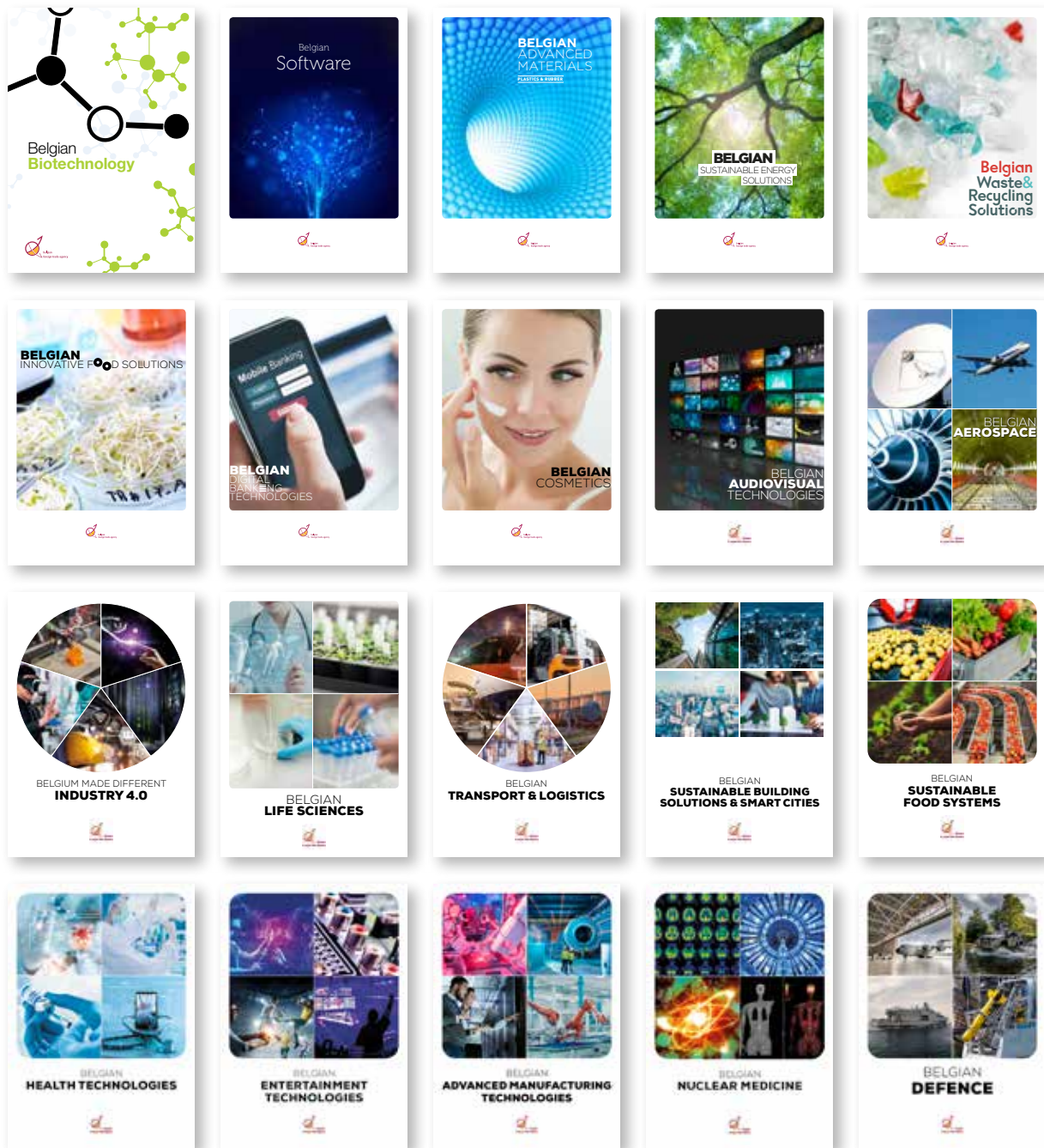




# BELGIAN **DEFENCE**



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**PRESENTATION**  
OF THE SECTOR

# THE SECTOR OF DEFENCE

## 1. Introduction

Belgium's strategic position at the crossroads of Europe, adjacent to key defence suppliers such as France, Germany, and the United Kingdom, enhances its military significance. The country benefits from proximity to Europe's second-largest seaport, which further bolsters its strategic advantages.

With a rich history in arms manufacturing, technological engineering, and a robust academic landscape featuring numerous universities, Belgium fosters strong connections between research and technological advancement. This synergy enables the nation to effectively understand defence requirements while driving innovation.

Belgium's defence strategy is intricately tied to global and European contexts, with significant emphasis on dual-use capabilities and strategic partnerships. The recent STAR Plan (Security & Service – Technology – Ambition – Resilience) highlights Belgium's commitment to modernizing its military forces, while also ensuring alignment with NATO and European defence initiatives. The plan addresses the growing challenges of hybrid warfare, cybersecurity, and international cooperation.

At the heart of this strategy is Belgium's reliance on dual-use infrastructure, which facilitates both civilian and military applications, such as rapid troop deployment and logistics during crises. The country's role as a logistical hub in Europe is bolstered by investments in transport networks, airports, and ports, which serve both economic and defence purposes. This infrastructure is a key asset for military mobility and cooperation within NATO and the EU.

The STAR Plan also prioritizes developing high-tech military capabilities in areas like cyber defence, artificial intelligence, and modern armoured vehicles. It promotes strategic autonomy through collaboration with European partners, notably through initiatives like the CaMo partnership with France, which aims for full interoperability between Belgian and French mechanized forces. Moreover, the defence budget reflects Belgium's aim to invest in cutting-edge technology and personnel recruitment to address modern security threats.

Furthermore, the involvement of Belgian research institutions ensures that dual-use technologies are developed ethically, with a focus on both military applications and societal benefits. This forward-thinking approach underlines Belgium's role in advancing defence capabilities while maintaining a strong civilian-military balance.



## 2. The international defence context.

### 2.1 Reasons for the increasing global military expenditures

The past few years have witnessed a notable shift in global military spending patterns, driven largely by geopolitical tensions, particularly the Russian invasion of Ukraine in 2022. This conflict has reshaped defence strategies worldwide, particularly in Europe, where governments have responded by ramping up military budgets to bolster national security. External threats, internal security challenges, economic considerations, and the evolving multipolar world order contribute to increasing military expenditures globally.







According to data from the Stockholm International Peace Research Institute (SIPRI), global military expenditure reached 2.44 trillion USD in 2023, compared to 2.40 trillion USD in 2022, reflecting not only increased defence spending in Europe but also in other regions like Asia, Africa, and the Middle East. This marks the first time since 2009 that all geographical regions have shown simultaneous growth in defence spending. Countries with prolonged internal conflicts have also seen remarkable increases in their defence budgets (SIPRI, 2024).

#### Geopolitical tensions

The Russian invasion of Ukraine has acted as a catalyst for renewed attention on defence preparedness, especially in Europe. Countries feeling a heightened threat, particularly those bordering Russia or with a history of regional conflicts, have significantly increased their defence budgets. Nations like Poland, Romania, and the Baltic states have committed to more robust defence policies, aligning their spending with NATO’s objectives of deterring Russian aggression. Due to these geopolitical tensions, the world military expenditure rose to the highest level ever recorded by SIPRI in 2023.

Military spending as a percent of GDP reflects how much of a nation’s economic resources are allocated to defence relative to other sectors. It highlights national priorities and the importance placed on military capabilities. Table 1 shows that the six largest spenders are countries in these geopolitical regions where there is traction.

Table 1: Top 5 countries in military spending as % of GDP in 2023

Rank	Country	Military Spending as % of GDP (2023)
1	 Ukraine	37%
2	 Algeria	8.2%
3	 Saudi Arabia	(7.1%)
4	 Russia	(5.9%)
5	 Oman	5.4%
6	 Israel	5.3%

Source: SIPRI, 2024; () = estimated figure

#### Internal security

Another significant driver of rising military budgets are internal security concerns. In many nations, especially those facing civil unrest, terrorism, or other forms of domestic instability, military forces often play a dual role in maintaining internal order alongside their external defence responsibilities. This overlap creates challenges in defence budgeting, as governments must account for both external and internal security threats. Countries like Israel and Russia exemplify how military spending often includes significant investments aimed at internal stability, particularly in light of geopolitical threats or ongoing domestic security challenges.

#### Economic considerations

While increased military spending is often justified by the need for enhanced security, it also carries substantial economic implications. Defence contracts can lead to technological advancements and job creation, benefiting civilian sectors like aerospace and cybersecurity. Countries that invest heavily in their defence industries often see positive spillover effects on innovation and technological progress. For example, U.S. defence spending, which stood at 916 billion USD in 2023, has spurred significant growth in sectors related to artificial intelligence (AI) and cybersecurity, both critical to modern warfare.

However, there are trade-offs. Funds allocated to military expenditures often come at the expense of other public services, including healthcare, education, and social welfare. Governments face a delicate balancing act between ensuring adequate defence while maintaining domestic

priorities. This is particularly true for nations with limited resources, where the opportunity cost of military spending is more pronounced. While larger economies like the United States can manage these competing priorities more easily, smaller or economically challenged nations may struggle to achieve this balance (Brown University, 2023).











### Evolving multipolar world order

The rise of new global powers, such as China, and the resurgence of Russia's assertiveness, have contributed to a shift toward a multipolar world order. This has prompted NATO members, especially in Europe, to boost their military capabilities.

In 2023, China's military budget reached 296 billion USD, making it the second-largest defence spender after the United States. Russia followed closely with 109 billion USD. Despite economic sanctions and its involvement in the ongoing conflict with Ukraine, Russia continues to prioritize military spending, with 5.9% of its GDP allocated to defence in 2023.

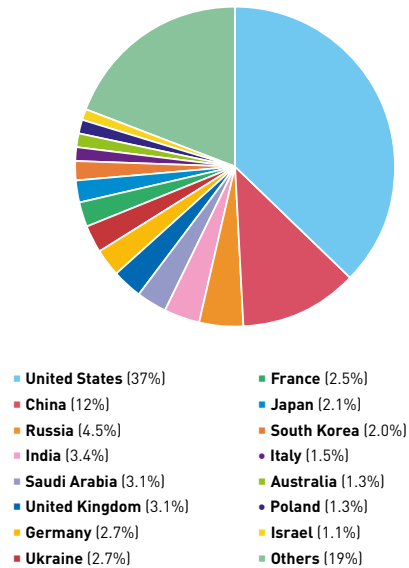
Similarly, smaller countries with significant regional threats, such as Algeria (8.2% of GDP) and Saudi Arabia (7.1% of GDP), maintain high military spending relative to their economies, emphasizing the importance they place on defence in maintaining regional stability. Most notably, Ukraine became the eighth largest military spender in 2023, increasing its spending by 51% to 64.8 billion USD, or 37% of GDP (SIPRI, 2024).

**Table 2: Top 10 countries with the highest Military Budget, in Bn USD, in 2023**

Rank	Country	Military Budget (USD bn, 2023)
1	 United States	916
2	 China	(296)
3	 Russia	(109)
4	 India	83.6
5	 Saudi Arabia	(75.8)
6	 United Kingdom	74.9
7	 Germany	66.8
8	 Ukraine	64.8
9	 France	61.3
10	 Japan	50.2

Source: SIPRI, 2024; ( ) = estimated figure

**Graph 1: Share of global military expenditure, in %, in 2023**



Source: SIPRI, 2024

Graph 1 shows the dominance of the United States, when it comes to military budget. The US alone makes up for 37% of the global military budget. In the international context, there have been created multiple international military organizations throughout history. The largest, the North Atlantic Treaty Organization (NATO), accounted for 55% (or 1341 billion USD) of the global military expenditure in 2023.

## 2.2 NATO & the role of Belgium

Belgium is a founding member of the North Atlantic Treaty Organisation (NATO), established on April 4<sup>th</sup>, 1949. This alliance, one of the longest running in history, began with 10 European countries, the United States, and Canada, signing the North Atlantic Treaty (also known as the Washington Treaty). This treaty forms the legal basis of NATO. Over the decades, NATO has grown to 32 members, with the most recent additions of Finland and Sweden (2023), prompted by geopolitical tensions. Belgium's membership in NATO reflects its commitment to ensuring security through multilateral frameworks, with the Alliance as a cornerstone of the country's defence policy (NATO history, n.d.).



### **NATO's Command Structure**

NATO's military command structure comprises two main components: Allied Command Operations (ACO) and Allied Command Transformation (ACT).

#### **Allied Command Operations (ACO)**

ACO is responsible for planning and executing NATO's military operations and maintaining the integrity of the Alliance's territory. Its headquarters, known as the Supreme Headquarters Allied Powers Europe (SHAPE), is located in Mons, Belgium. ACO operates across strategic, operational, and tactical levels, ensuring that NATO forces are capable of responding to security threats or delivering a military response in case of an armed attack.

SHAPE, at the strategic level, directs nine operational commands and plays a vital role in strengthening NATO's defence capabilities. Headed by the Supreme Allied Commander Europe (SACEUR), traditionally a U.S. officer, ACO coordinates operations with the U.S. European Command. ACO works under the supervision of the Military Committee, which provides military advice to the North Atlantic Council and the Nuclear Planning Group, NATO's senior decision-making bodies.

Additionally, ACO contributes to NATO's cybersecurity efforts, and in recent years, new commands like the Cyberspace Operations Centre and Joint Force Command Norfolk have been established to address emerging security challenges. Together, ACO and ACT form NATO's NATO Command Structure (NCS), which ensures the Alliance's preparedness to face threats.

#### **Allied Command Transformation (ACT)**

ACT, headquartered in Norfolk, Virginia, is responsible for adapting NATO's military capabilities to modern challenges, ensuring that the Alliance remains capable and credible in a rapidly changing security environment. Its role is to transform NATO's military structure, forces, and doctrine by leveraging innovation and emerging technologies. ACT works closely with industry, academia, and NATO's Centres of Excellence to foster interoperability and prepare NATO for future conflicts.

ACT leads NATO's efforts in areas such as cyber warfare, space militarization, and artificial intelligence. With a focus on future security challenges, ACT ensures that NATO remains at the forefront of military innovation, maintaining a strategic edge through continuous capability development. (NATO, 2024)



## NATO Agencies

NATO's operational efficiency is supported by several specialized agencies:

- The NATO Communications and Information Agency (NCI Agency), based in Den Haag, provides NATO-wide IT services, cyber defence, and command systems.
- The NATO Support and Procurement Agency (NSPA), headquartered in Luxembourg, manages procurement and logistics for NATO members.
- The Defence Innovation Accelerator for the North Atlantic (DIANA) promotes collaboration on emerging technologies between the private sector and military forces, driving innovation in defence capabilities. DIANA's main presence includes a regional office in London (UK) and a regional hub in Tallinn (Estonia), with plans to establish a North American regional office in Halifax (Canada).
- The NATO Science and Technology Organization (STO), headquartered in Brussels, leads scientific research and innovation within the Alliance, offering cutting-edge solutions to complex security challenges.

These agencies ensure NATO's technological and logistical resilience, enabling it to respond effectively to contemporary and future security demands.

## The Role of Belgium in NATO

Belgium has played a pivotal role in NATO since its inception, hosting the Alliance's headquarters for over five decades. As one of NATO's founding members, Belgium has been integral to the Alliance's development and operations, contributing both strategically and economically. Brussels is home to NATO's political headquarters and serves as a hub for European and international institutions, including the European Union. This proximity fosters a unique environment for political, economic, and military cooperation within Europe and beyond. Additionally, Belgium holds the distinction of being the country where Paul-Henri Spaak, the first former Head of State, became NATO Secretary General.

Belgium's participation in NATO reflects its broader foreign and defence policies, where multilateral cooperation is key. This approach allows Belgium to champion the interests of smaller countries in discussions surrounding European policy and Atlantic cooperation. During the Cold War, Belgium played a significant role in shaping NATO's strategic direction, particularly after the withdrawal of France from NATO's integrated military structure in 1966. As a result, Belgium became the host nation for NATO's Supreme Headquarters Allied Powers Europe (SHAPE), which was inaugurated in Mons in 1967.

## Military Contributions and Collective Defence

Throughout the Cold War, Belgium consistently increased its defence budget as a percentage of its gross national product (GNP), participating in NATO-led military exercises and operations, such as naval mine clearance in collaboration with the Netherlands. Hosting NATO for such an extended period has positioned Belgium as a reliable and credible ally, emphasizing its commitment to collective defence. Article 5 of the NATO treaty, which ensures mutual defence, remains the cornerstone of Belgium's defence strategy within the Alliance.

Belgium's commitment to NATO is also reflected in its participation in military spending targets. Although NATO sets a goal for members to spend 2% of their GDP on defence, Belgium has struggled to meet this target, leading to political pressure domestically and from within NATO. In 2023, 11 out of 31 NATO members met or surpassed this benchmark. However, Belgium has met NATO's other spending target of allocating at least 20% of military expenditures to equipment, a goal reached by 28 NATO members in 2023.



**Economic Contributions and NATO Agencies**

Belgium also benefits economically from its NATO membership. The NATO Communications and Information Agency (NCIA), has generated significant economic returns for Belgian companies. In 2022, Belgian businesses earned 156.1 million EUR through contracts with NATO, increasing to 209.4 million EUR in 2023. These revenues stem from the provision of hardware, software licenses, and other capabilities, with Belgian companies playing a crucial role in supporting NATO’s information and communication needs (NCIA, 2024).

**Innovation and Collaboration: DIANA and NATO Innovation Fund**

Belgium is also at the forefront of NATO’s efforts to foster innovation through initiatives like the Defence Innovation Accelerator for the North Atlantic (DIANA) and the NATO Innovation Fund (NIF). These programs aim to enhance NATO’s technological capabilities by developing and implementing emerging and disruptive technologies, such as artificial intelligence (AI), cyber warfare, quantum computing, autonomous systems, and biotechnology.

DIANA leverages a unique transatlantic innovation ecosystem, known as the accelerator program, bringing together the best and brightest from academia, industry, governments and investors to help founders build their companies, products and find adoption pathways. By providing a NATO-backed, dual-use curriculum, access to

trusted venture capital, and exposure to Allied national initiatives, DIANA’s goal is to help start-ups to grow and establish themselves as resilient, successful participants in the commercial and defence markets. DIANA currently has 20 accelerator sites across the alliance and one of those sites is located in Belgium. WSL (Wallonia Space Logistics), located in the province of Liège, focusses on supporting the development of innovative technology startups in sectors such as aerospace, engineering, and information technology. To help innovators get selected into the Accelerator Programme, DIANA is leveraging test centres located in innovation hubs across the Alliance. DIANA’s test centres are selected as the very best venues for innovators to develop and evaluate their concepts and technologies. Belgium has 18 recognised test centres (DIANA, 2024).

Belgium, through cooperation between its federal and regional governments, has committed to supporting these initiatives financially and through test centres recognized by NATO. DIANA focuses on the practical development and evaluation of dual-use technologies, while the NATO Innovation Fund (NIF) emphasizes financial investment in cutting-edge innovations. Belgium’s involvement includes a financial contribution of 41.5 million EUR to the NIF and 16 million EUR to DIANA by 2030. This collaboration reflects Belgium’s long-term commitment to maintain NATO’s technological edge, with an accelerator site and test centres across the country contributing to the development of NATO’s future defence capabilities.

**Table 3: DIANA Accelerator site and test centres in Belgium, in 2024**

DIANA test centres	
VIB (Flemish Institute for Biotechnology) – VUB Centre for Structural Biology – CSB	Digital Wallonia – Cyberwal and TRAIL
VIB – Center for Inflammation Research – IRC	VIB – Center for Medical Biotechnology – CMB
IMEC (Interuniversity Microelectronics Centre)	VIB – Center for Plant Systems Biology – PSB
VIB – Discovery and Science Unit Leuven – Innovation and Business – DS	VIB – Center for Inflammation Research – IRC
VIB – Discovery and Science Unit Gent – Innovation and Business – DS	VIB - University of Antwerp Center for Molecular Neurology - CMN
VIB – Center for Brain & Disease Research – CBD	FlandersMAKE
VIB – Center for Cancer Biology – CCB	The von Karman Institute for Fluid Dynamics (VKI)
VIB – Center for Microbiology – CfM	VITO N.V (3 Sites) – The Flemish Institute for Technological Research
VIB – NeuroElectronics Research Flanders – NERF	
DIANA Accelerator site	
WSL (Wallonia Space Logistics)	

Source: DIANA, 2024

### 3 The European defence context

#### 3.1 EU Defence Policy and cooperation initiatives

The **Common Security and Defence Policy (CSDP)** serves as the EU's central framework for enhancing defence capabilities, managing crises, and promoting peace. It oversees military and civilian missions aimed at crisis management, peacekeeping, and conflict prevention. The **Political and Security Committee (PSC)** plays a pivotal role in guiding these operations, while the **European External Action Service (EEAS)** coordinates the broader aspects of EU foreign policy, ensuring an integrated approach to external challenges. Belgium is an active participant in the CSDP, contributing to its missions and promoting multilateral cooperation as a cornerstone of its defence policy.

The EU has established several key mechanisms to foster cooperation and enhance defence capabilities across its member states:

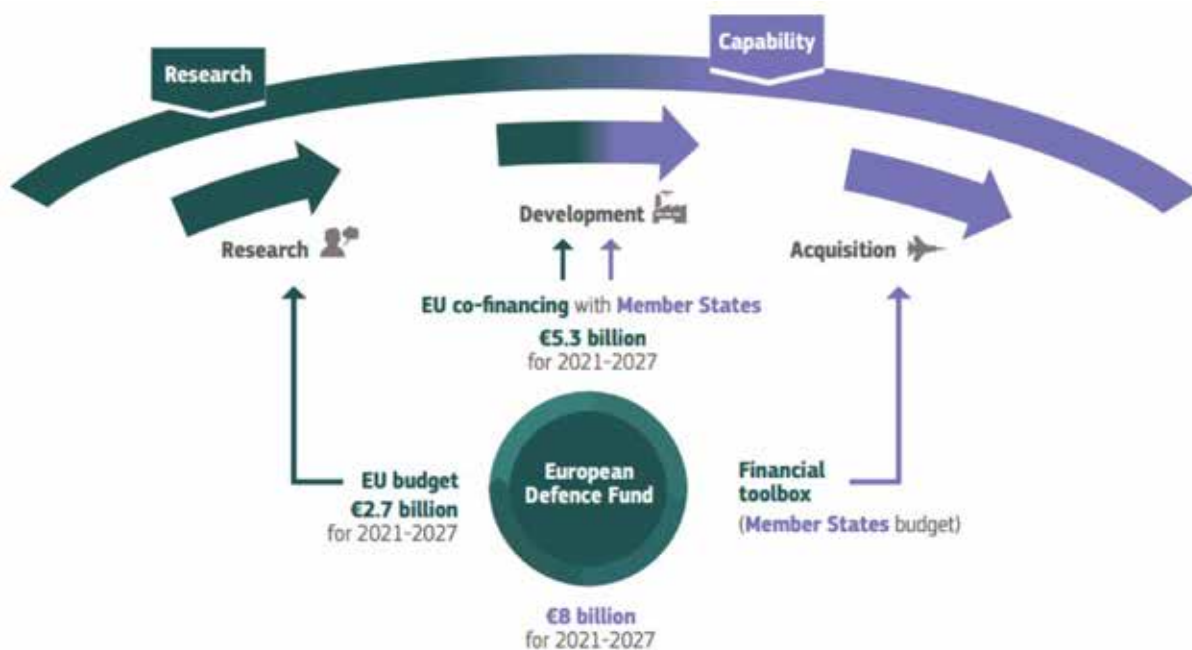
One of the most significant frameworks is **Permanent Structured Cooperation (PESCO)**, launched in 2017. PESCO allows member states to jointly develop defence capabilities and improve interoperability between their

armed forces. Belgium actively participates in multiple PESCO projects, including initiatives focused on military mobility and operational readiness. As of 2023, PESCO includes 68 ongoing projects and facilitates cooperation with key partners like the United States and Canada on critical issues such as military mobility (PESCO, 2024).

The **EU's Strategic Compass**, approved in March 2022, aims to strengthen Europe's security and defence by 2030. It focuses on four main pillars: crisis management (building a 5,000-strong rapid deployment force), resilience (enhancing cybersecurity and addressing hybrid threats), capability development (boosting defence investment and innovation), and partnerships (strengthening ties with key allies like NATO and the UN). The strategy encourages a unified EU approach to defence, increasing the bloc's ability to act both independently and collaboratively in global security matters.

Another major initiative is the **European Defence Industrial Development Programme (EDIDP)**, which operated from 2019-2020 with a budget of 500 million EUR. It was the first program to provide EU grants for joint defence capability development. This program laid the groundwork for the

Figure 1: Allocation of the EDF budget 2021-2027



Source: EDF, 2024

**European Defence Fund (EDF)**, which continues with a significantly larger budget of nearly 8 billion EUR for 2021-2027. The EDF focuses on collaborative research and capability development, providing essential financial support for defence projects (EDF, 2023).

Figure 1 shows that the 8 billion EUR budget is fully allocated to research and development projects aimed at enhancing European defence capabilities. It finances up to 100% of eligible project costs through grants, focusing on both research and development phases. However, the acquisition of defence equipment is not covered by the Fund. These costs are the responsibility of the member states.

In March 2024, the EU introduced the **European Defence Industrial Strategy (EDIS)**. This strategy aims to consolidate the **European Defence Technological and Industrial Base (EDTIB)**, ensuring that the EU's defence industry is resilient, innovative, and capable of addressing emerging security challenges. The EDTIB is crucial for strategic autonomy as it underpins Europe's capacity to produce its own military equipment and technologies, reducing reliance on external suppliers. The **European Defence Agency (EDA)** plays a vital role in supporting the growth of the EDTIB by fostering collaboration between defence industries, research institutions, and member states. Through EDIS, the EU is promoting cross-border cooperation, joint investments, and the development of critical technologies like artificial intelligence (AI), cybersecurity, and quantum computing.

The EDTIB not only strengthens defence capabilities but also contributes significantly to Europe's economic growth by supporting jobs and technological innovation.

### 3.2 Funding, support mechanisms, and procurement

The **European Peace Facility (EPF)** is one of the key financial instruments supporting EU military operations. Operating as an off-budget mechanism, the EPF provides 5 billion EUR from 2021-2027 to support EU missions and supply military equipment to partner countries. This tool allows the EU to fund military actions without impacting the formal EU budget, offering flexibility in responding to crises.

Another critical funding initiative is the **Strategic European Security Initiative (SESI)**, launched by the **European Investment Bank (EIB)** in 2022. SESI offers up to 6 billion EUR in financing by 2027 to support the development of dual-use technologies, including cybersecurity, artificial intelligence, and space technologies. Additionally, a €175 million Defence Equity Facility was launched in 2024 to fund startups and SMEs working in these fields (Reuters, 2024).

Additionally, **Horizon Europe** includes a Security Research pillar, focusing on technological innovations in civilian security. This program promotes research in areas like AI, cybersecurity, and border protection, ensuring that the EU remains at the forefront of security technology.

In recent years, the EU has increasingly emphasized the need for a unified approach to defence procurement to reduce market fragmentation and enhance collective defence capabilities. A significant step in this direction is the **European Defence Industry Reinforcement through Common Procurement Act (EDIRPA)**. EDIRPA, introduced to foster joint procurement of defence assets, aims to encourage EU member states to purchase military equipment collectively, streamlining procurement processes and reducing duplication of efforts. By pooling resources and demand, member states can benefit from economies of scale, enhancing cost-efficiency and interoperability among European armed forces. The act is especially crucial in light of the increased defence spending across Europe following geopolitical tensions, notably the Russian invasion of Ukraine. EDIRPA is expected to further unify the European defence markets, facilitating faster and more coordinated responses to emerging threats while strengthening the EU's overall defence capabilities.

## 3.3 Defence industry and strategic autonomy

The European defence industry is central to the EU's efforts to achieve strategic autonomy. The industry had a 135 billion EUR turnover in 2022, employing 516,000 people across the continent. The sector experienced a significant boost following the Russian invasion of Ukraine, prompting the EU to increase its collective defence budget to 290 billion EUR by 2025. Belgium plays a key role in this industrial network, integrating its defence sector into broader European projects, particularly in joint research and development (R&D) and the production of dual-use capabilities (European commission, n.d.).

The EDTIB plays a crucial role in the EU's drive for strategic autonomy. The EDTIB is essential for reducing reliance on non-European defence suppliers and fostering innovation and competitiveness. The EU has been focusing on improving the access of the EDTIB to both public and private financing, particularly for small and medium-sized enterprises (SMEs), which are critical to the industrial base but often face financial constraints. The EDIS provides a roadmap for enhancing the EDTIB, ensuring it continues to support the EU's defence readiness through innovation and the production of state-of-the-art military technologies.

### Space and Geospatial Intelligence

Space and geospatial intelligence have become crucial components of Europe's defence strategy. The European Space Programme, which includes projects like **Galileo** and **Copernicus**, supports both civilian and military applications, contributing to the EU's security and strategic autonomy in space. The European Union Satellite Centre (SatCen) plays a critical role in providing geospatial intelligence that supports crisis management, surveillance, and operational planning.

## 3.4 Impact on Belgium and its defence sector

For Belgium, these European defence initiatives provide significant benefits. By participating in PESCO projects and contributing to EDF-funded research and development, Belgium has secured access to collaborative defence programs, ensuring its armed forces remain interoperable with European partners. The EDIRPA and EDIS programs further integrate Belgian defence companies into broader European supply chains, allowing them to participate in joint procurement projects and benefit from economies of scale. This strengthens Belgium's defence industry and boosts its competitiveness on the international stage.

Moreover, Belgium's strategic involvement in the EDTIB and access to Horizon Europe funding enables its defence sector to contribute to cutting-edge technological developments, particularly in cybersecurity and dual-use technologies. These initiatives ensure that Belgian companies and institutions remain key players in Europe's defence landscape, supporting not only military innovation but also contributing to the country's economic growth and technological advancement.



## 4 The Belgian defence sector

### 4.1 History

The firearms industry in Liège has deep roots, dating back to the Middle Ages, and it saw significant expansion in the 16th and 17th centuries. This growth was largely supported by the region's political neutrality and its wealth of natural resources, such as coal and iron. By the 17th century, production levels were remarkable, with over 100,000 guns produced annually. By the end of the 18th century, Liège had established itself as a significant firearms export hub in Europe.

The 19th and early 20th centuries marked the golden era of Liège's arms industry, driven by the booming local metal and coal industries and the influx of international talent like John Moses Browning. A pivotal moment in this period was the founding of FN Herstal (now known as FN Browning group) in 1889, which cemented Belgium's place in the global arms industry. Although the world wars caused significant disruptions, FN Herstal successfully recovered post-World War II and became a dominant force, especially known for producing the FAL assault rifle.

In the second half of the 20th century, Belgium broadened its defence industry, incorporating companies like Sabca and Sonaca, which benefited from contracts with the Belgian military. The sector's growth continued, particularly in the 1970s and 1980s, with arms exports reaching an estimated turnover of nearly 40 billion Belgian francs during the peak of the 1980s.

By the 1990s, the Belgian government, through the Walloon Region, took a more active role in the industry, particularly with the acquisition of FN Herstal. While the Walloon region continued focusing on traditional firearms, Flemish companies began to pivot towards high-tech civilian sectors, diversifying the Belgian defence landscape. A notable example of these high-tech pivots are Barco and its spin-off Scioteq, which provide mission critical visualization and computing solutions (Duquet, 2014).

Belgium's geographic location on Europe's crossroads, near major defence suppliers like France, Germany, and the United Kingdom, as well as its access to Europe's second-largest seaport, adds significant strategic value. The country's long-standing tradition in arms production, coupled with a strong academic sector with multiple

universities, facilitates close ties between research and technology. This allows Belgium to maintain a deep understanding of defence needs while innovating at the highest levels. Reflecting its global reach, more than 90% of Belgium's defence goods and services are exported, showcasing the international significance of its defence sector (Belgian Security & Defence Industry, 2023).

### 4.2 Five components

The Belgian military is organized into four core components: the Land, Air, Naval, and Medical Components. The fifth component, Cyber Command, was officially established in 2022, marking a crucial step in modernizing the Belgian Armed Forces to address contemporary security challenges. Each plays a pivotal role in national defence and supports Belgium's contributions to international alliances like NATO and the EU. These components work together to maintain national security and contribute to joint operations in various fields such as mine warfare, cyber defence, and multinational rapid-response operations.

#### 4.2.1 The Land Component

The Land Component is the largest and most versatile branch, consisting of mechanized, infantry, and artillery units. The bulk of the resources are assigned to two key pillars: The Motorized Capacity (CaMo) and Special Operations Capacity (SO). These pillars enable the Land Component to respond effectively to a wide range of military operations both within Belgium and abroad.

**The CaMo (Capacité Motorisée)** initiative is a cornerstone of the Belgian-French strategic defence partnership, aimed at significantly enhancing operational capabilities and ensuring full interoperability between both nations' armed forces. The program focuses on deploying mechanized units capable of collective defence and multinational operations. The CaMo initiative will be a central feature during Belgium's state visit to France in October 2024, underscoring the importance of this partnership and mutual commitment to strengthening defence ties.

As part of this collaboration, Belgium has acquired new Jaguar wheeled armoured vehicles, which boost mobility, firepower, and readiness for rapid deployment. However,

the impact of the initiative goes far beyond equipment procurement. The overarching goal is to achieve full interoperability, culminating in the creation of Combined Arms Tactical SubGroups (CATSG), where Belgian and French units are fully interchangeable.

This program also fosters cooperation in developing employment concepts, joint education, and training programs, ensuring that both forces can operate as equals. In addition to the introduction of Scorpion vehicles such as the Griffon and Jaguar, the program includes a range of advanced weapons systems that enhance protection, agility, and communications across the battalion. The Scorpion Combat Information System (SICS), new medium-range missiles, and 81 mm mortars play a key role in this integrated combat system. The CaMo partnership is built on equality, where Belgian and French military forces work as fully interoperable partners, making this a comprehensive and large-scale initiative with far-reaching effects across all levels of defence collaboration (Ministry of Defence, n.d.).



Source: (Ministry of Defence, 2024)

The Land Component also prioritizes anti-aircraft capabilities and reconnaissance, making it a well-rounded force capable of addressing various threats and rapid movement across various terrains. Special Operations Capacity (SO) is dedicated to executing specialized missions that require elite training and precision. The Special Operations Regiment, composed of highly skilled commandos and paratroopers, is capable of performing complex operations globally, emphasizing swift deployment and adaptability in high-risk environments.

In addition to these capacities, the Land Component features several specialized modules. The Reception Staging Onward Movement (RSOM) module manages the logistics and transportation of troops during deployments. The Chemical Biological Radiological Nuclear and Explosive (CBRN(e)) unit responds to hazardous material incidents, securing and decontaminating affected areas. The Military Police (MP) ensures law enforcement and security during peacekeeping operations, while Explosive Ordnance Disposal (EOD) teams are responsible for safely neutralizing unexploded ordnance, minimizing the risk to both military personnel and civilians.



#### 4.2.2 The Air Component

The Air Component operates Belgium's fleet of F-35 fighter jets, which are replacing the aging F-16s to ensure NATO interoperability and modern airspace protection. The F-16s were an important part of the Belgian defence history, acquired by the European Participation Group (Belgium, Denmark, Netherlands) and partly produced at SABCA's Gosselies plant in Belgium. A similar initiative where Belgium is involved, NGCAT, a set of several strategic initiatives and collaborations aimed at enhancing its defence capabilities and fostering European cooperation in military aviation. (See 4.5.3)

An example of such a strategic initiative and collaboration is the Future Combat Air System (FCAS) program, where Belgium officially joined as an observer and will officially become part of the European FCAS in June 2025. This participation allows Belgium to engage in strategic discussions with France, Germany, and Spain about developing a sixth-generation fighter jet. The Belgian government has committed €60 million for research and development and plans to fully participate in future phases

after gaining insights from its recent F-35 acquisition. Belgium's involvement is expected to enhance its contributions to European defence capabilities, with operational systems aimed for readiness by 2040 (The Eurasian Times, 2024).

In addition, Belgium is acquiring 17 H145M multirole helicopters for tactical airlift and medical evacuation missions. Of these, 15 are intended for the Army and two for the Federal Police. Powered by Turbomeca Arriel 2E engines, these helicopters can reach speeds of 268 km/h and have a range of approximately 663 km. They will replace the Agusta A109B helicopters by 2027, further modernizing Belgium's aerial capabilities (Defence post, 2024).

Belgium is also modernizing its A400M aircraft fleet, with seven planes expected to be delivered by 2025. The A400M is a key asset for logistics and troop transport, capable of carrying 116 fully equipped soldiers. These aircraft have already participated in special operations exercises, demonstrating their importance in Belgian and NATO operations.



Source: (Ministry of Defence, 2024)

### 4.2.3 The Naval Component

Though small, Belgium's Naval Component is highly specialized in mine warfare, playing a significant role in NATO's naval missions. Belgium excels in mine clearance operations and is currently upgrading its naval capabilities through the STAR Plan, with a budget of 527 million EUR allocated from 2023 to 2030. This plan includes acquiring new mine-hunting vessels and anti-submarine warfare frigates capable of ballistic missile defence, strengthening Belgium's ability to contribute to maritime security.

One of the key initiatives currently undertaken by the Belgian Navy is the **rMCM (Replacement Mine Countermeasures)** program. This project is a joint effort between Belgium and the Netherlands, aimed at modernizing their fleets' ability to detect and neutralize naval mines. The goal of the initiative is to replace aging minehunters with more advanced vessels equipped with unmanned systems, enhancing both safety and operational efficiency. These next-generation ships will work alongside a variety of drones, autonomous underwater vehicles (AUVs), and remotely operated vehicles (ROVs), allowing for more effective mine detection and neutralization from a safe distance, reducing the risks to human crews.

The rMCM program will see the Belgian and Dutch navies acquire a total of 12 new vessels—six for each nation, as well as around a hundred drones integrated into a toolbox to equip

the vessels. In September 2023, France, Belgium, and the Netherlands signed a Memorandum of Understanding (MoU), granting France access to the design of the rMCM ships to supply its navy with six vessels. Thales will be responsible for providing the onboard UAV systems for the French Navy.

The Oostende, the first mine countermeasures vessel of the Belgian-Dutch rMCM program, began its initial sea trials on 17 July 2024, from Concarneau. Led by Belgium Naval & Robotics, a consortium of Naval Group and Exail, the trials aim to test the ship's propulsion and navigation systems before its delivery in summer 2025. (Naval news, 2024)

### Bi-national military cooperation

The cooperation between the Belgian and Dutch navies, which began in 1948 and was formalized in 1996 under the Admiralty Benelux command structure, involves joint training, logistics, and naval asset maintenance. This partnership benefits both countries by enhancing their naval capabilities. Recent developments include the June 2023 agreement to procure four ASWF frigates, with each nation receiving two by 2030, as part of a broader naval modernization effort. Additionally, both navies are replacing mine countermeasure vessels (MCMVs) through a joint program, acquiring six new ships each from the French shipbuilder Naval Group. The Netherlands will also invest 355 million EUR in Belgian industry as part of the frigate procurement deal.



Source: (Ministry of Defence, 2024)

The Belgian Navy also participates in broader international training and operational initiatives, such as the **Mission Jeanne d'Arc**, an annual naval deployment organized by the French Navy. This mission serves a dual purpose: it is both a training exercise for newly commissioned French naval officers and an opportunity for operational deployments across various global maritime theaters. The mission typically involves a months-long voyage, during which French naval cadets gain hands-on experience in naval operations, maritime strategy, and international military cooperation. The route usually passes through critical maritime zones, such as the Mediterranean, the Indian Ocean, and the Atlantic, where the mission engages in patrols, humanitarian operations, and joint military exercises.

Belgium has participated in **Mission Jeanne d'Arc** through personnel exchanges, which helps to deepen the military relationship between Belgium and France. For Belgian naval officers, this mission offers invaluable operational experience, preparing them for leadership roles within the navy while simultaneously enhancing Belgium's capacity for joint naval operations with its allies (Ministry of Defence, 2023).

#### 4.2.4 The Medical Component

The Medical Component of the Belgian military is known for its advanced field hospitals and expertise in casualty evacuation. A second medical battalion has been established to increase capacity, and Belgium's mobile field hospital is classified as a «Role 2»<sup>1</sup> facility under NATO standards. These capabilities enable Belgium to provide advanced care during international missions, making the Medical Component a vital part of Belgium's contribution to NATO and humanitarian operations.

#### 4.2.5 The Cyber Command

In response to the evolving landscape of modern warfare, Belgium has developed a Cyber Component to defend against digital threats. This unit focuses on protecting national infrastructure and military systems from cyber-attacks, while also participating in joint NATO cyber defence initiatives. The Cyber Component's efforts are crucial in maintaining the security of Belgian defence operations and national digital infrastructure.

<sup>1</sup> A role 2 facility is capable of providing inpatient care and handling more complex medical situations than Role 1 facilities. Role 3 facilities are typically found in larger hospitals or medical treatment facilities that can provide definitive care whilst Role 4 facilities provide a full range of preventive, acute, restorative, curative, rehabilitative, and convalescent care.

In addition to digitalization, efforts are made to maintain or develop intelligence gathering through satellites (imagery intelligence - IMINT), electromagnetic signals (signals intelligence - SIGINT), and public sources (open-source intelligence - OSINT). A cyber capability is also required, both defensive and offensive, that can be deployed in Belgium and during operations abroad.

The *Service Général du Renseignement et de la Sécurité* (SGRS), or *Algemene Dienst Inlichting en Veiligheid* (ADIV), is Belgium's military intelligence agency, operating under the Ministry of Defence. Its role is to provide security intelligence for the Belgian Armed Forces and strategic intelligence for the government, focusing on counterespionage and national security. Its key tasks include gathering military intelligence, preventing espionage, and working with civilian agencies such as the *Veiligheid van de Staat / Sûreté de l'Etat* (VSSE). The VSSE, Belgium's civilian intelligence agency under the Ministry of Justice, was founded in 1830 and focuses on domestic threats such as terrorism, organized crime, and subversion. It analyses these threats, protects key individuals, and engages in international collaboration. The SGRS/ADIV and VSSE work together to enhance Belgium's intelligence capabilities, sharing resources and information to address threats like terrorism, espionage, and organized crime. Their cooperation is guided by the **National Strategic Intelligence Plan** (NSIP) (VSSE, n.d.).

The 2023 annual report from ADIV/SGRS provides a comprehensive analysis of the evolving geopolitical situation and the growing complexity of global threats. ADIV plays a crucial role in protecting Belgium, its businesses, and expats from dangers such as cyberterrorism, espionage, and hacktivist attacks—notably from pro-Russian groups. Key highlights of the report include the increasing instability worldwide, with major conflicts like the Israel-Palestine tensions and the Russia-Ukraine war drawing attention. Other crises, such as coups in West Africa, the Sudanese civil war, and conflicts in the Democratic Republic of Congo, underscore the volatile global landscape.

ADIV collaborates with partners, including the VSSE, Foreign Affairs, and local authorities, to provide intelligence and security for Belgian operations. The rise of fake news and deep fakes is a growing challenge, and the use of drones and artificial intelligence in modern warfare, particularly showcased by the war in Ukraine, highlights the importance of staying up to date with new technologies.

## Joint C4ISR

All aircraft, ships, and vehicles, down to the individual soldier, can be seen as data centres that need to be interconnected to ensure the flow of information required for Joint C4ISR (command, control, communication, computer, intelligence, surveillance, and reconnaissance). During the planning and execution of operations, it is crucial to protect one's own forces (Force Protection), use resources efficiently, and ensure the effectiveness of military actions across cognitive, virtual, and physical domains.

The Joint Collection Assets Integration (JCAI) project aims to integrate all internal and external information sources within the Ministry of Defence, ensuring that military decision-makers have the right information at the right time. On a national level, Joint C4ISR is deployed to support domestic operations or safeguard major international summits.

## 4.3 Hardware & software weapons in Belgian defence

**Hardware weapons** are the physical assets essential to any military's combat and defence capabilities, including firearms, armoured vehicles, artillery, aviation assets, and other equipment necessary to support operations. These tangible tools enable forces to project power, defend territory, and participate in national defence and multinational missions, such as those under NATO and EU. Notably, Belgium's FN Five-seven and FN SCAR series<sup>2</sup> are key firearms for direct combat scenarios, requiring consistent maintenance and logistical support. Alongside hardware, Belgium is increasingly focusing on **software weapons**, integrating advanced technologies into its defence strategy. Cybersecurity and cyber warfare have become critical areas as digital threats grow, with the development of software tools to protect against cyber-attacks essential to safeguarding military operations and sensitive information. Artificial intelligence (AI) is also being explored for military applications, such as logistics, reconnaissance, and decision-making, enhancing operational efficiency but posing risks if misused or weaponized.

<sup>2</sup> The SCAR-L MK2 is an assault rifle designed for combat situations requiring versatility and adaptability. The FN Five-seven is a semi-automatic pistol intended for close-quarter engagements as a sidearm.



## 4.4 Dual-use capabilities in Belgian defence

Belgian Defence places significant emphasis on dual-use capabilities, which refer to goods and technologies that have both civilian and military applications. This strategic approach enables investments in infrastructure and systems to benefit both Belgium's civilian economy and its military readiness. By leveraging dual-use capabilities, Belgium can enhance its operational flexibility, especially in times of crisis. Belgium's defence strategy emphasizes dual-use technologies, where civilian innovations, such as surveillance systems and data analysis tools, are adapted for military purposes. This dual-use approach optimizes investments and ensures both civilian and military readiness, creating a more flexible and efficient defence infrastructure.

### 4.4.1 Importance of dual-use capabilities in military mobility

Belgium understands the necessity of swift and seamless military mobility. Dual-use capabilities are essential in rapidly deploying troops and resources during crises, enabling Belgium to act efficiently in both national and multinational operations. Investments in transportation networks, airports, harbours, and communication systems not only enhance Belgium's civilian infrastructure but also bolster its military agility. This dual functionality ensures that in times of conflict or emergencies, these civilian systems can quickly shift to support military objectives (Beldefnews, 2024).

A key aspect of Belgium's dual-use strategy is the cooperation between military and civilian institutions. Civilian infrastructure forms the foundation of Belgium's military mobility. By engaging with transportation authorities, developers, and industry partners, military planners can align objectives and ensure that infrastructure meets both civilian and military needs. This collaboration has led to a more resilient and adaptable defence structure, allowing for smoother operations across both sectors.

### 4.4.2 Belgium's EU Presidency and focus on dual-use infrastructure

During its 2024 presidency of the EU Council, Belgium hosted a seminar in Gent that focused on dual-use transport and infrastructure capabilities. This event highlighted the growing need for **preparedness** in response to geopolitical tensions, particularly concerning the Ukraine conflict. Central to the seminar was the concept of dual-use infrastructure, where civilian resources—such as transport networks, harbours,

and airports—are also utilized for military purposes. Belgium's role as a logistical hub in Europe reinforces its importance in ensuring military readiness in both NATO and EU contexts (BEpresidencyEU, 2024).

**Key takeaways** from the seminar include the following priorities for Belgian and European defence:

- I. The swift movement of military assets is crucial for maintaining defence readiness.
- II. Collaboration across all levels of society, including government, military, and civilian sectors, is necessary to improve military mobility.
- III. The need for enhanced cyber resilience, cross-border cooperation, and dedicated financial resources to support dual-use infrastructure.
- IV. Training and preparing together—military and civilian stakeholders alike—are essential for optimizing response times and readiness.

### 4.4.3 Dual-use export controls and legal frameworks

Belgium actively regulates the trade of dual-use goods—items developed for civilian use but with potential military applications, such as weapons of mass destruction components. This trade is governed by European Union regulations, with Belgium's regional governments largely responsible for enforcement.

For the export of dual-use goods, there are three types of licenses: individual, global, and Union licenses. Each license type comes with specific formalities and obligations, which can be found on the corresponding license page. In Flanders, the Flemish government, through the Flemish Department of Foreign Affairs, is responsible for issuing these export licenses and managing the policy's implementation. At the Walloon level, the competent authority is the Directorate of Arms Licensing and Dual-Use Goods (DLA) of the SPW Economy, Employment, Research (EER). Similarly, in the Brussels-Capital Region, the regional government oversees the control of dual-use goods exports through the Licencing Unit: Weapons and Dual-Use Goods.

**Flanders:** Uitvoer Dual Use Goederen |  
Departement Kanselarij en (fdfa.be)

**Wallonia:** <https://www.wallonie.be/fr/acteurs-et-institutions/wallonie/spw-economie-emploi-recherche/direction-des-licences-darmes>

**Brussels:** Home - Brussels International (du-arms.brussels)

The 'Observatoire des armes wallonnes' (OAW), a civil society initiative aimed at ensuring accountability in arms trade within the Walloon Region, focuses on monitoring Walloon arms exports to countries that may commit serious violations of international humanitarian law and human rights. The centre primarily collects, analyses, and disseminates public information regarding arms trade policies, transparency, production, and alleged legal violations. The initiative does not function as a formal control centre.

The Flemish Peace Institute is directly tied to the Flemish Parliament and plays an integral role by monitoring legislation, analysing trade data, and assessing the alignment of Belgium's dual-use export policies with non-proliferation goals. This ensures that Belgium complies with international disarmament treaties, such as the Nuclear Non-Proliferation Treaty (NPT) and the Chemical Weapons Convention (CWC).

#### 4.4.4 Belgian academic research and ethical considerations in dual-use technologies

Belgian universities and research institutions play a significant role in dual-use weapon research, ensuring that dual-use technologies are developed responsibly and ethically. The University of Liège (ULiège), for instance, has a dedicated Dual Use Support Unit that assists researchers in evaluating the potential risks associated with their work. This unit ensures that research complies with regulations governing dual-use goods, helping researchers assess whether their work could inadvertently contribute to military applications. Similarly, Ghent University recognizes that some projects may have dual-use potential. Ethical guidelines and a Committee on Human Rights Policy and Dual Use Research ensure compliance with human rights standards and prevent misuse. Other universities, like KU Leuven and Vrije Universiteit Brussel (VUB), have established ethics committees that provide guidance on dual-use research, ensuring it aligns with both legal and ethical requirements (Ugent, Uliège & VUB, n.d.).

*"The core tasks of the Belgian Defence are collective defence, collective security, and the protection of Belgian nationals abroad. Furthermore, through its anchoring in society, Defence can contribute to the safety, in the broadest sense of the word, of the population on national territory, regardless of the crisis."*

[Principle No. 1 – excerpt] Source: (STAR plan, 2024)

## 4.5 The STAR-plan

The STAR plan (Security & Service – Technology - Ambition - Resilience) of Belgium, approved on June 17, 2022, is a strategic revision of the country's defence vision through 2030. This plan responds to the evolving and unpredictable security environment and aims to strengthen and adapt Belgian defence capabilities to new challenges.

The STAR plan is based on a thorough analysis of the security landscape for the period 2022-2030, conducted by a committee of experts. This analysis revealed significant structural factors, such as economic stability, emerging technologies, and demographic trends that impact Belgium's security. The current global security environment is characterized by increasing competition among major powers, hybrid warfare, and non-state threats like terrorism and cyberattacks. These factors necessitate Belgium's preparation for both traditional and non-traditional forms of conflict.

The plan defines the core tasks of Belgian defence, including collective defence within NATO's framework, contributing to international stability, and supporting national security. Humanitarian missions and defence diplomacy are also considered important tasks. To achieve these goals, the STAR plan advocates for significant investments in equipment and personnel, emphasizing operational readiness and modernizing military capabilities to meet contemporary demands.

Additionally, the plan highlights the necessity for intensified cooperation with European partners and NATO allies. This collaboration aims to create synergies and improve the efficiency of joint operations through joint exercises and missions that promote interoperability. The STAR plan also recognizes the important role of defence in national crises such as natural disasters or pandemics, where the military can contribute to civil protection and assistance.

Finally, the plan emphasizes flexibility and adaptability in operations. To respond quickly to changing threats, a dynamic approach to training, planning, and deployment is essential. The STAR plan underscores that the Belgian military must be prepared not only for traditional conflicts but also for new security challenges likely to arise in the coming years (STAR plan, 2022).

**4.5.1 Role of defence in the defence industry**

As demonstrated above, the Belgian Defence has a major impact on defence industries, not only in Belgium but also in Europe and NATO-allied countries. The **National Armaments Director (NAD)** is in charge of exploring international opportunities for military capability development and overseeing international armament programs. The NAD works to involve Belgian defence industries in these efforts. Defence attachés, in collaboration with commercial and diplomatic representatives, promote Belgian industry in their assigned regions.

Belgium’s defence acquisition policy focuses on strategic autonomy, ensuring that major equipment procurement is guided by factors like cost-effectiveness, whether to procure off-the-shelf solutions or invest in research and development, and whether to pursue international cooperation or domestic production. Developing Belgium’s **Defence Technological and Industrial Base (DTIB)** is also a central goal, ensuring that the country can produce high-quality military equipment independently when necessary. The STAR Plan also emphasizes European partnerships to address capability gaps and advocates for buying “off-the-shelf” equipment when urgent needs arise.

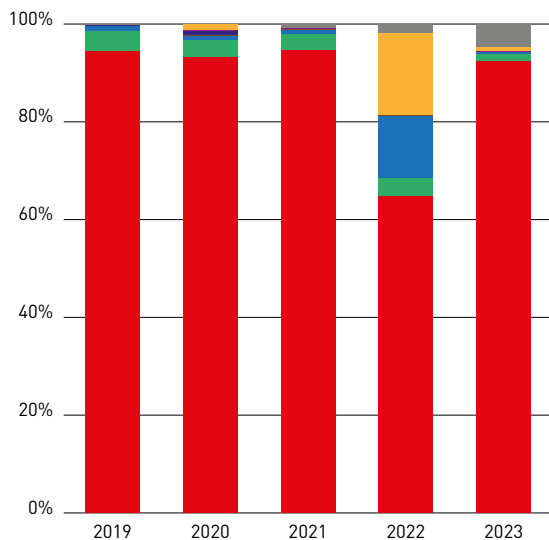
**Belgian defence contracts**

All new Belgian defence contracts, such as the acquisition of new equipment, are classified under two laws: the Classical Law and the Defence and Security Law. This classification distinguishes between non-defence-specific material and defence-specific material. For instance, items related to the internal workings of the defence organization, such as telecommunications, fall under the Classical Law.

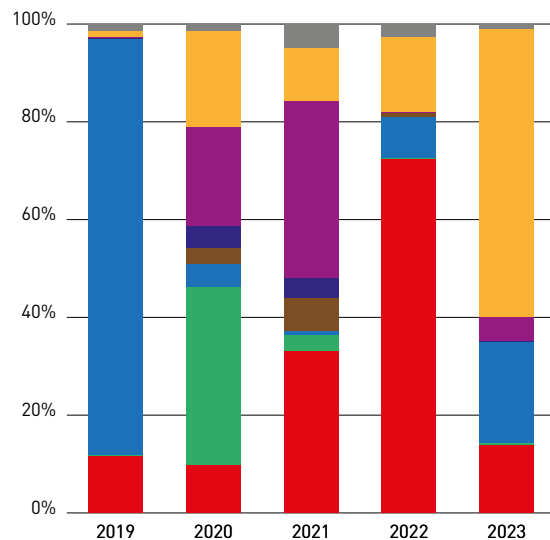
Graph 2 illustrates contracts (excluding VAT) awarded under the Classical Law between 2019 and 2023, showing how these contracts are distributed. The chart indicates that most contracts under this law are awarded to Belgian companies or organizations. The Netherlands takes second place, followed by France in third.

Graph 3 presents the distribution of contracts for defence-related acquisitions under the Defence and Security Law (also excluding VAT) for the same period. The distribution fluctuates depending on the year. In 2019, most contracts were awarded to France, in 2020 to the Netherlands, in 2021 to the United States, and in 2022 primarily to Belgian companies or organizations.

**Graph 2: Marketvalue of public Belgian defence contracts under Classic Law, without VAT, 2019-2023**



**Graph 3: Marketvalue of public Belgian defence contracts under Defence and Security Law, without VAT, 2019-2023**



- Other
- International organization
- United States (incl. FMS)
- France (incl. G2G)
- Netherlands (incl. G2G)
- United Kingdom
- Belgium
- Germany

Source: Ministry of Defence, 2024

Both charts include a category for “other countries”, which represents the combined total of contracts awarded to a list of smaller partners, including Canada, Denmark, Finland, Italy, Luxembourg, Spain, the Czech Republic, Greece, Austria, Switzerland, Norway, Romania, New Zealand, Jordan, Estonia, Congo, Rwanda, Serbia, Sweden, Slovenia, and Ireland.

#### 4.5.2 DIRS (Defence Industry and Research Strategy)

The **Defence, Industry, and Research Strategy (DIRS)** is the overarching strategy for building and maintaining a strong Belgian technological and industrial base, capable of positioning itself at both the European and transatlantic levels, while also meeting certain national defence-related autonomy needs. This strategy defines the long-term objectives and technology areas that ensure the preservation of advanced defence-related technological expertise and industrial capabilities in Belgium, and that Belgium contributes significantly to European strategic autonomy.

Central to DIRS is the creation of cohesive value chains and consistent support across the entire lifecycle of capability or product development—from research and technology through design, engineering, production, deployment, and in-service support. This holistic strategy is bolstered by targeted policies created in partnership with the appropriate federal and regional authorities.

The technology domains prioritized by DIRS are important to the medium- and long-term capability development of Belgium’s security and defence policy, but also hold future relevance for the collective security of European and transatlantic partners and contribute to the development and strengthening of the Belgian Defence Technological and Industrial Base (DTIB), aligning with long-term European and transatlantic capability needs.

Fifteen key technological domains define the DIRS focus areas, encompassing vertical fields such as advanced soldier systems, ammunition, and unmanned systems, as well as horizontal fields like cybersecurity, energy solutions, and smart materials. Additionally, the strategy prioritizes investment in disruptive and emerging technologies with the potential to significantly enhance defence capabilities and address evolving security challenges.

At the core of DIRS lies a commitment to fostering close collaboration among the Defence Ministry, Belgian industry stakeholders, research institutions, and academia. This collaborative approach is key to position the Belgian DTIB as a reliable and competitive technological partner while

safeguarding critical scientific knowledge, technological expertise, and industrial capacity.

**Table 4: The key technological priorities of the DIRS, categorized on the vertical and horizontal axis.**

<i>Vertical axis</i>	<i>Horizontal axis</i>
Maritime mine countermeasures technologies	Defence-related cyber
Next generation combat aircraft technologies	In-service support and life cycle services
Advanced military health and human performance	Smart and advanced structures and materials
Advanced soldier system	Energy and environment
Ammunition systems/ effectors and integration	Information processing & data management, communications & embedded intelligent systems
Unmanned intelligent systems	Emerging and disruptive technologies
Space-related applications	Underpinning technologies
	Skills and competences

Source: Royal Higher Institute for Defence, 2022

#### STAR plan update 2023

In 2023, the Belgian Defence Ministry made significant strides, including increases in personnel for operations and training, infrastructure development, and recruitment successes. There were also critical developments in terms of reorganization, transitioning to the new Defence Staff structure, and implementing the Readiness Plan. Belgium has also played a key role in supporting Ukraine during the ongoing conflict. Despite the progress, the global situation remains dire, with the war in Ukraine, coups in Africa, and renewed violence in the Middle East underscoring the need for robust and adaptable defence strategies. Emerging threats and natural disasters further necessitate accelerated transformation and adjustment of the STAR Plan.

Belgium took significant steps in 2024, such as delivering new strategic capabilities and providing training for advanced systems. Defence will also keep focusing on aligning personnel and equipment, improving recruitment and retention. In the coming years, the STAR Plan’s effect on the Belgian defence forces, capital equipment, and the overall Belgian defence sector, will be noticeable and substantial (Beldefnews, 2024).



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