BGM-71 TOW	2017-2018	± 264
Bahrain	Anti-tank missile	±221 BGM-71 TOW-2B	2018	± 221
Colombia	AT-missile	100 BGM-71 TOW	2015	100
Colombia	Portable SAM	60 FIM-92 Stinger	2015	60
Egypt	SAM	139 RIM-116A RAM	2014	± 139
India	ASW torpedo	±32 Mk-54 MAKO	2013-2016	± 32
Iraq	Portable SAM	±200 FIM-92 Stinger	2013-2014	± 200
Iraq	ASM	±50 AGM-65 Maverick	2015	± 50
Iraq	BVRAAM	±150 AIM-7M Sparrow	2015-2016	± 150
Iraq	SRAAM	100 AIM-9L Sidewinder	2015	± 100
Iraq	Guided bomb	±300 Paveway	2015	± 300
Iraq	ASM	±50 AGM-65 Maverick	2016	± 50
Iraq	BVRAAM	±150 AIM-7M Sparrow	2016-2017	± 150
Iraq	SRAAM	100 AIM-9L Sidewinder	2016-2017	± 100
Iraq	Guided bomb	±300 Paveway	2016-2017	± 300
Iraq	air search radar	±13 MPQ-64	2013-2014	± 13
Lebanon	Anti-tank missile	±1500 BGM-71 TOW-2B	2018	± 500
Lebanon	Anti-tank missile	±350 BGM-71 TOW	2017	± 350
Pakistan	AMRAAM/BVRAAM	±500 AIM-120C	2010-2014	± 500
Pakistan	Anti-tank missile	±843 BGM-71 TOW	2015	± 843
Philippines	ASM	±125 AGM-65 Maverick	2017-2018	± 75
Saudi Arabia	Guided bomb	±2400 Paveway	2015	± 2400

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
Saudi Arabia	ARM	±600 AGM-88 HARM	2018	± 100
Saudi Arabia	SRAAM	±300 AIM-9X Sidewinder	2012-2018	± 270
Saudi Arabia	Guided bomb	±3100 Paveway	2013-2016	± 3100
Saudi Arabia	BVRAAM	±500 AIM-120C AMRAAM	2015-2018	± 371
Saudi Arabia	Guided bomb	±355 AGM-154 JSOW	2016-2017	± 355
Saudi Arabia	Guided bomb	±8120 Paveway	2016-2017	± 8120
Saudi Arabia	Guided bomb	618 AGM-154 JSOW	2018	± 130
Saudi Arabia	Anti-tank missile	±4941 BGM-71F TOW-2B	2015-2018	± 4941
Saudi Arabia	Anti-tank missile	±10747 BGM-71 TOW	2015-2018	± 10747
Turkey	SAM	±275 RIM-162 ESSM	2011-2017	± 275
Turkey	CIWS	4 Mk-15 Phalanx	2017-2018	4
Turkey	BVRAAM	±145 AIM-120C AMRAAM	2016-2018	± 108
Turkey	SRAAM	117 AIM-9X Sidewinder	2015-2016	± 117
Turkey	SAM	±125 RIM-116A RAM	2011-2018	± 105
Turkey	SAM	±150 RIM-116A RAM	2017	± 30
Turkey	CIWS	4 Mk-15 Phalanx	2017-2018	± 4
UAE	SAM	±96+96 RIM-162 ESSM	2015 & 2018	± 144
UAE	SAM	±200 RIM-116A RAM	2011-2016	± 200
UAE	ABM system	2 THAAD	2015-2016	± 2
UAE	ABM missile	192 THAAD missile	2015-2018	± 171
UAE	SAM	±25 RIM-116A RAM	2017	± 25
UAE	ASM	±2000 Talon	2015-2018	± 2000
UAE	SAM	100 MIM-104C PAC-2	2018	± 30

Information (except company name) from the Stockholm International Peace Research Institute (SIPRI), <https://www.sipri.org/databases/armstransfers>

3.10.1 Raytheon's reply to the letter sent by PAX

Raytheon replied to our letter stating that it cannot comment on specific arms sales. In general terms, a company representative explained that the company has in place internal systems to ensure compliance with regulation applicable within the US, concerning doing business with foreign governments.⁶⁵

PAX and the Fair Pension Guide recommend Raytheon to develop policies to prevent that the company supplies military goods if the risk is significant that these goods will be used to violate human rights. A compliance policy with national legislation is not sufficient to avoid this risk. The criteria used in this report are an example of how to develop such policy.

3.11 Rheinmetall

Rheinmetall, headquartered in Germany, provides modules and systems for the automotive sector, as well as military and security technology. Products include military vehicles, vehicle protection, ammunition and naval protection amongst others.⁶⁶ The military products of Rheinmetall consist among others of armoured vehicles, turrets, air defence systems, ground robots and ammunition.⁶⁷

In the financial year ending 31 December 2018, Rheinmetall generated revenues through sales of US\$ 6.78 billion (€ 6.2 billion), resulting in an operating result of US\$ 538 million (€ 492 million) and a net income of US\$ 387 million (€ 354 million).⁶⁸ According to the SIPRI list of top 100 arms-producing companies of 2017, Rheinmetall ranked twenty-fifth with total arms sales of US\$3.4 billion (€3.1 billion), accounting for 51% of its total sales that year.⁶⁹

The involvement of Rheinmetall in controversial arms deals, in the period from January 2014 to December 2018, is summarized in Table 1725.

Table 25 Sales of military goods to states at risk 2014-2018 by Rheinmetall

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
China	AA gun	±400 GDF 35 mm	1997-2018	± 400
China	fire control radar	±200 Skyguard	1997-2018	± 200
Egypt	APC	±1280 Fahd	1986-2015	± 1280
Pakistan	portable SAM	±12 GDF 35mm	2016-17	± 12
Pakistan	fire control radar	±6 Skyguard	2016-17	± 6
Saudi Arabia	Air search radar	±26 X-TAR	2015-2016	± 26

Information (except company name) from the Stockholm International Peace Research Institute (SIPRI), <https://www.sipri.org/databases/armstransfers>

3.12 Rolls-Royce

Rolls-Royce, based in the United Kingdom, provides power supply systems such as engines for civil and military aviation, as well as other power systems.⁷⁰ The military products of Rolls-Royce consist among others of engines for fighter aircraft, land vehicles and warships.⁷¹

In the financial year ending 31 December 2018, Rolls-Royce generated revenues of US\$ 19.5 billion (€ 17.8 billion), resulting in a (underlying) operating result of US\$ 760 million (€ 695 million).⁷² According to the SIPRI list of top 100 arms-producing companies of 2017, Rolls-Royce ranked seventeenth with total arms sales of US\$4.4 billion (€4 billion), accounting for 23% of its total sales that year.⁷³

Rolls-Royce is actively involved in servicing its engines once they are in operation. For example, the company has staff on military airfields in Saudi Arabia, and states it 'supports the country's national defence forces'.⁷⁴

The involvement of Rolls-Royce in controversial arms deals, in the period from January 2014 to December 2018, is summarized in Table 1726.

Table 26 Sales of military goods to states at risk 2014-2018 by Rolls-Royce

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
Chad	turboprop	4 AE-2100	2014	± 4
China	naval diesel engines	±8+38 MTU-1163 & MTU-956	2013-16	8 + est 24
China	turbofan	±500 Spey	1998-2018	± 500
Colombia	diesel engine	16 MTU-1163	2012-14	± 16
Egypt	Diesel engine	12 MTU-595	2013-2015	± 12
Egypt	Diesel engine	4 MTU-595	2015	4
Egypt	Diesel engine	4 MTU-4000	2015	4
India	diesel engine	±155 MTU-838	2004-2014	± 155
India	turbofan	±4 BR-710	2015	± 4
India	diesel engine	±118 MTU-838		
India	diesel engine	±100 MTU-881	2018	10
India	turbofan	6 AE-3007	2017-18	± 6
Iraq	Diesel engine	8 MTU-956	2017	8
Israel	diesel engine	±790 MTU-883	2002-2017	± 785
Nigeria	diesel engine	4 MTU-4000	2014-16	4
Turkey	Turboshaft	±118 T-800	2014-2018	± 90
Turkey	Diesel engine	±70 MTU-881	2013-2018	± 52
Turkey	Diesel engine	4+8 MTU-595	2018	2
Turkmenistan	diesel engine	12 MTU-4000	2015-17	± 12
UAE	Diesel engine	±24 MTU-595	2011-2016	24
UAE	Diesel engine	±24 MTU-2000	2013-2015	est 24
UAE	Turbofan	4 BR-710	2018	2

Information (except company name) from the Stockholm International Peace Research Institute (SIPRI), <https://www.sipri.org/databases/armstransfers>

3.12.1 Rolls-Royce’s reply to the letter sent by PAX

Rolls-Royce replied to the letter sent by PAX. In this letter, a company representative makes the following points:

- *“We would like to reiterate our commitment to maintaining the highest ethical standards, and to maintaining and improving global policies and processes to avoid any potential complicity in human rights violations. The potential impacts from the use of our products are not taken lightly, and we value the work of organisations such as PAX in holding businesses and governments to account.”*

- The company furthermore indicates it does not consider itself an arms company, but rather as an engineering company focused on power and propulsion systems.
- Third, the company explains that it relies on export control frameworks within the United Kingdom to ensure responsible arms trade. Key reasons why the company relies on this framework listed in the letter are:
 - There is not always a relationship with the end-customer
 - There is no access to the same level of information available to governments
 - It's the responsibility of elected government officials to determine whether or not to do business with other nation's governments
 - *"However, we do not accept the allegation that the decision of state officials is accepted uncritically and will raise questions and challenge when appropriate."*
- The representative states that Rolls-Royce is involved in supporting the Arms Trade Treaty and works with government and NGOs to promote responsible arms trade.^[i]

In response to the comments made by Rolls-Royce, PAX reiterates the following:

- While the power and propulsion systems Rolls-Royce makes are not lethal weapons on their own, they do form a crucial component of lethal weapon systems.
- While Rolls-Royce indicates there is not always a relationship with the end-customer, it states that it is actively involved in ongoing servicing of the engines Rolls-Royce has supplied. Saudi Arabia and the United Arab Emirates are examples of such ongoing relationships.
- PAX and the Fair Pension Guide recommend Rolls-Royce to develop policies to prevent that the company supplies military goods (including propulsion systems) if the risk is significant that these goods will be used to violate human rights or international humanitarian law. The criteria used in this report are an example of how to develop such policy.

3.13 Saab

Saab, based in Sweden, serves the global market with products, services and solutions from military defense to civil security.⁷⁵ The military products of Saab consist among others of fighter jets, missile systems and warships.⁷⁶

In the financial year ending 31 December 2018, Saab reported sales of almost €2,9 billion, resulting in an operating income of € 211 million and a net profit of € 127 million.⁷⁷ According to the SIPRI list of top 100 arms-producing companies of 2017, Saab ranked thirty-sixth with total arms sales of US\$2,67 billion (€2,6 billion), accounting for 84% of its total sales that year.⁷⁸

The involvement of Saab in controversial arms deals, in the period from January 2014 to December 2018, is summarized in Table 27.

Table 27 Sales of military goods to states at risk 2014-2018 by Saab

Recipient	Weapon description	Quantity orderd and designation	Years delivery	number delivered
Azerbaijan	Trainer aircraft	10 MFI-17 Supporter	2018	±10
Pakistan	portable SAM	RBS-70	1988-2017	±1475
Saudi Arabia	AEW&C ac	2 Saab-2000 AEW	2014	2
UAE	Air search radar	6 Giraffe AMB	2011-2016	6

Recipient	Weapon description	Quantity ordered and designation	Years delivery	number delivered
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Information (except company name) from the Stockholm International Peace Research Institute (SIPRI), <https://www.sipri.org/databases/armstransfers>

3.14 Textron

Textron is a US-based company engaged in aircraft, military, industrial and finance businesses. Military-related business sections include Textron Systems and Bell Helicopter.⁷⁹ The military products of Textron consist among others of air, land and sea vehicles, unmanned systems, small arms and missiles.⁸⁰

In the financial year ending 31 December 2018, Textron generated revenues of US\$ 14.0 billion (€ 12.4 billion), resulting in an operating income of US\$ 845 million (€ 750 million) and a net income of US\$ 1.2 billion (€ 1.06 billion).⁸¹ According to the SIPRI list of top 100 arms-producing companies of 2017, Textron ranked twentieth with total arms sales of US\$4,1 billion (€3,7 billion), accounting for 29% of its total sales that year.⁸²

The involvement of Textron in controversial arms deals, in the period from January 2014 to December 2018, is summarized in Table 1728.

Table 28 Sales of military goods to states at risk 2014-2018 by Textron

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
Afghanistan	Armoured security vehicle	71 ASV-150/M-1117 Guardian	2014	± 71
Afghanistan	Armoured security vehicle	±136 ASV-150/M-1117 Guardian	2013-2014	± 136
Afghanistan	Armoured security vehicle	135 ASV-150/M-1117 Guardian	2014-2015	± 135
Afghanistan	Armoured security vehicle	55 ASV-150/M-1117 Guardian	2015	55
Afghanistan	Light transport ac	±7 Cessna-208 Caravan	2018	± 2
Cameroon	light transport ac	2 Cessna-208 Caravan	2018	2
Chad	light transport ac	±2 Cessna-208 Caravan	2017	2
Colombia	APC	28+2 ASV-150/M-1117	2013-2014 + 2016	± 28 +2
Colombia	helicopter	4 Bell-412	2013-2014	± 4
Colombia	APC turret/RWS	12 Textron turret	2014	± 12
Colombia	light transport ac	±1 Cessna-208 Caravan	2017	± 1
India	guided bomb	512 CBU-97 SFW	2013-2017	± 512
Iraq	AGS aircraft	1 King Air-350 ISR	2016	1
Iraq	Light helicopter	16 Bell-407	2015	16
Iraq	APC	60 ASV-150/M-1117	2016	± 60
Lebanon	Light transport ac	1 Cessna-208 Caravan	2016	1
Lebanon	helicopter	±18 Bell-205/UH-1 Huey-2	2016-2017	± 6

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
Mauritania	light transport ac	2 Cessna-208 Caravan	2014	2
Niger	light transport ac	2 Cessna-208 Caravan	2015	2
Nigeria	light transport ac	3 King Air	2014	3
Pakistan	light transport ac	7 Cessna-208 Caravan	2015-2016	7
Pakistan	light ac	7 Cessna-U206	2017	4
Pakistan	AGS aircraft	2 King Air-350 ISR	2013-2018	± 2
Philippines	helicopter	±7 Bell-205/UH-1H	2014	± 7
Philippines	helicopter	±6 Bell-412	2015	± 6
Philippines	light transport ac	±2 Cessna-208 Caravan	2017	2
Saudi Arabia	light transport ac	±9 King Air-350	2013-2014	± 9
Saudi Arabia	AGS aircraft	4 King Air-350 ISR	2015-2016	± 4
Saudi Arabia	Guided bomb	±1300 CBU-97 SFW	2014-2015	± 1300
UAE	Light helicopter	30 Bell-407	2014-2016	± 30
Uganda	helicopter	5 Bell-205/UH-1 Huey-2	2016	5
Uganda	light transport ac	2 Cessna-208 Caravan	2014	2
Yemen	AGS aircraft	±1 King Air-350 ISR	2015	± 1

Information (except company name) from the Stockholm International Peace Research Institute (SIPRI), <https://www.sipri.org/databases/armstransfers>

3.15 Thales

Thales is a European company engaged in aerospace, defence, ground transportation, security and space.⁸³ The French state (25.7%) and aircraft manufacturer Dassault Aviation (24.7%) are the main shareholders of Thales.⁸⁴ The military products of Thales consist among others of communications, command and control systems, and combat systems for air, land and naval systems.⁸⁵

In the financial year ending 31 December 2018, Thales generated revenues of € 15.9 billion, resulting in an operating income of € 1.65 billion and a net income of € 1.17 billion.⁸⁶ According to the SIPRI list of top 100 arms-producing companies of 2017, Thales ranked eighth with total arms sales of US\$9 billion (€8,0 billion), accounting for 51% of its total sales that year.⁸⁷

The involvement of Thales in controversial arms deals, in the period from January 2014 to December 2018, is summarized in Table 29.

Table 29 Sales of military goods to states at risk 2014-2018 by Thales

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
Colombia	fire control and radar systems	4+4+4 Mirador+SMART+STING	2012-2014	± 4+4+4
Egypt	Air search radar	3 MRR-3D	2013-2015	3
Egypt	Air search radar	1 MRR-3D	2015	1
Egypt	Sea search radar	3 Scout	2013-2015	3

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
Egypt	Fire control radar	3 STING	2013-2015	3
Egypt	Sea search radar	1 Scout	2015	1
Egypt	Fire control radar	1 STING	2015	1
Egypt	Air search radar	4 SMART	2017	1
Egypt	Air search radar	1 SMART	2018	± 1
Egypt	Fire control radar	4 STING	2017	1
Egypt	Aircraft EO system	±12 TALIOS	2016-2018	± 12
India	air search radar	19 GS-100	2010-2016	± 19
India	air search radar	7 LW-08	2014-2016	3
Saudi Arabia	Arty locating radar	±2 COBRA	2017-2018	± 3
Saudi Arabia	Aircraft EO system	±60 Damocles	2009-2017	± 60
Saudi Arabia	Air search radar	±20 Ground Master-60	2013-2015	± 20
Saudi Arabia	ASW sonar	±10 FLASH	2018	± 5
Turkey	MP aircraft radar	15 Ocean Master	2013-2014	± 9
Turkey	Fire control radar	2 STING	2017	1
Turkey	Air search radar	2 SMART	2017	2
Turkey	Air search radar	2 SMART	2017	1
Turkmenistan	sea search radar	8 Scout	2013-2016	8
Turkmenistan	air/sea search radar	8 Variant	2013-2016	8
UAE	Air search radar	17 Ground Master-200	2015-2017	± 17

Information (except company name) from the Stockholm International Peace Research Institute (SIPRI), <https://www.sipri.org/databases/armstransfers>

3.16 United Technologies Corporation

United Technologies Corporation (UTC) is a US-based company in defence, aerospace and building that owns companies such as Carrier (air-conditioning), Pratt & Whitney (military and civilian aircraft engines), Collins Aerospace (aircraft components) and Otis (elevators and escalators). The military products of UTC consist among others of engines for fighter jets and other military aircraft.⁸⁸

UTC is actively involved in servicing its engines once they are in operation. For example, the company lists the Middle East Propulsion Company (MEPC) on its website as service centre for its military customers. The MEPC is in Saudi Arabia.⁸⁹

In the financial year ending 31 December 2018, UTC generated net sales of US\$ 66,5 billion (€ 59,5 billion), resulting in a net income of US\$ 5,7 billion (€ 5.1 billion).⁹⁰ According to the SIPRI list of top 100 arms-producing companies of 2017, UTC ranked eleventh with total arms sales of US\$7,8 billion (€ 7,0 billion), accounting for 13% of its total sales that year.⁹¹

In October 2019, the shareholders of UTC and Raytheon approved a merger between UTC’s aerospace business with Raytheon. The companies indicated that the new company, Raytheon Technologies Corporation would create a “premier systems provider with advanced technologies to address rapidly growing segments within aerospace and defence.” The merger will finalize mid-2020, pending approval by regulatory bodies in the US. To complete the deal, UTC would divest from its business Otis (elevators, escalators, etc.) and Carrier (heating, security).⁹²

The involvement of UTC in controversial arms deals, in the period from January 2014 to December 2018, is summarized in Table 170.

Table 30 Sales of military goods to states at risk 2014-2018 by UTC

Recipient	Weapon description	Quantity ordered and designation	Years delivery	Number delivered
Afghanistan	Turboprop/turboshaft	±26 PT6A-68/3	2016-2018	± 26
Egypt	Turboprop/turboshaft	±12+16+8 PW100	2013-2016	± 36
India	Turboprop/turboshaft	±75+10 PT6	2013-?	± 75
Iraq	Aircraft recce system	4 DB-110	2015-2016	± 4
Lebanon	Turboprop/turboshaft	±8 PT6	2017-2018	± 8
Mali	Turboprop/turboshaft	±4 PT6	2018	4
Mali	Turboprop/turboshaft	2 PW100	2016	2
Philippines	Turboprop/turboshaft	±6 PW100	2015	± 6
Saudi Arabia	Turboprop/turboshaft	±8 PW100	2015-2018	8
Saudi Arabia	Turboprop/turboshaft	±55 PT6	2014-2016	± 55
Saudi Arabia	Aircraft recce system	±10 DB-110	2014-2016	± 10
Turkey	Aircraft recce system	4 DB-110	2014	± 4
UAE	Turboprop/turboshaft	±24 PT6	2015-2017	± 24

Information (except company name) from the Stockholm International Peace Research Institute (SIPRI), <https://www.sipri.org/databases/armstransfers>

3.17 Overview

Table 3131 provides an overview of which companies supplied which states with military goods, based on the data from SIPRI’s arms transfer database for the time frame 2014-2018.

Table 31 Overview of countries supplied by companies

	Airbus	Boeing	General Electric	Honeywell	Leonardo	Lockheed Martin	Northrop Grumman	Saab	Raytheon	Rheinmetall	Rolls-Royce	Textron	Thales	UTC
Afghanistan		x							x			x		x
Azerbaijan								x						
Bahrain					x	x			x					
Cameroon		x										x		
Chad					x						x	x		
China	x									x	x			
Colombia					x		x		x		x	x	x	
Egypt	x	x	x		x	x			x	x	x		x	x
Equatorial Guinea														
India	x	x	x	x	x	x			x		x	x	x	x
Iraq		x				x	x		x		x	x		x
Israël		x		x	x	x					x			
Laos	x													
Lebanon	x				x	x			x			x		x
Mali	x													x
Mauritania					x							x		
Niger												x		
Nigeria												x		
Pakistan	x	x			x	x	x	x	x	x	x	x		
Philippines	x	x	x		x			x	x			x		x
Saudi Arabia	x	x	x		x	x		x	x	x	x	x	x	x
Turkey	x	x	x	x	x	x	x		x		x		x	x
Turkmenistan	x				x						x		x	
UAE	x	x			x	x		x	x		x		x	x
Uganda												x		

Chapter 4 Investments by Dutch pension funds in the selected companies

This chapter identifies which Dutch pension funds have investments in the companies listed in chapter 3, for arms sales to states at risk. If investments were found for a pension fund, a table is presented that summarizes these investments. Investments lower than 100,000 euro were not included in the report. The financial research was carried out by Profundo, which retrieved data from the overviews of share- and bondholding the pension funds publish. One fund does not publish any information on their investments, for this fund the investments of their asset manager were retrieved from the Thomson Reuters Eikon database.

Paragraph 4.1 provides a description of the research process. Table 41 provides a summary of the investments by Dutch pension funds in the selected companies. The paragraphs 4.2-4.11 provide a summary of research finding per pension fund. For those pension funds that responded to the questions asked (see 4.1) in the framework of this study, their responses are included in the relevant section. Since the recommendations are very similar for all 10 pension funds, no specific recommendations are provided. All recommendations are listed in Chapter 5.

4.1 Research process

The pension funds involved in this study were given the opportunity to comment before publication. They were asked to the following questions:

1. Is the information concerning financial links with the selected companies correct?
2. Has your pension fund taken any action towards the selected companies, either through (collective) engagement, through voting on shareholder meetings or by reducing investments in the company, to persuade the company in question to change its policy and practice around the supply of military goods to the countries listed in this report?
3. If yes, could you provide more information about the actions your pension fund took, specifically:
 - a. The goals of the action
 - b. The results so far
 - c. The timeframe you have established for your actions
4. How does the action your pension fund took relate to the policy of your pension fund?
5. Will you take measures based on this study?

If the pension fund replied to the questions, the response is presented below.

4.2 Responsible investment policies and arms trade

The Fair Pension Guide published an overview of the Responsible Investment policies of the ten pension funds in this study in March 2019. This study analyzed which policies the pension funds apply to their investments to deal with various risks around human rights, environmental damage, corruption, and other themes. The study scrutinized publicly available policy only.

This 'policy analysis' also assessed policies dealing with exposure to risks of human rights violations through investments in the arms sector. The study showed that most funds have policies on the exclusion of chemical, biological and nuclear weapons. For cluster munitions, Dutch law prohibits investing in companies involved their production. However, with one exception, none of the assessed funds had any policy on investments in arms trade, which includes all weapons, and not only controversial weapons. The only fund with policy on this issue is PME, which wants to exclude companies that supply weapons to states that are under a UN or EU arms embargo.⁹³

4.3 ABP

Table 32 shows the investments found for ABP.

Table 32 Investment by ABP in the arms companies

Group	Ultimate Parent Country	Closing / Issue / Filing Date	Type of financing	Per Investor Value (in mln EUR)
General Electric	United States	31-3-2019	Bondholding	272
General Electric	United States	31-3-2019	Shareholding	102
United Technologies Corporation	United States	31-3-2019	Bondholding	83
United Technologies Corporation	United States	31-3-2019	Shareholding	112
Total				569.5

Sources:

ABP (2019), Beursgenoteerde beleggingen ABP per 31 maart 2019, retrieved in September 2019

ABP (2019), Overzicht bedrijfsobligaties ABP per 31 maart 2019, retrieved in September 2019

4.3.1 ABP response to the findings

ABP responded to the findings, the full response can be found in box 1. The recommended update of the figures was not possible as ABP filed its response too late to change data in this report. The response itself could still be incorporated. Based on this response, the Fair Pension Guide includes the following remarks:

- Despite the criteria used by ABP for ‘inclusion’, investments were made in companies that are linked to violations of international humanitarian law. The companies ABP invests in have supplied Saudi Arabia with jet engines, and continued to do so despite mounting evidence that Saudi Arabia was violating international humanitarian law in its involvement in the war in Yemen.
- ABP does not comment on specific engagement with any of the two companies. Its overview of engagements in 2018 does state that engagement took place with United Technologies Corporation. ABP publishes an overview of its engagements with investee companies. One of the companies in this report in which ABP invests, United Technologies Corporation, was engaged by the pension fund in 2018. ABP discloses on which issue it engages with companies, but discloses only the general theme: human rights, corruption, environment, child labour, occupational safety, and governance, or ‘other’. For UTC, ABP indicates it engaged on ‘other’, it is thus unclear what exactly was the reason for ABP to engage with UTC.⁹⁴
- The Fair Pension Guide hopes that this report, which ABP considers ‘useful input for our mapping and screening’ will in fact be used in engagement or investment decisions in the future.

Box 1: ABP response to the findings

1. Is the information concerning financial links with the selected companies correct?
 - *The PAX report is based on ABP's first-quarter holdings. In the meantime, ABP's holding per end of June 2019 have been published. We recommend you use the latest information.*
 - *In the overview of Q1 holdings used by PAX, Raytheon features on the list of '<0.5mln EUR' holdings, whereas in fact Raytheon has been excluded since 2018. For a technical reason, companies to which ABP has an exposure of nil appeared in the Q1 overview. This has been remedied in the Q2 holdings list. Since inception of the revised exclusion policy on nuclear weapons, we have not had any exposure to Raytheon.*
 - *The overview of Q2 holdings shows that, in addition to General Electric and United Technologies Corp, we have investments in Rolls-Royce (which also features in the PAX research).*
2. Has your pension fund taken any action towards the selected companies, either through (collective) engagement, through voting on shareholder meetings or by reducing investments in the company, to persuade the company in question to change its policy and practice around the supply of military goods to the countries listed in this report?
 - *We have applied our inclusion policy to these companies (as we do to all companies of which we hold stocks or bonds). This means that we have checked whether the companies have a policy for the agreements the United Nations has made regarding responsible business practices (the UN Global Compact). This concerns universal principles on human rights, labor, the environment and anti-corruption. We also check whether the companies fulfill these agreements in practice. If a company satisfies our return, risk and cost criteria, but lags in the area of responsible business practices, the portfolio manager can invest in it, but only if he expects he can get the company to improve its ESG performance. Companies that are active in contested areas or in countries where human rights are violated, are expected to show that they are aware of the risks and are willing to take action. One of our requirements is that these companies have an elaborate human right policy.*
3. If yes, could you provide more information about the actions your pension fund took, specifically:
 - 3a. The goals of the action
 - *We ask companies that are active in contested areas or countries where human rights are violated to show that they are aware of the risks and are willing to take actions. We require these companies to have an elaborate human rights policy. Our objective is to make sure the company is able to deal effectively with the risks of becoming involved in human rights violations.*
 - 3b. The results so far
 - *We do not comment on company specific engagements.*
 - 3c. The timeframe you have established for your actions
 - *The timeframe of engagement varies, depending on the nature of the objectives and the company's stance and responsiveness.*
4. How does the action your pension fund took relate to the policy of your pension fund?
 - *The assessment of topics such as controversial arms trade and exposure to high-risk countries is part of our inclusion policy.*
5. Will you take measures based on this study?
 - *The selection of countries in the report highly overlaps with our definition of geographies that require more scrutiny from the companies we invest in. The report is useful input for our mapping and screening and provides information on specific arms (or related materials) deliveries of the companies in scope.*

4.4 bpfBouw

Table 33 shows the investments found for bpfBouw. This table contains an extra column with updated figures on investments. At the time of the financial research, only Q1 figures of bpfBouw were published. bpfBouw indicated in its response (see Box) that its Q2 figures had become available in the meantime. These are included in the last column of Table 28.

Table 33 Investments by bpfBouw in the arms companies

Group	Ultimate Parent Country	Closing / Issue / Filing Date	Type of financing	Per Investor Value (in mln EUR) Q1	Updated per investor value (in mln EUR) Q2
General Electric	United States	31-3-2019	Bondholding	42.4	47.0
United Technologies Corporation	United States	31-3-2019	Bondholding	13.0	31.0
General Electric	United States	31-3-2019	Shareholding	10.3	9.7
United Technologies Corporation	United States	31-3-2019	Shareholding	11.3	11.3
Total				77.0	99.0

Sources:

bpfBouw (2019), *Overzicht bedrijfsobligaties bpfBOUW per 31 maart 2019*, retrieved on 29 August 2019 and *Overzicht bedrijfsobligaties bpfBOUW per 30 juni 2019*, retrieved on 6 November 2019

bpfBouw (2019), *Aandelenportefeuille bpfBOUW per 31 maart 2019*, retrieved on 29 August 2019 and *Aandelenportefeuille bpfBOUW per 30 juni 2019*, retrieved on 6 november 2019

4.4.1 bpfBouw response to the findings

bpfBouw responded to the findings, the full response can be found in box 2. The recommended update of the figures can be found in Table 33. The investments by bpfBouw in Rolls-Royce to which the reply of the fund refers, were below the threshold applied in this study. Based on this response, the Fair Pension Guide includes the following remarks:

- Despite the criteria used by bpfBouw for 'inclusion', investments were made in companies that are linked to violations of international humanitarian law. Both companies bpfBouw invests in have supplied Saudi Arabia with jet engines, and continued to do so despite mounting evidence that Saudi Arabia was violating international humanitarian law in its involvement in the war in Yemen.
- bpfBouw does not comment on specific engagement with any of the two companies. Its overview of engagements in 2018 does state that engagement took place with United Technologies

Corporation. The information provided is identical to the information provided by ABP (see 4.3.1): engagement took place on a non-disclosed issue.

- The Fair Pension Guide hopes that this report, which bpfBouw considers ‘useful input for our mapping and screening’ will in fact be used in engagement or investment decisions in the future.

Box 2: bpfBouw response to the findings

1. *Is the information concerning financial links with the selected companies correct?*
 - The PAX report is based on bpfBOUW’s first-quarter holdings. In the meantime, bpfBOUW holding per end of June 2019 have been published. We recommend you use the latest information.
 - In the overview of Q1 holdings used by PAX, Raytheon features on the list of ‘0 mln EUR’ holdings, whereas in fact Raytheon has been excluded since 2018. For a technical reason, companies to which bpfBOUW has an exposure of nil appeared in the Q1 overview. This has been remedied in the Q2 holdings list. Since inception of the revised exclusion policy on nuclear weapons, we have not had any exposure to Raytheon.
 - The overview of Q2 holdings shows that, in addition to General Electric and United Technologies Corp, we have investments in Rolls-Royce (which also features in the PAX research).
2. *Has your pension fund taken any action towards the selected companies, either through (collective) engagement, through voting on shareholder meetings or by reducing investments in the company, to persuade the company in question to change its policy and practice around the supply of military goods to the countries listed in this report?*
 - We have applied our inclusion policy to these companies (as we do to all companies of which we hold stocks or bonds). This means that we have checked whether the companies have a policy for the agreements the United Nations has made regarding responsible business practices (the UN Global Compact). This concerns universal principles on human rights, labor, the environment and anti-corruption. We also check whether the companies fulfill these agreements in practice. If a company satisfies our return, risk and cost criteria, but lags in the area of responsible business practices, the portfolio manager can invest in it, but only if he expects he can get the company to improve its ESG performance. Companies that are active in contested areas or in countries where human rights are violated, are expected to show that they are aware of the risks and are willing to take action. One of our requirements is that these companies have an elaborate human right policy.
3. *If yes, could you provide more information about the actions your pension fund took, specifically:*
 - 3a. *The goals of the action*
 - We ask companies that are active in contested areas or countries where human rights are violated to show that they are aware of the risks and are willing to take actions. We require these companies to have an elaborate human rights policy. Our objective is to make sure the company is able to deal effectively with the risks of becoming involved in human rights violations.
 - 3b. *The results so far*
 - We do not comment on company specific engagements.
 - 3c. *The timeframe you have established for your actions*
 - The timeframe of engagement varies, depending on the nature of the objectives and the company’s stance and responsiveness.
4. *How does the action your pension fund took relate to the policy of your pension fund?*
 - The assessment of topics such as controversial arms trade and exposure to high-risk countries is part of our inclusion policy.
5. *Will you take measures based on this study?*
 - The selection of countries in the report highly overlaps with our definition of geographies that require more scrutiny from the companies we invest in. The report is useful input for our mapping and screening and provides information on specific arms (or related materials) deliveries of the companies in scope.

4.5 BPL Pensioen (Landbouw)

Table 3434 shows the investments found for BPL Pensioen.

Table 34 Investments by BPL Pensioen in the arms companies

Group	Ultimate Parent Country	Closing / Issue / Filing Date	Type of financing	Per Investor Value (in mln EUR)
General Electric	United States	31-12-2018	Bondholding	39.1
Total				39.1

Bronnen:

BPL Pensioen (2019), Overzicht beleggingen december 2018, retrieved on 29 August 2019.

BPL Pensioen, email conversation (for figures)

4.5.1 BPL Pensioen response to the findings

BPL Pensioen responded to the findings in this study, the response can be found in Box 3.

Box 3: BPL Pensioen response to the findings

1. *Is the information concerning financial links with the selected companies correct?*

Yes BPL Pensioen has investments in the selected company (General Electric).

BPL Pensioen's corporate bond portfolio had the following exposure on 30-9-2019:

ISIN	Security ID	Security name	Clean value PC	Issuer name
XS1612542826	GE.8750MAY25	General Electric Co .8750% 17/05/2025	15.279.575,04	General Electric Co
XS1169353254	GE.8000JAN22	Ge Capital Euro Funding .8000% 21/01/2022	5.639.570,16	General Electric Co
XS0954025267	GE2.250JUL20	GE Capital Euro Funding 2.250% 20/07/2020	12.284.888,00	General Electric Co
XS0350890470	GE6.025MAR38	GE Capital European Funding 6,025% 01/03/2038	2.902.729,75	General Electric Co
XS0453908377	GE5.375JAN20	GE Capital European Funding 5,375% 23/01/2020	8.132.080,00	General Electric Co

2. *Has your pension fund taken any action towards the selected companies, either through (collective) engagement, through voting on shareholder meetings or by reducing investments in the company, to persuade the company in question to change its policy and practice around the supply of military goods to the countries listed in this report?*

No. BPL Pensioen does not pursue a policy specifically aimed at the supply of military goods. This subject is therefore not specifically addressed in the BPL responsible investment policy instruments and no specific actions have been taken in the engagement or voting program.

Based on BPL Pensioen's human rights policy companies have been excluded in the past from the BPL Pensioen's portfolio because it was plausible that company products were used to suppress people and that the company had taken insufficient measures within its sphere of influence to mitigate or prevent this involvement.

Based on the information from our independent ESG data supplier, there is currently no reason to assume that General Electric has such involvement and that reducing investments is an appropriate measure.

3. *If yes, could you provide more information about the actions your pension fund took, specifically:*

- a. *The goals of the action*
- b. *The results so far*
- c. *The timeframe you have established for your actions*

See question above.

4. *How does the action your pension fund took relate to the policy of your pension fund?*

BPL Pensioen pursues a policy on the production and distribution of controversial weapons and not a policy specifically aimed at the supply of military goods.

Not taking specific actions is therefore fully in line with BPL Pensioen's current policy.

5. *Will you take measures based on this study?*

In the context of the continuous evaluation of the responsible investment policy, including the exclusion policy, a closer look is being taken at expanding the controversial weapons policy with criteria regarding arms trade. However, this exploration has already been initiated at an earlier stage and is independent of the findings from this study.

4.6 Pensioenfonds Detailhandel

Table 355 shows the investments found for Pensioenfonds Detailhandel. Pensioenfonds Detailhandel disclosed the value of its investments for this study.

Table 35 Investments by Pensioenfonds Detailhandel in the arms companies

Group	Ultimate Parent Country	Closing / Issue / Filing Date	Type of financing	Per Investor Value (in mln EUR)
Airbus	Netherlands	30-6-2019	Share- and bondholdings	14.3
Boeing	United States	30-6-2019	Shareholding	5.3
General Electric	United States	30-6-2019	Bondholding	29.1
Honeywell	United States	30-6-2019	Share- and bondholdings	15.2
Leonardo	Italy	30-6-2019	Share- and bondholdings	1.8
Lockheed Martin	United States	30-6-2019	Shareholding	30.8
Raytheon	United States	30-6-2019	Shareholding	10.5
Rolls-Royce	United Kingdom	30-6-2019	Share- and bondholdings	4.0
Saab	Sweden	30-6-2019	Shareholding	0.4
Textron	United States	30-6-2019	Shareholding	0.8
Thales	France	30-6-2019	Bondholding	1.0
United Technologies Corporation	United States	30-6-2019	Share- and bondholdings	11.0
Total				124,2

Sources: Pensioenfonds Detailhandel (2019), Beleggingen Pensioenfonds Detailhandel per 30 juni 2019, retrieved on 29 August 2019.

And: Email conversation between Pensioenfonds Detailhandel and PAX.

4.6.1 Pensioenfonds Detailhandel response to the findings

Pensioenfonds Detailhandel provided the value of its investments, but no response to the questions asked.

4.7 PFZW (Pensioenfonds Zorg en Welzijn)

Table 36 shows the investments found for Pensioenfonds Zorg en Welzijn.

Table 36 Investments by PFZW in the arms companies

	Ultimate Parent Country	Closing / Issue / Filing Date	Type of financing	Per Investor Value (in mln EUR)
General Electric	United States	31-12-2018	Bondholding	23,37
General Electric	United States	31-12-2018	Shareholding	42,09
Rolls-Royce	United Kingdom	31-12-2018	Shareholding	11,93
Rolls-Royce	United Kingdom	31-12-2018	Shareholding	0,07
Saab	Sweden	31-12-2018	Shareholding	1,35
United Technologies Corporation	United States	31-12-2018	Shareholding	76,76
Total:				155,57

Bronnen:

PFZW (2018), *Transparantielijst Obligaties per 31-12-2018*, retrieved on 29 August 2019.

PFZW (2018), *Transparantielijst Aandelen per 31-12-2018*, retrieved on 29 August 2019.

4.7.1 PFZW response to the findings

PFZW did not respond to the findings of this study.

4.8 Pensioenfonds Horeca en Catering

Table 37 shows the investments found for Pensioenfonds Horeca en Catering.

Table 37 Investments by Pensioenfonds Horeca en Catering in the arms companies

Group	Ultimate Parent Country	Closing / Issue / Filing Date	Type of financing	Per Investor Value (in mln EUR)
General Electric	United States	31-3-2019	Shareholding	6.4
Rheinmetall	Germany	31-3-2019	Shareholding	0.3

Group	Ultimate Parent Country	Closing / Issue / Filing Date	Type of financing	Per Investor Value (in mln EUR)
Saab	Sweden	31-3-2019	Shareholding	0.2
Total				6.9

Bronnen: Pensioenfonds Horeca & Catering (2019), Transparantielijst aandelen per 31 maart 2019, retrieved on 29-8-2019.

4.8.1 Pensioenfonds Horeca en Catering response to the findings

Pensioenfonds Horeca en Catering responded to the findings in this study, the response can be found in Box 4.

Box 4: response by Pensioenfonds Horeca en Catering

1. *Is the information concerning financial links with the selected companies correct?*

Yes. This information is correct.

2. *Has your pension fund taken any action towards the selected companies, either through (collective) engagement, through voting on shareholder meetings or by reducing investments in the company, to persuade the company in question to change its policy and practice around the supply of military goods to the countries listed in this report?*

No. We have not taken any action towards the three selected companies.

3. *If yes, could you provide more information about the actions your pension fund took, specifically:*

- a. *The goals of the action*
- b. *The results so far*
- c. *The timeframe you have established for your actions*

4. *How does the action your pension fund took relate to the policy of your pension fund?*

Pensioenfonds Horeca & Catering excludes companies that violate universal principles on human rights, labour, environment and anti-corruption: the UN Global Compact Principles. Furthermore we exclude tobacco producing companies and companies involved in controversial weapons. We exclude a large number of companies based on their involvement in controversial weapons and have excluded ten out of the thirteen companies identified in this study. The three selected companies have not been identified by our fund as being involved in controversial weapons or in violation of UN Global Compact Principles and are therefore not excluded.

5. *Will you take measures based on this study?*

Studies like these help us in further developing our responsible investment policy. We will use the recommendations in this study when evaluating our policy to see if any changes should be made.

4.9 PME (Pensioenfonds van de Metalektro)

Table 38 shows the investments found for PME. In its response to the findings, PME indicated that a number of shareholdings had been removed from its portfolio in the meantime. These shareholdings are struck out in the table below. The decrease in investments is reflected in the overview in table 26 as well.

Table 38 Investments by PME in the arms companies

Group	Ultimate Parent Country	Closing / Issue / Filing Date	Type of financing	Per Investor Value (in mln EUR)
Airbus	Netherlands	31-12-2018	Bondholding	2.3
Airbus	Netherlands	31-12-2018	Shareholding	15
Boeing	United States	31-12-2018	Bondholding	4.4
Boeing	United States	31-12-2018	Shareholding	45
General Electric	United States	31-12-2018	Bondholding	37.1
General Electric	United States	31-12-2018	Shareholding	26
Honeywell	United States	31-12-2018	Bondholding	8.3
Honeywell	United States	31-12-2018	Shareholding	34.6
Leonardo	Italy	31-12-2018	Shareholding	1
Lockheed Martin	United States	31-12-2018	Shareholding	23.6
Northrop Grumman	United States	31-12-2018	Shareholding	14.2
Raytheon	United States	31-12-2018	Shareholding	16.2
Rheinmetall	Germany	31-12-2018	Shareholding	0.16
Rolls-Royce	United Kingdom	31-12-2018	Bondholding	6.4
Rolls-Royce	United Kingdom	31-12-2018	Shareholding	5.1
Saab	Sweden	31-12-2018	Shareholding	0.4
Textron	United States	31-12-2018	Shareholding	4
United Technologies Corporation	United States	31-12-2018	Bondholding	16.6
United Technologies Corporation	United States	31-12-2018	Shareholding	33.2
Total				293.3 202

Bronnen:

Pensioenfonds van de Metalektro (2018), Obligatieoverzicht per 31 December 2018, retrieved on 29-8-2019.

Pensioenfonds van de Metalektro (2018), Aandelenoverzicht per 31 December 2018, retrieved on 29-8-2019.

4.9.1 PME response to the findings

Box 5: response by Pensioenfonds PME

1. Is the information concerning financial links with the selected companies correct?

The information is no longer up to date. PME has changed its equity portfolio extensively since December 2018. We therefore currently no longer have shareholdings in Airbus, Boeing, General Electric, Leonardo, Rheinmetall, Saab and Textron.

2. Has your pension fund taken any action towards the selected companies, either through (collective) engagement, through voting on shareholder meetings or by reducing investments in the company, to persuade the company in question to change its policy and practice around the supply of military goods to the countries listed in this report?

Yes, we have taken action by two means:

- *We have changed our equity portfolio extensively, therefore no longer have equity holdings in the 7 mentioned companies, this is already effectuated;*
- *We have evaluated our weapon-exclusion policy in 2019, and have just been granted Board approval for a renewed policy that excludes all companies involved in the production and distribution of nuclear weapons, and fire arms for civil use. As this policy still needs to be implemented, we cannot provide specifics on the expected changes (this is market-sensitive information). However, we would appreciate it when our broadened exclusion policy on weapons could be taken into account for this research.*

These two actions come from performing due diligence on ESG-risks on the portfolio after identifying our previous policy on weapon exclusion was no longer sufficient.

3. If yes, could you provide more information about the actions your pension fund took, specifically:
 - a. The goals of the action
 - b. The results so far
 - c. The timeframe you have established for your actions

We would kindly refer you to question 2.

4. How does the action your pension fund took relate to the policy of your pension fund?

PME chooses to make responsible returns. We are aware of the responsibility we have as an investor, both to our beneficiaries- in making sound returns to ensure they can enjoy their pensions in a world worth living in - but also responsibility for the impact our investments have on the world, both positive and negative.

We believe responsible investing and acting as an active shareholder for the companies we invest in, can contribute to a sustainable and stable society, therefore, also contributing to sound returns. These beliefs underpin our investment policy: it is part of our investment principles that translate into our responsible investment policy.

For each of the topics PME finds important, e.g. because it poses severe risk to the society, or our beneficiaries deem it relevant, PME tries to match the right action to it. For companies that are involved in controversial arms trade, PME believes exclusion is the appropriate measure.

PME wants to be an active shareholder for the companies it invests in. Yet, for some companies, engagement or voting are not the right instruments, simply because we principally disagree with their business involvement or products. Therefore, exclusion or negative screening can be used to make sure our portfolio's match our mission and vision as a pension funds.

5. Will you take measures based on this study?

We will gladly review the specific recommendations PAX and ProFundo make for PME. Those were not yet available at the time of writing.

We believe that by taking the two abovementioned measures, mostly in updating our exclusion policy on weapons, which will effectuate later in 2019 and early 2020, PME will have a policy on controversial arms and controversial arms trade that aligns with the preferences of our pension fund participants and society at large.

4.10 PMT (Pensioenfonds Metaal en Techniek)

No relevant investments were found for PMT. A 8.9 million euro investment listed on PMT’s disclosure files as shares of ‘General Electric Co’ were in fact investments in a subsidiary company that was out of the scope of this study.

4.10.1 PMT response to the findings

PMT responded to the findings of this study, its response is in box 6.

Box 6: response by Pensioenfonds PMT

Since December 2018, PMT no longer invests in controversial weapons. The € 9 in shares of General Electric (GE) concern Baker Hughes A., a subsidiary of GE that is active in oil and gas, and which GE is currently divesting from. Because of market- and price sensitivity we publish our shareholding portfolios with a half year delay, which is why this is visible only now.

The exclusion of controversial weapons is the consequence of the introduction in December 2018 of the new PMT Strategic Shareholding Portfolio, in which we screen potential companies with financial and ESG criteria. One of the consequences of the criteria is that PMT no longer invests in tobacco, fur, and porn industries, and no longer invests in nuclear and controversial weapons. PMT is the first pension fund in the Netherlands that applies responsible investment in its shareholding portfolio for developed countries at this scale. Because of this change, we no longer have any shareholdings in the companies mentioned in the study.

4.11 StiPP

Table 399 shows the investments found for StiPP. StiPP does not disclose its investments. Table 34 therefore lists the investments of StiPP’s asset manager, Kempen Capital Management which are considered an indication for the investments of StiPP. Since StiPP would not disclose its investments in the arms companies

Table 39 Investments by StiPP in the arms companies

Group	Ultimate Parent Country	Closing / Issue / Filing Date	Type of financing	Per Investor Value (in mln EUR)	Investor Parent	Investment attributed to StiPP
General Electric	United States	31-03-2019	Bondholding	12,23	StiPP (Kempen Capital Management)	
General Electric	United States	31-03-2019	Bondholding	5,48	StiPP (Kempen Capital Management)	
General Electric	United States	31-03-2019	Bondholding	3,34	StiPP (Kempen Capital Management)	
General Electric	United States	31-03-2019	Bondholding	2,59	StiPP (Kempen Capital Management)	
General Electric	United States	30-06-2019	Bondholding	3,69	StiPP (Kempen Capital Management)	
General Electric	United States	30-06-2019	Bondholding	1,74	StiPP (Kempen Capital Management)	
General Electric	United States	30-06-2019	Bondholding	0,97	StiPP (Kempen Capital Management)	

Group	Ultimate Parent Country	Closing / Issue / Filing Date	Type of financing	Per Investor Value (in mln EUR)	Investor Parent	Investment attributed to StiPP
General Electric	United States	30-06-2019	Bondholding	0,86	StiPP (Kempen Capital Management)	
General Electric	United States	30-06-2019	Bondholding	0,44	StiPP (Kempen Capital Management)	
General Electric	United States	30-06-2019	Bondholding	0,20	StiPP (Kempen Capital Management)	
General Electric	United States	30-06-2019	Bondholding	0,10	StiPP (Kempen Capital Management)	
General Electric	United States	30-06-2019	Bondholding	0,10	StiPP (Kempen Capital Management)	
Leonardo	Italy	30-06-2019	Bondholding	2,00	StiPP (Kempen Capital Management)	
Leonardo	Italy	30-06-2019	Bondholding	0,50	StiPP (Kempen Capital Management)	
Leonardo	Italy	30-06-2019	Bondholding	0,30	StiPP (Kempen Capital Management)	
Raytheon	United States	30-06-2019	Shareholding	0,23	StiPP (Kempen Capital Management)	
Total				34,77		NDA

Bronnen: Thomson Reuters Eikon, Bondholdings and Thomson Reuters Eikon, Share ownership

4.11.1 StiPP response to the findings

StiPP did not disclose investments in the arms companies.

4.12 Pensioenfonds Vervoer

Table 40 shows the investments found for Pensioenfonds Vervoer.

Table 40 Investments by Pensioenfonds Vervoer in the arms companies

Group	Ultimate Parent Country	Closing / Issue / Filing Date	Type of financing	Per Investor Value (in mln EUR)
Airbus	Netherlands	30-6-2019	Shareholding	NDA
Boeing	United States	30-6-2019	Bondholding	NDA
Boeing	United States	30-6-2019	Shareholding	NDA

Group	Ultimate Parent Country	Closing / Issue / Filing Date	Type of financing	Per Investor Value (in mln EUR)
General Electric	United States	30-6-2019	Bondholding	NDA
General Electric	United States	30-6-2019	Shareholding	NDA
Honeywell	United States	30-6-2019	Bondholding	NDA
Honeywell	United States	30-6-2019	Shareholding	NDA
Lockheed Martin	United States	30-6-2019	Bondholding	NDA
Lockheed Martin	United States	30-6-2019	Shareholding	NDA
Raytheon	United States	30-6-2019	Shareholding	NDA
Rolls-Royce	United Kingdom	30-6-2019	Bondholding	NDA
Rolls-Royce	United Kingdom	30-6-2019	Shareholding	NDA
Textron	United States	30-6-2019	Shareholding	NDA
United Technologies Corporation	United States	30-6-2019	Bondholding	NDA
United Technologies Corporation	United States	30-6-2019	Shareholding	NDA
Total:				NDA

Sources:

Pensioenfonds Vervoer (2019), *Aandelen per 30-06-2019*, retrieved on 29-8-2019. Pensioenfonds Vervoer (2019), *Obligaties per 30-06-2019*, retrieved on 29-8-2019.

4.12.1 Pensioenfonds Vervoer response to the findings

Pensioenfonds Vervoer did not respond to a request to disclose investments in the arms companies, nor to the other questions asked.

4.13 Overview

Table 41 provides an overview of the findings in Chapter 4.

Table 41 Overview of investments by ten pension funds in the fourteen companies

	Airbus	Boeing	General Electric	Honeywell	Leonardo	Lockheed Martin	Northrop Grumman	Raytheon	Rheinmetall	Rolls-Royce	Saab	Textron	Thales	UTC	Total (in million €)
ABP			374											195	569
bpfBouw			56.7											42.3	99.0
BPL Pensioen (landbouw)			39.1												39.1
Pensioenfonds Detailhandel	14.3	5.3	29.1	15.2	1.8	30.8		10.5		4.0	0.4	0.8	1.0	11.0	124.2
PFZW			65.4							12.0	1.4			76.8	155.6
Pensioenfonds Horeca en Catering			6.4						0.3		0.2				6.9
PME	2.3	4.4	37.1	42.9		23.6	14.2	16.2		11.5				49.8	202
PMT															0
StiPP															NDA
Pensioenfonds Vervoer	X	X	X	X		X		X		X		X		X	NDA
Total	16.6	9.7	607.8	58.1	1.8	54.4	14.2	26.7	0.3	27.5	2.0	0.8	1.0	374.9	1,195.8

Chapter 5 Conclusions and recommendations

This report focused on the investments of ten Dutch pension funds in controversial arms trade.

5.1 Conclusions

The following conclusions stand out:

- Fifty countries should be considered ‘states at risk’, as the sale of military goods to these states is a risk for civilians: they face significant risks of violation of their human rights and / or international humanitarian law.
- Fourteen companies have supplied military goods (ammunition, jet fighters, tanks, vehicles, helicopters, engines, etcetera) to more than one of these fifty ‘states at risk’.
- Nine out of the ten pension funds in this study hold investments in one or more of these fourteen companies. Total investments amount to 1.072 million euro. This is without the undisclosed investments of three funds:
 - Pensioenfonds Vervoer did not disclose the value of its investments in nine of the fourteen companies;
 - StiPP did not disclose in which companies it is invested.
- PMT is the only pension fund that does not invest in any of the fourteen companies in this study.
- BPL Pensioen indicated it is already working on taking the issue of arms trade into account in policy development. bpfBouw, Pensioenfonds Horeca en Catering and PME indicated they would include the recommendations of this report in their considerations.

Table 42 Overview total investments per fund, in number of companies

	Total investments in the 15 arms companies (in million €)	Number of companies
ABP	569	2
bpfBouw	99.0	2
BPL Pensioen (landbouw)	39.1	1
Pensioenfonds Detailhandel	124.3	12
PFZW	155.6	4
Pensioenfonds Horeca en Catering	6.9	3
PME	202	9
PMT	0	
StiPP	NDA	
Pensioenfonds Vervoer	NDA	9
Total	1,072.1	14

- It is very likely that the investments in the arms companies are a consequence of the lack of policy on investments in arms producers. Without a thorough policy on investments in all producers of military goods, and not only of controversial weapons, the pension funds risk investing in producers of military goods that sell their products to states that use these systems in the violation of human rights and international humanitarian law, or states at high risk of doing so. This risk has materialized for nine pension funds in this study.

- The only pension fund without investments in any of the companies in this report, PMT, also does not have public policy on investments in arms producers. Without policy on the issue, it is unclear if the absence of investments in any of the fourteen companies is a deliberate choice of the fund. Policy remains a key element of avoiding future investments in the companies listed in this report or similar companies.
- The only pension fund with policy on arms trade, PME, has only very limited policy, which does not sufficiently guide investments away from the risks described in this report. Or, alternatively, does not sufficiently direct engagement efforts towards preventing and mitigating the risks.

5.2 Recommendations

The Fair Pension Guide recommends the pension funds to:

- Formulate very clearly in their responsible investment policy that they do not want any investee company involved in the production of military goods to sell these goods to parties where the following risks are present:
 - The risk of violation of human rights and/ or international humanitarian law by the end user of these goods
 - The risk of fuelling an armed conflict
 - The risks of selling military goods to a corrupt state
 - The risks of selling military goods to a fragile state
 - The risks of selling military goods to a state that spends a disproportionate share of its budget on military goods.
- Apply this policy to all activities and investments, including assets managed for third parties as well as passive investments.
- Apply this policy without exceptions for companies which have, besides their military activities, civilian activities as well.
- Applying the policy as outlined above does not necessarily mean swift exclusion of all companies, a time-bound and result oriented engagement would be possible as well. If possible, investors should increase their leverage over companies, for instance by working with other investors which share their goals.
- Investors would need to formulate clear, specific and time-bound goals for their engagement. Engagement with arms companies should, depending on the context of the specific company, have the following goals, which build on the recommendations in the report of Amnesty International (1.3):
 - The company commits to international human rights standards
 - The company has policies in place which ensure strong due diligence processes, to prevent that the military goods it produces and/ or sells will be used in violations of human rights and / or international humanitarian law.
 - The company identifies and assesses the human rights impact of company products and services before, during and after transfer.
 - The company takes steps to address human rights risks and impacts, if needed through remediation of negatively affected individuals and communities. This includes steps to prevent that the military goods it produces will be used again in similar violations.
 - The company takes steps to mitigate the negative impacts in which the military goods it produced were involved.
 - The company is transparent about the negative impacts in which their products were (or are) involved.

Annex 1 Detailed overview of States at Risk

The fifty selected states are summarized in Table 43. To indicate whether a state is selected (i.e.: is at risk, should not be supplied with military goods), the row is marked red. For each state, the indicators for which the state scored above the threshold for one of the criteria, is marked dark red.

All states listed in the indicator-specific tables above are listed in the table below as well.

Table 43 Final selection of states for the case study

Institution ->	European Union & United Nations	Freedom House & The Economist Intelligence Unit	Institute for Economics and Peace & Uppsala	Transparency International	Foreign Policy & The Fund for Peace	United Nations Development Programme / SIPRI
Criteria type	Primary criteria			Support criteria		
Name of Index	Arms Embargo	Freedom House Index & Democracy Index	Global Peace Index & Conflict Data Program	Government Defence Anti-Corruption Index	Fragile State Index	Human Development Index (low development) & SIPRI government budget on military spending
Threshold	EU or UN arms embargo	6.5 or higher <i>and</i> Authoritarian Regime (AR)	> 2.300 <i>and</i> Listed as in conflict	Very high or critical corruption risk	>90.0	Low Human development <i>and</i> > 7% government budget on military spending
Afghanistan	No	5.5/AR	3.585 2014-2017	Very high corruption risk	106.6	LHD/3.6%
Algeria	No	5.5/AR	2.182	Critical corruption risk	75.8	HHD/16.1%
Azerbaijan	No	6.5/AR	2.454 2014 UN	Very high corruption risk	74.6	HHD/10.04%
Bahrain	No	6.5/AR	2.437 2015-2016	Critical corruption risk	64.4	VHHD/11.8%
Bangladesh	No	4.0/HR	2.084	High corruption risk	90.3	MHD/9.6%
Belarus	EU	6.0/AR	2.112	No data	70.5	VHHD/25.3%

Botswana	No		1.659	Very high corruption risk	62.0	HHD/9.2%
Burkina Faso	No		2.029	Critical corruption risk	86.5	LHD/5.1%
Burundi	No	6.5/AR	2.488 2014-2017 (UN) 2015	Very high corruption risk	97.4	LHD/8.3%
Brazil	No		2.160	Very high corruption risk	68.7	HHD/3.7%
Cambodia	No	5.5/AR	2.101	Critical corruption risk	84.0	MHD/9.0%
Cameroon	No	6.0/AR	2.484 2014-2017	Critical corruption risk	95.3	MHD/6.5%
Central African Republic	EU/UN	7.0/AR	3.236	Critical corruption risk	111.1	LHD/9.7%
Chad	No	6.5/AR	2.498 2014-2017	Critical corruption risk	108.3	LHD/13.8%
China	EU	6.5/AR	2.243	Very high corruption risk	72.4	HHD/6.1%
Colombia	No	3.0/FD	2.729 2014-2016	Low corruption risk	76.6	HHD/11.0%
Comoros	No	3.5/AR	No data	Very high corruption risk	82.6	LHD/No data
Congo (Br)	No	6.0/AR	2.343 2015-2016 (UN) 2016	Critical corruption risk	93.1	MHD/17.9%
Côte d'Ivoire	EU/UN (lifted 2016)	4.0/AR	2.207	Very high corruption risk	94.6	LHD/5.1%

Cuba	No	6.5/AR	2.037	No data	62.9	HHD/No data
Democratic Republic of Congo	EU/UN NGF	6.5/AR	3.251 2014-2017	Critical corruption risk	110.7	LHD/6.4%
Egypt	EU	6.0/AR	2.632 2014-2017	Critical corruption risk	88.7	MHD/4.6%
Equatorial Guinea	No	7.0/AR	1.946	Critical corruption risk	83.4	MHD/No data
Eritrea	EU/UN	7.0/AR	2.522 2016	Critical corruption risk	97.2	LHD/No data
Ethiopia	No	6.5/AR	2.524 2014-2017 2017 UN	Very high corruption risk	99.6	LHD/3.8%
Gabon	No	6.0/AR	2.099	Critical corruption risk	72.5	HHD/9.3%
Gambia	No	4.5/	1.989	Very high corruption risk	87.1	LHD/No data
Guinea	EU (lifted)	5.0/AR	2.101	Critical corruption risk	101.6	LHD/9.9%
Guinea-Bissau	No	5.0/AR	2.275	Critical corruption risk	98.1	LHD/No data
Haiti	No	5.0/HR	2.064	No data	102.0	LHD/0.0%
India	No	2.5/FD	2.504 2014-2017	High corruption risk	76.3	MHD/9.1%
Iran	EU/UN	6.0/AR	2.439 2015-2017	Very high corruption risk	84.3	HHD/15.8%
Iraq	EU/UN NGF	5.5/HR	3.425 2015-2017	Critical corruption risk	102.2	MHD/9.4%
Israel	No	2.0/FD	2.764	No data	78.5	VHHD/11.5%

			2014			
Jordan	No	5.0/AR	2.104	Very high corruption risk	76.8	HHD/15.8%
Kenya	No	4.0/HR	2.354 2014-2017 (UN)	High corruption risk	97.4	MHD/4.5%
Kuwait	No	5.0/AR	1.799	Critical corruption risk	55.9	VHHD/11.3%
Laos	No	6.5/AR	1.821	No data	80.7	MHD/No data
Lebanon	EU/UN NGF	5.0/HR	2.778 2014- 2015/2017	Very high corruption risk	86.8	HHD/15.6%
Liberia	EU/UN (lifted 2016)	3.0/HR	1.931	Very high corruption risk	92.6	LHD/1.7%
Libya	EU/UN	6.5/AR	3.262 2014-2017	Critical corruption risk	94.6	HHD/No data
Madagascar	No	3.5/	1.766	Very high corruption risk	83.6	LHD/2.9%
Malawi	No	3.0/	1.811	Very high corruption risk	85.5	LHD/2.7%
Mali	No	4.5/HR	2.686 2014-2017	Very high corruption risk	93.6	LHD/12.7%
Mauritania	No	5.5/AR	2.355 2014- 2017 (UN)	Critical corruption risk	92.2	LHD/No data 2016: 10.3% ^{iv}
Morocco	No	5.0/HR	1.979	Critical corruption risk	74.0	MHD/10.7%

^{iv} For Mali, no data is available on military spending in 2017. In 2016, military spending amounted to 10.3% of total government spending. We have included Mali based on 2016 data for military spending.

Mozambique	No	4.0/	2.056	Very high corruption risk	88.7	LHD/2.5%
Myanmar (Burma)	EU	5.0/AR	2.302 2014-2017	Critical corruption risk	96.1	MHD/12.4%
Niger	No	4.0/AR	2.359 2014-2017 (UN)	Very high corruption risk	96.2	LHD/8.8%
Nigeria	No	4.0/HR	2.873 2014-2017	Very high corruption risk	99.9	LHD/4.1%
North Korea	EU/UN	7.0/AR	2.950	No data	93.2	No data/No data
Oman	No	5.5/AR	1.984	Critical corruption risk	52.6	VHHD/26.3%
Pakistan	No	4.5/HR	3.079 2014-2017	Very high corruption risk	96.3	MHD/16.7%
Philippines	No	3.0/FD	2.512 2014-2017	High corruption risk	85.5	MHD/6.9%
Qatar	No	5.5/AR	1.869	Critical corruption risk	48.1	VHHD/No data
Russia	EU	6.5/AR	3.160 2014-2017	High corruption risk	77.2	VHHD/12.0%
Rwanda	No	6.0/AR	2.140	Very high corruption risk	89.3	LHD/5.1%
Saudi Arabia	No	7.0/AR	2.417 2014 -2017	Very high corruption risk	70.2	VHHD/30.4%
Senegal	No	2.0/	1.849	Very high corruption risk	79.6	LHD/6.6%
Sierra Leone	No	3.0/HR	1.740	Very high corruption risk	89.1	LHD/4.6%
Somalia	EU/UN	7.0/No data	3.367	Critical corruption risk	113.2	No data /No data

			2014-2017			
South Sudan	EU	7.0/No data	3.508 2014-2017	Critical corruption risk	113.4	LHD/7.4%
Sri Lanka	No	3.5/FD	1.954	Very high corruption risk	84.9	HHD/11.0%
Sudan	EU/UN	7.0/AR	3.115 2014-2017	Critical corruption risk	108.7	LHD / 30.9%
Swaziland	No	6.5/AR	1.980	Very high corruption risk	87.5	MHD/5.5%
Syria	EU	7.0/AR	3.600 2014-2017	Critical corruption risk	111.4	LHD/No data
Tajikistan	No	6.5/AR	2.266	No data	79.5	MHD/No data
Tanzania	No	4.0/	1.837	Very high corruption risk	79.4	LHD/5.8%
Thailand	No	5.5/	2.259	Very high corruption risk	75.0	HHD/1.0%
Togo	No	4.0/AR	2.104	Critical corruption risk	85.2	LHD/6.3%
Turkey	No	5.5/	2.898 2014 (UN) 2014-2017	High risk		HHD/6.4%
Turkmenistan	No	7.0/AR	2.283	No data	72.6	HHD/No data
Uganda	No	5.0/HR	2.168	Very high corruption risk	95.1	LHD/8.6%
Ukraine	EU (lifted)	3.0/HR	3.113 2014-2017	High corruption risk	72.6	HHD/7.8%
United Arab Emirates	No	6.5/AR	1.820	Very high corruption risk	42.8	VHHD/no data
Uzbekistan	No	7.0/AR	2.144	Very high corruption risk	79.1	HHD/No data

Venezuela	EU	5.5/AR	2.642	No data	86.2	HHD/1.5%
Yemen	EU/UN NGF	6.5/AR	3.305 2014-2017 2014 (UN)	Critical corruption risk	112.7	LHD/ No Data
Zambia	No	4.0/HR	1.822	Very high corruption risk	87.2	MHD/5.2%
Zimbabwe	EU	5.5/AR	2.326	Critical corruption risk	102.3	LHD/7.4%

Annex 2 Letter sent to the selected companies

To:...

Ref: Your company's involvement in controversial arms trade

Date: April 24, 2019

Dear Sir, Madam,

I am writing you on behalf of PAX, a Dutch peace organisation. PAX is preparing a study into investments of financial institutions in weapons producers involved in controversial arms trade. The study lists your company as involved in this activity.

With 'controversial arms trade' we refer to trade in military goods to countries or parties that match one or more of the following criteria:

- countries that are under a United Nations or EU multilateral arms embargo;
- countries where there is an overriding risk that the arms will be used for serious violations of international human rights and humanitarian law;
- countries that severely violate human rights;
- parties involved in conflict, unless to parties acting in accordance with a UN Security Council resolution;
- countries that are sensitive to corruption;
- countries that can be considered as failed or fragile state;
- countries that spend a disproportionate part of the government budget on purchases of arms.

These criteria are based on international standards such as the Arms Trade Treaty and the EU Common Position on Arms Export Controls.

We have analysed supply of military goods to 50 countries that meet these criteria. Your company was involved in supply of a number of military goods to the selected countries. In appendix I of this letter, you will find an overview of the trade deals we found. This overview is based on SIPRI's Arms Transfers Database. If you would like to receive the full analysis that led to the selection of the 50 countries, please reach out to me by email via the address provided below.

Many other campaigns worldwide currently engage directly with arms producers, for instance around supply of military goods to states involved in the war in Yemen. The study we aim to publish in June 2019 focuses on the investment of financial institutions in your company, also has the overarching goal to convince your company to sell military goods only to countries of which the risk of abuse of these goods is minimal.

As your company does play a prominent role in our upcoming report, I would like to reach out to you to enable you to clarify your position on the issue we aim to address. I would like to invite you to react on the following three questions:

1. If you are of the view that the listing of arms transfers by your company in appendix I is incorrect, could you please provide us with relevant documentation to elaborate your view?
2. Does your company have any policy in place to prevent arms transfers to countries that meet (some of) the criteria listed above and could you elaborate on that policy?
3. If not, is your company planning to put in place a policy in order to refrain from arms transfers to such countries in the future?

We would very much welcome your answers to these questions. We would like to include these, where possible, in the Fair Pension Guide case study which will be published in June 2019. If you would want to respond, but would not want (parts of) your response to be included in the report, please indicate this and we will respect your preference. The study will be published online aimed at an audience in the Netherlands, and likely also in Belgium and Sweden.

We would like to receive your reaction **before May 13 2019**. Please send an email to

Thank you again for your time, and if you have any questions please do not hesitate to get in touch.

Yours sincerely,

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3501 DH Utrecht

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About PAX

PAX means peace. Together with people in conflict areas and concerned citizens worldwide, PAX works to build just and peaceful societies across the globe. PAX brings together people who have the courage to stand for peace. Everyone who believes in peace can contribute. We believe that all these steps, whether small or large, truly matter and will contribute to a just and peaceful world.

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The Fair Pension Guide is a coalition of organisations that consists of Amnesty International, Milieudefensie, Oxfam Novib, PAX and World Animal Protection.

