

Ministry of Defence

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# A STRONGER NETHERLANDS, A SAFER EUROPE

**INVESTING IN A ROBUST NATO AND EU** 

2022 DEFENCE WHITE PAPER

## PREFACE

We present this Defence White Paper at a tipping point in European history. A large-scale war is raging at the very heart of Europe. In this new reality, it is important that we take responsibility. The Netherlands and Europe must become stronger in order to be able to protect our freedom, security and prosperity, today and in the future. That is the starting point for this Defence White Paper.

The threat assessment has grown in scale and complexity over the past years, and this instability is expected to continue. In view of the challenges we face, the Netherlands Ministry of Defence will be called upon with increasing frequency in the future. Whether defending our own territory and that of our allies, promoting the international rule of law or providing relief in a crisis: the Netherlands armed forces always step up to the plate. Thanks to the personnel of our organisation.

Building the armed forces of the future therefore begins with our people: regular military personnel, civilians and reservists. We will invest in good conditions of employment, education and training, and a safe working environment. Good employment practices also entail creativity and flexibility in the recruitment and retention of our people, and good facilities for our veterans. The Defence organisation will become a modern organisation that does not only serve society but is also at the very heart of it. Sustainability, transparency, inclusivity and diversity are standard elements in our plans.

We are resolutely working to make up arrears. Operational readiness, combat power and agility will be increased. In addition, we are taking a targeted and efficient approach to our investment in new domains and in innovation. This includes strategic choices. For that reason, the Defence organisation is committed to a long-term programme of intensive collaboration and further development of our specialisations. But we cannot do this alone. Reinforcement of the European security architecture starts with a strong NATO and a strong EU. Together, we will improve the coordination of investments in national armed forces, paying particular attention to Europe's strategic shortfalls. By working together, we will improve the quality, quantity and efficiency of our own armed forces and those of our partners. The Netherlands will play a leading role in this reinforcement drive.

We will expand and intensify our collaboration with our partners. We will also do so with knowledge institutes, the business sector and other security partners. Moreover, we will maintain internal communication across all branches and levels of the armed forces about what is needed and how we can best shape the transition of our organisation.

Our freedom, security and shared values are precious. Before you lies an ambitious yet realistic plan for the future of our armed forces, underpinned by the most substantial investments in the Defence organisation since the end of the Cold War. Swift action is needed to achieve concrete results, yet recovery and restructuring also take time. Multi-annual political commitment remains essential for the long-term realisation of the changes that have been initiated.

We are pushing hard to implement the plans set out in this white paper, together with our personnel and our partners. This is how the Defence organisation will protect what we value.

Minister of Defence Kajsa Ollongren

**State Secretary for Defence** *Christophe van der Maat* 

## 2022 DEFENCE WHITE PAPER: A STRONGER NETHERLANDS, A SAFER EUROPE

### **MAIN MEASURES**

### 1 Strong support

- Replenish stocks such as ammunition, fuel and equipment
- Tackle materiel maintenance backlogs
- Strengthen support for special forces, air defence, fire support and national tasks
- The Netherlands as the gateway for military mobility in Europe

### 2 A good employer, embedded in society

- Improve conditions of employment with a new salary structure, allowance scheme and flexible HR model
- Diversity, inclusiveness and social and physical safety
- Concentrate, renew and increase sustainability of real estate

### 3 Strengthening of specialisations

- Strengthen air and missile defence at sea and in the air
- Expand and arm unmanned reconnaissance aircraft
- Reinforce measures to counter enemy drones

### 4 More European cooperation

- Expand and intensify collaboration with European partners
- Boost European development of defence capabilities
- Increase contribution to the existing European headquarters
- The Netherlands continues to strive towards better interoperability and increased standardisation within NATO and the EU

### 5 New domains and the ability to innovate

- Investment in research with knowledge institutes throughout Europe
- Development of our own technological and industrial base in the Netherlands
- Investment in the space domain and development of our own small satellites

### 6 Information-driven organisation and operations

- Improve IT infrastructure
- Reinforce intelligence capabilities
- Purchase new sensors
- Expand defensive and offensive cyber capabilities

### **COURSES OF ACTION**



A good employer, embedded in society

Strong support

Strengthening of specialisations



More European cooperation



New domains and the ability to innovate



Information-driven organisation and operations European countries are joining forces to protect Europe's current and future security. They are intensifying Defence collaboration and increasing defence spending. An increase in collective defence capabilities will allow Europe to better defend itself and counter any threats. This is a matter of urgency, as demonstrated by Russia's invasion of Ukraine.The Netherlands, too, will invest heavily in defence in the coming years. The government will invest an additional 14.8 billion euros between 2022 and 2025. With these funds, the armed forces will become a future-proof organisation embedded within NATO, the EU, and Dutch society. The Defence organisation will take significant steps in the coming years to make the Netherlands stronger and Europe safer.

### EFFECTS

### **OBJECTIVES**



#### HIGHER READINESS AND DEPLOYABILITY

The Defence organisation must be able to act more rapidly, more frequently and for longer periods of time. The current diverse and complex threats demand it.



#### TARGETED IMPROVEMENT OF COMBAT POWER

The armed forces must be capable of fighting and winning. That is a deterrent. The Defence organisation is reinforcing a number of specific capabilities.



#### **MORE AGILE**

The armed forces must be capable of adapting to threats and crisis situations rapidly, scaling up or down quickly, and taking a customised approach, all on the basis of a solid foundation. Future-proof armed forces, embedded in NATO, the EU and Dutch society

Caribbean territories

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## INTRODUCTION

Countries around the world are facing various and increasing threats. The shifting balance of power, climate change and technological advances all play a significant role. Russia's invasion of Ukraine demonstrates how threats can turn into actual violence with far-reaching consequences, even on the European continent. NATO countries are therefore taking additional measures to bolster their defences. Within the European Union, too, there is momentum for collectively strengthening the security architecture. European countries want to improve their ability to protect their populations. For the first time in years, the Netherlands is investing heavily in defence in order to be able to defend our freedom together with our allies.

By reinforcing its defence cooperation, Europe will become a stronger partner in the transatlantic relationship and a more credible player in the geopolitical field. Now is the time to work with our allies on the collective development, procurement and maintenance of materiel, and the training of personnel. More standardisation increases interoperability. After all, military cooperation is heavily dependent on the ability of our systems and units to operate together without limitations.

The Russian invasion of Ukraine may be foremost in our minds, but it is by no means the only type of threat that is looming. Increasingly, hybrid power struggles are involved: disinformation affects our democracies on a daily basis and frequent cyberattacks pose an ongoing threat to critical infrastructure and processes. The development of China as a superpower means that the US is shifting its focus from Europe to Asia. At Europe's borders, climate change and inadequate public policies are fuelling instability and extremism. Within our own Kingdom, organised crime groups are undermining the rule of law and causing more extreme violence on our streets. In the Caribbean, the situation in neighbouring Venezuela is causing geopolitical tensions. In addition, the effects of extreme weather conditions are noticeable throughout the Kingdom.

The armed forces serve the Netherlands in order to protect our freedom, our security and our prosperity. The diversity and complexity of threats clearly demonstrate the need for armed forces that can be deployed rapidly and effectively in a variety of scenarios, often at several locations at once, as part of international alliances and in variable circumstances. We cannot limit our focus to just one type of threat or one type of operation. This approach demands a great deal from our people, and precisely those people are our greatest strength. They are always ready, at home and abroad, whenever and wherever they are called upon. By making additional funds available, the government is committing to building future-proof armed forces. We will invest in our personnel by providing better conditions of employment, good colleagues and sufficient staffing levels, opportunities for development, and modern equipment with which they can do their jobs safely.

### SELECTED AREAS OF FOCUS

The Defence organisation is transforming itself into a modern, high-tech organisation with the ability to respond more rapidly, with greater adaptability and combat power; an organisation that acts on the basis of the best information. The Netherlands cannot protect its freedom, security and prosperity on its own. And it does not need to. As a member of NATO and the EU, we are embedded in two powerful and complementary alliances together with countries that share our values. In terms of our investments in the Defence organisation, we are therefore selecting capabilities that provide added value within those alliances. Because they match our qualities and because they meet the needs of NATO and the EU. Together we stand strong in the face of the dangers that lie ahead.

We have established specific areas of focus in order to guide our choices. First, we will reinforce the foundation of our armed forces. This is the quickest way to increase our readiness, deployability and agility. In concrete terms, this means improving conditions of employment, bolstering business operations and reinforcing operational support for combat units, for example by:

- increasing deployment stocks;
- reinforcing the air transport capability;
- reinforcing the medical chain;
- expanding fire support capabilities;
- expanding intelligence, surveillance, and reconnaissance (ISR) capabilities.

Besides the foundational layer, combat power will also be reinforced. The emphasis in this regard is on multidomain operations: achieving effects collectively. For example, integrated air and missile defence will be strengthened with additional ground-based air defence capabilities and additional fighter aircraft, and with the procurement of long-range and precision-guided weapon systems that can also be deployed from frigates and submarines. To enable a rapid response in times of crisis, Royal Netherlands Army and Royal Netherlands Navy special operations forces will be reinforced with support units and resources such as special helicopters. Furthermore, the Defence organisation will expand the capabilities that contribute to national security, including the protection of critical infrastructure and processes.

The specific consequences for the armed forces services in short:

For the Royal Netherlands Navy (RNLN) and the Royal Netherlands Air Force (RNLAF), the focus is on attaining greater striking power, which will enable them to make greater contributions to international joint deterrence and operations at the highest end of the spectrum of force;

For the **Royal Netherlands Army (RNLA**), the focal point is further integration with the German army and the increase of collective striking power. We will invest in the necessary support so that battalions can operate more rapidly and autonomously across the entire spectrum of force.

For the Royal Netherlands Marechaussee (RNLM), the focus is on information technology, training opportunities, and providing support for land operations and national tasks. This will allow the Defence organisation to also meet increasing demand for support to civilian authorities.

### BUILDING THE ARMED FORCES OF THE FUTURE

It takes time to build future-proof armed forces. After earlier cutbacks, the current growth demands a great deal of our people and processes. The Defence organisation understands like no other the need to achieve this growth quickly and responsibly, and is fully committed to doing so. In the coming years, the Defence organisation will achieve the following effects:

### 1. Higher levels of readiness and

**deployability:** Units must be at full strength, trained and current, and provided with the right

support and sufficient supplies so that they can be deployed more rapidly, more frequently, and for longer periods of time. This requires, among other things, investment in our personnel, as they form the core of the organisation. They deserve appropriate remuneration and a safe and pleasant environment in which they can focus on their unique work.

- 2. Targeted improvement of combat power: The armed forces must be capable of fighting and winning. This acts as a deterrent and contributes to preventing armed conflict.
- 3. More agility: The Defence organisation must be capable of adapting rapidly, independently and in an international context when threats and crisis situations arise suddenly. In this regard, innovation is crucial in order to keep up with the constantly changing playing field.

The transition of the armed forces will be subject to changes in our environment. Regardless of whether these changes concern the security situation, the labour market, the climate or modern technology: the Defence organisation will adapt in order to shape the armed forces of the future. Stronger ties to society and creative solutions, for example with regard to recruitment and retention, will help us deal with changing circumstances. With a view to the future, the Ministry of Defence must also carry out essential modernisations. That requires across the board commitment to information-driven operations, automation and robotisation, cyber and cyber security, electronic warfare, and space presence. Sustainability measures are already part of our business operations and will continue to be included.

### A STRONGER NETHERLANDS, A SAFER EUROPE

As a result of the ambitions and the associated investments of the current government, in 2024 and 2025 the Netherlands will meet the NATO standard of spending 2% of Gross Domestic Product (GDP) on defence. The structural increase in defence spending amounts to EUR 5 billion. After 2025, the Netherlands will fall below that standard, but it will reap the benefits of the initiated change of direction. A stronger Netherlands in terms of defence contributes to a safer Europe, of which we are an integral part. How will the Defence organisation attain its goals for readiness, deployability, combat power and agility? What path will the Defence organisation follow for our country to play a more robust role in Europe? This Defence White Paper will answer those questions.

## **READER'S GUIDE**

The introduction and this reader's guide are followed by the threat assessment: a brief visualisation of factors that indicate why the Defence organisation must be reinforced. Next is an infographic illustrating our objective, the effects to be achieved, and the courses of action for the necessary transition of the Defence organisation.

This transition plan is further detailed in the remainder of the white paper. First, the selection of focus areas is explained. The choices made have resulted in six courses of action. Each of these courses of action is discussed in a separate chapter. For each course of action, the reasons are set out why this choice is effective (will lead to the intended effect) and efficient (the best way to achieve the objective).

Although the choices by the Defence organisation have been elaborated as six separate courses of action, they will be addressed as an integrated whole. For example, the organisation of our real estate is determined by the requirements of good employment practices (Course of Action 2); but it primarily serves the operational requirements (Courses of Action 1 and 3).

In Annex 1, operational readiness is explained in greater detail, including a description of the transition per Defence element. Annex 2 is devoted to finances, and Annex 3 presents the investment programme.

Annex 4 covers reporting and evaluation. The Defence organisation produces a variety of reports about matters such as personnel, materiel, and deployability. The most important reports are listed in this annex. On the basis of these reports, the Ministry of Defence informs Parliament about the deployment of military personnel in the Netherlands and abroad, the implementation of defence policy, and the expenditure of financial resources. In future budgetary reports, the Defence organisation also intends to use more concrete indicators to provide greater insight into the implementation of the plans set out in this white paper. In addition, reports are intended to look not only back to the past but also forward to the future. The evaluation agenda provides the Defence organisation with the opportunity to learn lessons during the implementation of the policies that are under way and to investigate whether resources have been used effectively and efficiently.

This Defence White Paper marks the start of this government's transition programme for the Defence organisation. Additional documents will follow. For example, an implementation plan will be drawn up to recruit and retain more people in the Defence organisation. The Defence organisation is working on an implementation plan to bring more focus and concrete substance to the 2021-2025 Strategic Knowledge and Innovation Agenda. There will also be an implementation plan for our sustainability plans. In addition, plans to concentrate and renew the Defence organisation's real estate, as well as make it more sustainable, will be sent to Parliament in the summer. Furthermore, the new strategic real estate plan provides a response to the interdepartmental policy study into real estate, the Interdepartementaal Beleidsonderzoek 'Toekomstvast – goed beheerd, naar een toekomstbestendige vastgoedportefeuille voor Defensie (IBO Vastgoed).

## SEVERE DETERIORATION OF THE SECURITY SITUATION





### REGIONAL DEVELOPMENTS

### KINGDOM

Within our own Kingdom, organised crime groups are undermining the rule of law and causing more extreme violence on our streets. In the Caribbean, the situation in neighbouring Venezuela is causing geopolitical tensions. In addition, the effects of extreme weather conditions are noticeable throughout the Kingdom.

### **EUROPE'S BORDERS**

Climate change and inadequate public policies are fuelling instability and extremism, resulting in armed conflict, oppression and irregular migration. Proxy wars are being fought in Syria, Libya, Yemen and elsewhere.

### RUSSIA

The security situation in Europe is deteriorating due to the Russian invasion of Ukraine. The consequences are barely comprehensible. The integrity of the allied territory is under real threat. Russia has violated numerous treaties and conventions. Russian intelligence officers do not shy away from using nerve agents on NATO territory. Even nuclear threats are not shunned.

### CHINA

China as a superpower is developing rapidly, also militarily. The country is adopting a more assertive stance. This is also contributing to the American shift of focus from Europe to China. China has a wide range of military and non-military resources at its disposal, which it can deploy in isolation or together to gain power and influence.

# OBJECTIVE AND IMPLEMENTATION



### OBJECTIVE

**Europe must improve its ability to defend itself and its own security interests.** Europe needs to become more self-reliant. The countries of Europe, including the Netherlands, must therefore become stronger together. This will be accomplished through NATO, the EU, and international cooperation.

The Defence organisation will become a **future-proof organisation embedded within NATO, the EU, and Dutch society**.

The Defence organisation will reinforce its foundation and transform itself into a high-tech organisation that is responsive and highly adaptive, prepared for the challenges of today and tomorrow.

The Defence organisation must be able to fight when necessary and, together with partners, be able to protect common interests. Below the threshold of armed conflict, the Defence organisation must also be ready for a wide range of deployment options. The Defence organisation will focus on the capabilities where the Netherlands has the greatest added value in relation to our partners. The technological, social and ecological developments that affect society and the Defence organisation will be taken into account. Those developments range from the consequences of climate change to trends in the labour market.

### **EFFECTS**

Strengthening the foundation and getting the most out of the existing organisation will increase the operational relevance of the Defence organisation and the stability of its finances. This will allow the organisation to focus on its core task: the deployment of the armed forces nationally and internationally. Meanwhile, the Defence organisation will be transforming itself into a smarter, more high-tech organisation with the ability to respond more rapidly, with greater adaptability and combat power; an organisation that acts on the basis of the best information.

To that end, the Defence organisation will achieve the following effects:

 Higher levels of readiness and deployability: The Defence organisation must be able to act more rapidly, more frequently and for longer periods of time. The diverse and complex threats that exist simultaneously across multiple domains demand it.



The armed forces must be able to step up when our security is under threat. Firstly, this requires that we reinforce operational support and increase deployment stocks. These are currently significant bottlenecks that mean we cannot make maximum use of our armed forces and

often have to deny requests from partners. With investments in fire support and air defence, supply, medical units, operational IT, ammunition and spare parts, the Defence organisation will make more deployment possible. Investments in materiel and exercises also contribute to increased readiness and deployability. Furthermore, the Defence organisation is investing in its personnel: we are providing our people with sufficient flexibility, challenging and meaningful work, career perspective, and appropriate remuneration. As a result, the Defence organisation will become and remain attractive to a greater target group. With enough people with the right skills, the Defence organisation can fight when necessary.

2. Targeted improvement of combat power: The armed forces must be capable of fighting and winning. This is a deterrent. We have opted to reinforce a number of specific capabilities.



The Defence organisation, together with its partners, must be able to respond to threats in any domain. Opponents are modernising their weapon systems, continuously increasing their impact. The Defence organisation must therefore also have high quality capabilities at its

disposal. These act as deterrents that can help prevent conflict. However, if conflict does arise, the armed forces fight to win. Because the Netherlands cannot do everything in isolation, the Defence organisation has , on the basis of our strengths and geographic location, made a targeted selection of capabilities that add significant value for our partners. This is how the Defence organisation contributes to the collective combat power of NATO and the EU. With the investments by the current government, the Defence organisation is therefore reinforcing the intelligence chain, cyber capabilities, special operations forces, fire support, and integrated air and missile defence.

3. More agility: The Defence organisation must be capable of adapting rapidly when threats and crisis situations suddenly arise. This requires the ability to scale up or down quickly and to take a customised approach, all on the basis of a solid foundation.



In crisis situations, such as the war in Ukraine and the COVID-19 crisis, the armed forces must be able to adapt rapidly. That is why the Defence organisation is investing in support capabilities, in cooperation with partners, and in reservists and

their employers. Furthermore, the Defence organisation will have faster access to better and more reliable information. Investments in knowledge and innovation also provide agility: the armed forces must also be able to win tomorrow's battle.

The most pressing problems have been solved, but there is more to do. Our IT infrastructure and real estate require further investment, as do physical and social safety. That, too, makes us more agile. In addition, we will simplify our own regulations in order to speed up procedures. Government-wide rules and policies will take account of the special position of the Ministry of Defence.

## **COURSES OF ACTION**

The effects described above constitute the central theme for the plans during the current government's term of office. The Defence organisation intends to achieve these effects through six courses of action, which also determine the structure of this Defence White Paper:



1. Strong support: investing in combat support, combat service support, and deployment stocks will enable the Defence organisation to act more rapidly, more frequently, and for longer periods of time. The Defence organisation will participate in military exercises more often, in multiple domains and with international partners.



**2.A good employer, embedded in society:** Ministry of Defence personnel deserve appropriate remuneration, development opportunities, and a safe working environment. The Defence organisation is therefore investing in employment conditions, a modern personnel policy, healthy business operations, and a healthy working environment. This also includes putting our real estate in order.



**3. Strengthening of specialisations:** the Ministry of Defence is making targeted investments in specific capabilities and skills where we add significant value. As a result, combat power and the effectiveness of deployment will increase. The Defence organisation works closely together with our allies with regard to our specialisations, thus contributing significantly to safety in Europe.



**4. More European cooperation:** cooperation is essential to guarantee our security. We are stronger when working with partners, multilaterally and bilaterally. The Netherlands will play a leading role in this collaboration. A stronger EU in the area of common security and defence means a stronger NATO.



**5.New domains and the ability to innovate:** with the current rate of technological development, failing to innovate means falling behind. Therefore, the Ministry of Defence will continue to take the lead in research and development, as well as in the exploration of new domains. Innovation often creates opportunities for Dutch knowledge institutes and businesses in other industry sectors.



**6.Information-driven operations:** better access to, and use of, data and information will improve the quality of decision-making and increase the effectiveness of operations in all domains (including the cyber domain). In addition to a robust IT infrastructure, the Ministry of Defence is therefore investing in further integration and reinforcement of sensor, weapon and C2 systems; in capabilities for improved and more rapid information processing; and in defensive and offensive assets in the information environment. Information-driven operations take place within the applicable legal frameworks. Furthermore, improvements to information management allow the armed forces to be more transparent.

The central themes of this Defence White Paper are the transition of the Defence organisation and the urgently needed adjustments to our response to familiar as well as emerging threats. Choices must be made across the board. To guide those choices, the Defence organisation has established specific areas of focus.

## THE DEFENCE ORGANISATION'S AREAS OF FOCUS

The Defence organisation performs its constitutional task in line with the three core tasks:



The Defence organisation must be able to act with regard to all three core tasks. However, it is currently predominantly equipped for the second core task. The threat assessment and current events demonstrate that deployment in the context of the first core task is equally necessary. The Defence organisation will, therefore, have to take extra steps in order to be able to perform the first and third core tasks. At the same time, operations in the context of the second core task remain relevant. The Defence organisation must be able to respond more quickly and sustain its effort in a conflict with an equal opponent for a longer period of time. In addition, it must make a greater contribution to the resilience of our Kingdom, for example by contributing to the protection of critical infrastructure and processes. Providing security and protecting the international rule of law continues to be of great importance: it improves global stability and thus contributes to

the security of our Kingdom and of Europe. The contribution to that task is expected more frequently and at multiple locations at once.

In the coming years, important steps will be taken towards a future-proof organisation that is hightech, reliable, highly responsive and adaptive, and embedded within NATO, the EU, and Dutch society. Choices remain necessary. In making these choices, the Defence organisation is guided not only by the threat assessment, but also by Europe's need to be more self-reliant. In that regard, the Defence organisation is considering European shortfalls within NATO and the needs within the EU. The Netherlands must add value and collaborate optimally with partners and allies.

On the basis of this context, the Defence organisation has established areas of focus for the utilisation of the additional financial resources that this government is providing. Those areas are described in the introduction to this Defence White Paper. Firstly, the Defence organisation will reinforce its foundation in order to increase readiness, deployability and agility as quickly as possible. The business operations of the Defence organisation will be modernised to allow growth. Combat power will be amplified in a targeted manner. Our capabilities will be strengthened and also better supported in order to boost international cooperation and integration. Lastly, commitment to essential modernisation and sustainability will make the Defence organisation more future-oriented.

This focus does not add or detract from the importance of one capability or another, but it does ensure that the Defence organisation spends the additional financial resources effectively and efficiently. Through targeted improvements, reinforcements and expansions, the Defence organisation will make a concrete contribution to the many challenges facing the Netherlands, the EU and the NATO alliance.

The choices set out in this Defence White Paper are guided by this focus and are reflected in the courses of action. For example, for the strengthening of support (Course of Action 1), we will specifically address support capability in the areas of focus. The areas of focus determine the priorities to be set in replenishing deployment stocks and spare parts, for example, and they determine the choice to increase support capabilities for land operations and special operations forces. In addition, the armed forces will also intensify their cooperation with national security partners as well as other partners.

The areas of focus also determine the kind of employer the Defence organisation wants to be (Course of Action 2). The Defence organisation will invest in its personnel: employment conditions will be improved and a new human resources model will be introduced. The organisation's growth and the consequent need to recruit, engage and retain committed personnel is a challenge that will require creativity and customisation over the coming years. In this regard, the Defence organisation will pay particular attention to improving social and physical safety. In addition, the Defence organisation will take decisive action regarding real estate to ensure that it provides optimum support for the performance of tasks and that it is future-proof and contributes to the social agenda regarding climate change, energy transition and housing.

With regard to strengthening specialisations (Course of Action 3), the Defence organisation will focus on integrated air and missile defence, for example through additional fighter aircraft, intensified ground-based air defence, and the procurement of long-range and precision-guided munitions for, among other things, frigates and submarines. This aligns with the needs of NATO and promotes expanded and intensified European cooperation (Course of Action 4), such as our cooperation with Belgium regarding navy frigates, with European co-users of the F-35 aircraft for the air force, and further integration with the German army by RNLA units.

The Defence organisation will invest in technical resources (sensors) and intelligence capabilities to gain better situational awareness. This will enable the Defence organisation to act more rapidly, to make better decisions, and to direct operations more effectively. The Defence organisation will strengthen its multidomain operations (the ability to operate across all domains at the same time), because threats are simultaneously manifesting at sea, on land, in the air, in space and in the cyber domain. Investments in knowledge development, technology and innovation will prepare the Defence organisation for the battle of the future. For the space and cyber domains (Courses of Action 5 and 6, respectively), for example, the selected area of focus and the current threat assessment also determine the approach chosen.



Given the increased threat levels on many fronts, it is vital that the Defence organisation scale up its deployability as soon as possible. We now have room to make the targeted investments needed to do so. This course of action will rapidly lead to concrete results.

### COURSE OF ACTION 1 STRONG SUPPORT

Increased levels of threat demand higher levels of readiness and deployability: the Defence organisation must be capable of more rapid and more frequent deployment sustained over longer periods of time. This applies to each of the Defence organisation's three core tasks. Currently, the main bottleneck is the lack of operational support (combat support and combat service support). Operational support consists of the personnel and resources required in support of combat actions, *i.e.* logistics, transport, medical support, fire support, intelligence and maintenance.

Better support capability will make the armed forces more agile and scalable. And with better support, the Defence organisation can more often respond to national and international requests for assistance. Investment in support capabilities will also increase the engagement and motivation among our people. Exercises will no longer grind to a halt due to shortages of spare parts, transport and ammunition. The readiness of the armed forces will be improved, with military personnel trained to a higher level. Annex 1 provides further details on the readiness and deployability of the armed forces.

We have a great deal of catching up to do, and it will take time to strengthen the foundation. To

### ACCELERATION

Due to the sharply deteriorating security situation, the government is bringing forward investment. This will expedite the replenishment of ammunition, spare parts and other deployment stocks. Backlogs in maintenance will also be eliminated more quickly thanks to external hires. As a result, readiness and deployability can be improved at greater speed. reap the benefits of the improved support capability as early as possible, the Defence organisation is taking a smart approach to investment. We are making arrangements with our international partners and allies concerning the collective procurement and maintenance of new support capabilities. The Netherlands has already achieved positive results through this approach, for example with regard to the mine countermeasures vessels (together with Belgium) and the Patriots (with Germany).

We also intend to increase the pooling and sharing of capabilities, which involves countries drawing on a common stock of materiel on the basis of agreements. This enables countries without their own full capability to use heavier materiel. The MRTT tanker and transport aircraft stationed in Eindhoven and used by the Netherlands and its allies are a good example and, where possible, we will continue to follow this approach. In some areas, such as medical support, we will put the basics in order so that we can support the independent deployment of our own rapid response capabilities.

International agreements are also needed for effective procurement, because due to the rising tensions defence materiel is in high demand. Such agreements also contribute to standardisation and thus to international interoperability: the collective procurement of support capabilities helps us work together smoothly. The EU must help expedite the process of reaching agreements regarding standardisation and interoperability.

We will also increase and improve cooperation at the national level. For example, the Defence organisation will establish agreements with commercial parties about flexible, guaranteed logistics capability. We will seek closer cooperation with hospitals and commercial medical parties to share equipment and supplies. By bolstering the



collaboration with civilian partners (in the field of security as well as elsewhere), knowledge institutes and the business sector, the Defence organisation will gain advantages and become even more deeply embedded in society. After all, the business sector and knowledge institutes play an important role as developers and suppliers of new and existing materiel and as collaboration partners for the sustainment of that materiel.

In terms of national cooperation, the Defence organisation also has something to offer in terms of the ability to respond to emergency situations more rapidly, since it has an organisational

### **EDUCATION AND TRAINING**

Armed forces personnel are deployed in difficult circumstances and in complex situations. It is essential that they are properly prepared. The Defence organisation achieves this by providing thorough individual training and education for its personnel and frequent realistic unit-based exercises and training sessions. Over the coming years, the investment in support capabilities and stocks will create more opportunities for training and exercises, also with European and other partners. We will see increasing use of modern simulation techniques and virtual support. The Defence organisation will expand its training capacity and will seek opportunities for collaboration with knowledge centres and educational institutes in the region and elsewhere more frequently.

We will also make the most of opportunities to conduct more frequent training and exercises with international partners. Expanding this form of international cooperation also makes it easier for countries to act together in a crisis or conflict situation.

The current security situation also means that deployment often takes place simultaneously on land, in the air, at sea, in space and in the cyber domain. In order to work together effectively during deployment, units from those different domains must conduct more joint training and exercises. Multidomain operations are thus becoming increasingly prominent in the education and training programme of the Defence organisation. structure tailored to that purpose, the required resources, and personnel with the relevant expertise. For the Kingdom of the Netherlands, a national security strategy *Rijksbrede Veiligheidsstrategie* (RbVs) is currently under development. The purpose of the RbVs is to ensure that the Kingdom is optimally prepared for any risks in the context of national security. A government-wide integrated risk and threat assessment is also being drawn up as the basis for long-term measures within the Kingdom. Completion of the RbVs is expected by the end of 2022. The Defence organisation is closely involved in this process.

National and international cooperation is also required in the protection of underwater infrastructure. Cables, and the data they transport, can come under threat from regular or mini submarines specifically equipped for this purpose. Potential opponents in possession of such submarines can achieve their goals undetected and thus unhindered. This covert method of offensive seabed warfare poses a real and current threat. The Defence organisation aims to expand its capability for protecting data cables, and in order to do so is working together with the ministries involved and with international alliances.

### ACTIONS SUPPORT FOR COMBAT UNITS

Deploying combat units requires a multitude of support capabilities. The government is investing heavily in these capabilities, which will allow us to eliminate backlogs and to increase the readiness of the armed forces for their core tasks.

The Defence organisation is reinforcing support capabilities for the special operations forces (SOF) with better intelligence, explosive ordnance disposal, engineer capability, medical support, fire support, and logistics. This will result in a higher level of readiness of the SOF units. In order to provide this support, a battalion of 11 Airmobile Brigade will for example be transformed into a SOF support unit. Elements of the Maritime Special Forces (MARSOF) and the Commando Corps (*Korps Commandotroepen*, KCT) will be combined to form a joint Early Forward Presence unit that can bolster our information position and, when necessary, strengthen or accelerate our capacity to act.

for SOF operations. This capability will initially be



provided by the current Cougar helicopters, but eventually those will be replaced by helicopters better suited to SOF operations.

Pending the arrival of the new transport aircraft, the Defence organisation will increase the number of contracted air transport hours so that units can continue to receive support during their exercises and deployments abroad. This contracting takes place through the European Air Transport Command (EATC) alliance.

• The Netherlands will strengthen support for the German-Dutch tank battalion, in order to enable the battalion to exercise and deploy independently. This mainly involves command and control, medical, and logistics support.

 Helicopters and transport aircraft will be equipped with fit-for-purpose sensors to better protect themselves against electronic warfare.

The transport helicopters will be equipped with sensors to improve their operation under conditions of reduced visibility and modified to increase their range.

The security unit at Volkel Air Base will be brought up to strength for the execution of new and existing tasks.

By expanding our capabilities for short-range air defence (Stinger) and fire support (mortars), the Marine Corps and 11 Airmobile Brigade will no longer have to share these capabilities, which will allow them to conduct exercises independently and concurrently, and also to be deployed simultaneously.

Current capabilities for ground-based air and missile defence will be reinforced.

The medical chain, which includes capabilities for medical evacuation and advanced mobile hospital capabilities for use on land and at sea, will be reinforced. This will allow us to deploy more units simultaneously. In the same manner, the Defence organisation will also expand the capabilities that can be deployed in national emergencies and crisis situations, both in the Netherlands and in the Caribbean parts of the Kingdom.

The Defence organisation will reinforce fire support capability for ground-based units. This involves the expansion of fire support resources (including the use of the reserve pool of selfpropelled howitzers), armaments, sensors, the required command and control capability and logistics support.

■ Fire support capabilities on board vessels in support of the marines will be expanded with modern precision weapon systems.

• Our national tactical air transport capability will be increased with an additional aircraft in addition to the already planned replacement. Furthermore, the entire fleet's available flight hours will be increased. This will allow for better and more frequent support for units, and the Netherlands will thus contribute to eliminating European shortfalls. The additional transport capability will also enable a more rapid response to emergencies, such as natural disasters in the Caribbean part of the Kingdom.

• The Royal Netherlands Marechaussee will be reinforced with a squadron specialising in military police tasks at the highest end of the spectrum of force, such as detention and investigation tasks into alleged war crimes in mission areas.

#### **INCREASING STOCKS**

The Defence organisation will significantly increase its stocks in the coming years. With replenished stockpiles, units will be able to conduct more frequent and more elaborate training and exercises, they will be deployable more rapidly and for longer periods of time, and the Defence organisation will moreover be better prepared for crisis situations.

The stocks of ammunition, medical supplies, fuel, nutrition and equipment will be increased. This will enable the Defence organisation to provide a more rapid and sustained response to security threats that arise. Storage facilities will be adapted accordingly.

• We are accelerating the purchase of additional ammunition, for example by purchasing greater quantities within existing framework contracts.

Materiel maintenance backlogs will be addressed, for example by purchasing spare parts and reinforcing the supply chain with enhanced management and procurement capacity. Some of the spare parts will be purchased ahead of schedule.

### COOPERATION

Support must become more agile and scalable: the Defence organisation must be capable of rapid and robust action in times of crisis, but that does not mean that the armed forces must have all capabilities available in-house. The Defence organisation will therefore expand and intensify the cooperation with regard to support capabilities.

• For this reinforcement of support capabilities, the Defence organisation will focus on collective procurement and subsequent pooling and sharing with partner countries.

• The Defence organisation will deepen its cooperation with national security partners, as well as with partners in other fields. As part of that process, the





Defence organisation will endeavour to renew agreements on the deployment of the Defence organisation in support of national authorities, also in wartime conditions. Examples include a national defence plan (*Nationaal Defensieplan*) and a nation-wide defence plan for crisis situations (*Landelijk Crisisplan Defensie*). Activities in this area will also cover deployment in the Caribbean part of the Kingdom, for example in operations to combat cross-border organised crime.

The so-called 'ecosystems' (partnerships) with the business sector will be continued and expanded. The Defence organisation is, for example, working together with the business sector to effectively and efficiently increase the availability of transport capacity and make it more sustainable.

The Defence organisation is increasing and expanding its cooperation with civilian parties and thus its connection with society, for example in the fields of innovation, training and operational capability. In this area, we are building on success stories such as the Institute for Defence and Partnership Hospitals (Instituut samenwerking Defensie en Relatieziekenhuizen, IDR), Defensity College, and the HR ecosystem (a system that facilitates organisations in sharing personnel).

### NATIONAL TASKS

In the coming years, the Defence organisation will expand its capabilities for performing its national tasks and for supporting the civil authorities.

The Netherlands is an important entry and transit point for military units of partners who are conducting support operations, exercises and deployments in Europe. In the near future, the infrastructure and accompanying processes (surveillance, security, escorts) will be further improved, in collaboration with other government organisations. This will enable Dutch units, NATO Allies and EU partners to rapidly, efficiently and effectively move large numbers of personnel and large quantities of materiel. To this end, we are entering into cooperation contracts with partners at an accelerated rate and are making specific investments ahead of schedule.

 To better contribute to protection against chemical, biological, radiological and nuclear (CBRN) threats in the Netherlands, the Defence organisation will expand CBRN protection capabilities.

In the coming years, step by step, the Defence organisation will increase its (scalable) capabilities for the protection of critical military and civilian infrastructure and processes. This also includes lending support, during the movement of (foreign) military units through the Netherlands for example. This means, among other things, that the flexible capacity of the Royal Netherlands Marechaussee and the National Reserve must be reinforced.

• To improve the protection of maritime materiel and personnel in the Nieuwe Haven in Den Helder, the Defence organisation will improve the force protection at the port.

The Defence organisation will reinforce command and control at the crisis coordination centres to better support civilian authorities in crisis situations and during emergencies. The centres will be better connected to allow them to act in an informationdriven way in crisis situations and exchange classified information quickly and easily.

• To strengthen the Defence deployment in the Caribbean territories, the readiness and deployability of military units in the area will be improved.

The Royal Netherlands Marechaussee and the Dutch Caribbean Coastguard will, through a staffing increase, contribute to strengthened border control in the Caribbean part of the Kingdom, in collaboration with Dutch Customs and the local authorities.

 The Royal Netherlands Marechaussee will establish a multifunctional squadron to support civilian authorities.

### Accountability

### **EFFECTIVENESS**

Investing in operational support capabilities is effective: it allows for more units to be deployed simultaneously and for more training and exercises. Increased stock levels will directly benefit agility and eliminating operating deficits will increase materiel readiness.

### **EFFICIENCY**

In strengthening support units, we have specifically selected those capabilities and stocks that match the selected areas of focus. We will also select units that the Netherlands must have available independently for deployment or activities related to the readiness process. In doing so, we will continuously assess which support capabilities the Defence organisation must have at its disposal and which support can be organised in collaboration with allies and commercial parties.



Effective and long-term deployment of the armed forces requires people who are up to the task. The Defence organisation must recruit, engage and retain those people, and bring out the best in them.

### COURSE OF ACTION 2 A GOOD EMPLOYER, EMBEDDED IN SOCIETY

The Defence organisation needs sufficient personnel to execute its constitutional core tasks. Building future-proof armed forces starts with investing in defence personnel. They are the heart of the organisation. They need to be able to focus on their specific tasks. To do this, they must receive appropriate remuneration, good equipment, suitable training and a safe and pleasant environment to work in.

The backlog that has built up in the Defence organisation due to previous budget cuts must be cleared. This will immediately improve readiness and deployability. In view of this, employment conditions and the remuneration model will be modernised and improved, and a new HR model will be introduced that will make better use of the talent of individual personnel, offer more opportunities for customisation and personal development, and more potential for further career steps within and outside the Defence organisation.

As the Defence organisation continues to grow, on top of filling the existing vacancies we must attract thousands more people. This will not happen if we continue to recruit and retain personnel in the way that we do now, and this is no simple task. That is why the Defence organisation is drawing up an implementation plan entitled 'Recruit, Engage and Retain'. The Defence organisation will seek a stronger connection with society and attempt to reach new target groups in innovative ways to inspire them to contribute to the resilience of the Netherlands. The starting point is that anyone who is motivated and possesses the right qualities should be able to work for the Defence organisation. This starts with young people. Inspired by models from Scandinavia, among other places, the Defence organisation will examine ways for young people to serve society through the

Defence organisation, on a voluntary basis. This does not mean reinstating conscription, but is about giving young people who are interested the opportunity to serve, for example through a year in military service on a voluntary basis. The Defence organisation is also looking into more collaboration with schools, and the reintroduction of Open Days.

The Ministry of Defence will also further improve the position of reservists. They are fully fledged members of the Defence organisation and crucial to becoming an agile and scalable organisation. That is why the Defence organisation will invest in making optimal use of our reservists and expanding the existing reservist component. To make the prospect of becoming a reservist more attractive, we are removing obstacles and differences with military personnel on permanent contracts. The new HR model contains HR instruments such as new types of appointment and forms of contract, strategic personnel planning and talent management that will enable and ensure that we have and retain the right people at the right time, even if they are temporarily hired from another organisation. This serves the operational interest of the Defence organisation. In order to increase agility and scalability, the Defence organisation will place even more emphasis on the collaboration with civilian and commercial partners. Since scalability cannot be based on contributions without obligations, the Defence organisation will examine how to guarantee the deployment of personnel not employed on a permanent basis when the need truly arises.

Diverse teams are the best teams. That is why the Defence organisation aims to be an inclusive organisation and is putting extra effort into diversity. Each employee must feel safe, appreciated and respected. Physical safety is as important as social safety: military personnel often perform their

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complex task under high pressure and in extreme conditions. They are exposed to serious risks. In recent years, major steps have been taken to improve safety. The Defence organisation will continue its efforts in this area. The safety organisations will be equipped for their important tasks at every level. Safety officers will advise commanders and managers with regard to risks relating to policy, procurement, construction, maintenance, exercises and deployment. A structural focus on risks will be further consolidated with the introduction of integral risk management as a business operations principle. The Defence organisation will make risks visible so that they can be properly assessed. This will make the organisation safer, and therefore stronger.

Good employment practice of course includes recognition for and appreciation of veterans. Veterans have served the Netherlands in wartime conditions or during missions and peace missions. They deserve recognition and appreciation for their service, both from government and society. In addition, the government has a special duty of care towards military personnel, both during and after deployment. The veterans policy guarantees the special care that veterans and their families need in relation to their military deployment. The coming period will be dedicated to the renewal of the care system for veterans, particularly in terms of mental health care. The focus will be on the veteran's reintegration and participation in society, supported by a modern and transparent system of benefits and provisions.

Good employment practice also includes the provision of a good working environment. The organisation must be put in order and business operations must be modernised. This requires time and investment, but it is an important topic and therefore a priority.

In many respects, the Defence organisation's real estate no longer meets today's standards. The current state and fragmentation of real estate cannot support the increased demand for deployment and higher readiness criteria. Additionally, budget cuts in recent decades have had a major impact on the conditions under which defence personnel have to do their work. That is why we are taking decisive action with regard to our expensive, outdated real estate, while taking the regional impact into account, such as regional employment opportunities. Moreover, the Defence organisation will also engage with society's challenges with regard to climate change, energy transition and housing.

In order to perform its constitutional tasks, the Defence organisation needs operating space to sail, fly, drive and shoot, now and in the future. This entails operating space in the Netherlands and also abroad, with which we have long-standing experience. When designating operating space in the Netherlands, due to its role in national security it is sometimes necessary for the Defence organisation to be given an exceptional position, or to build exemptions into for example the Environment and Planning Act. The use of the limited space in the Netherlands is subject to a considered and thorough process and close alignment between authorities and society, of which the Defence organisation is an integral part. Coordination with allies regarding the co-use of their training areas is also required as is coordination with regard to their co-use of our own training areas. Over the coming months we will map out the spatial impact of the plans set out in this Defence White Paper and their execution. We will also take external spatial development, such as housing construction, into account in this analysis. This will result in a spatial planning vision. In this vision, we will examine our current and future operating space, and include our real estate plans. With the Room for Defence programme (Ruimte voor Defensie), we will indicate what the future-proof use of operating space by the Defence organisation entails, and how this task will be realised and anchored through, for example, legal instruments such as permits, while taking the environment into consideration.

## ACTIONS PERSONNEL

The employment conditions for defence personnel will be improved. The Defence organisation has the ambition to put the basic salary in order and to emphasise remuneration for operational deployment and for individual talents and specialisation. Further customisation and options are also necessary. Part of this ambition are: a new pay structure in order to better remunerate personnel; a new and simplified allowance scheme to reward military personnel fairly and transparently for extra efforts such as deployment and exercises; and preparations for the transition to the new pension system.





### **EMBEDDED SOCIETY**

The Defence organisation has a prominent place within society and links to many civilian partners. The most important examples are given in this overview. The Defence organisation will be intensifying and expanding its collaboration with these partners in the coming years. The Defence organisation aims to be a transparent, accessible organisation and to deepen its commitment to local residents, other government authorities, the business sector, non-governmental organisations and knowledge institutes. This ensures the resilience and security of our country and our Defence organisation.



Step by step, the Defence organisation will
 Since the introduce a new HR model between now and 2025.
 This HR model will ensure better career prospects and a better work-life balance. It makes use of new veteran ca examine ir and forms of contract, strategic personnel planning, initiative K

and talent management. This modernisation will attract more people to the Defence organisation, help it to retain more personnel and better match that personnel with tasks and positions.

• The IT systems necessary to support the new HR model will be modernised.

• A more inclusive culture and more diversity will be better facilitated and embedded in, for example, training and the implementation process.

• The Ministry of Defence will strive to achieve a target of a 30% female personnel component by 2030 across the entire Defence organisation. An allocation key will be used per Defence element.

We will introduce more ways to connect with the Defence organisation. The Defence organisation aims to make a plan to attract young people who want to make a voluntary contribution to the resilience of society through the Defence organisation, as is already successfully taking place in Scandinavian countries. Research will begin into a suitable way to offer these 'opportunities to serve' within a Dutch context. We will also examine the possibility of increasing the capacity for successful programmes such as 'Gap year' and Defensity College. Additionally, it will become easier for reservists to work for the Defence organisation, and the number of reservists will be expanded.

The above changes and the modifications necessary within the Defence organisation will collectively be outlined in a 'Recruit, Engage, Retain' implementation plan.

The Defence organisation will consult with employers and partners in order to better guarantee the deployment of reservists. The Defence organisation will increase collaboration with external training institutes in designing training programmes for personnel.

The Defence organisation will embed the topics of safety, risk management, sustainability, integrity, and diversity and inclusivity within training courses.

In order to improve the sustainable employability of personnel, the Defence organisation will appoint more coaches to offer targeted advice to personnel and make other support that is available to personnel with regard to sustainable employability more accessible.

The Defence organisation will supply training shoes to military personnel.

• Since the Defence organisation, as an employer, has a special duty of care towards its veterans and since requests for care are increasing, support for veteran care will be boosted. We will, for example, examine initiatives such as the mental health care initiative KNAK and increase veterans' access to service dogs.

### SAFETY

It is essential that Defence personnel are able to work under good and safe conditions. The Defence organisation will, in the coming years, take further steps to improve physical and social safety, in line with actions taken in recent years.

• Within operational units, we will increase the focus on safety through, for example, special advisers.

• Risk management will be further embedded in the Defence organisation's business operations.

• We promote and safeguard ethical behaviour and encourage social safety.

The Defence organisation remains committed to including the subject of gender in the execution of its operations, in accordance with Defence Action Plan 1325.

### **REAL ESTATE**

Defence real estate is severely outdated, which means that the readiness and actual deployment of units cannot be facilitated sufficiently. In addition, Defence personnel deserve a modern and safe living and working environment. The extensive real estate problems will therefore be tackled in the coming years.

■ The Defence organisation is exploring options to concentrate and renew defence real estate and make it more sustainable, and will send a new strategic real estate plan to Parliament in the summer, also in response to the Interministerial Policy Study on Real Estate (*IBO Vastgoed Defensie*). This plan will be used as a framework for the next 10 to 15 years.

The aim is to create a real estate portfolio that optimally supports the execution of our tasks, that is future-proof, that contributes to job satisfaction and pride, that is sustainable and that, where possible, is more embedded in society than before. One of the starting points of the survey is to, where possible, cluster units and activities that reinforce one another and also to place training capacity closer to the operational units. This will reinforce the regional role of defence locations and, at the same time, ensure a good distribution throughout the country, which is also important with regard to the national tasks of the Defence organisation and regional visibility.



**COURSE OF ACTION 2** 

### **COURSE OF ACTION 2**



Concentrating real estate will also necessitate the difficult decision of closing certain locations.

In planning and shaping this real estate transition, the Defence organisation will be in constant dialogue with regional authorities and other stakeholders.

The option of incorporating Defence real estate within a separate branch of the Government real estate scheme (Rijkshuisvestingsstelsel) will be examined.

The Defence elements will receive extra budget that they can use independently to solve bottlenecks in their own real estate issues.

### SUSTAINABILITY

The Defence organisation contributes to the social challenge of combating climate change. That is our responsibility as a government organisation. The fact that climate change is a driver of instability elsewhere in the world only serves to reinforce how relevant this task is to the Defence organisation. The Defence organisation aims to be energy-efficient in its deployment, because this increasingly contributes to the reduction of its logistics footprint and the increase in operational effectiveness. The Defence organisation is developing an expansive implementation plan with regard to our sustainability goals in the fields of real estate, materiel and innovation.

Sustainability measures will be implemented as part of the renewal and renovation of real estate.

Together with partners and the business sector, the Defence organisation will make more sustainable choices for the energy transition of our (future) operational materiel. In doing so, we will focus on the added value of sustainability for operations.

### COOPERATION

The Defence organisation exists to serve society, and the organisation and its people are part of society. This connection will be further strengthened over the coming years.

Together with the business sector and trade associations, we will increase opportunities for the exchange of personnel. The possibilities of making additional agreements on sufficient and more guaranteed availability are being explored.

In consultation with the ministries, organisations and supervisory bodies involved, we are looking at ways to increase the operating space of the Defence organisation. This is needed for exercises, among other things, which also contribute to the job satisfaction of our personnel. The Defence organisation will involve the local community in the development of plans and the execution of training activities. The Defence organisation will also exercise in the midst of and with society more often. We will also look at conducting exercises together with international partners more frequently.

### Accountability

### EFFECTIVENESS

The Defence organisation wants to offer a workplace where people want to work and want to stay. To increase readiness and deployability, we need enough people with the right skills — and this is a matter of urgency.

By working together more intensively and more intelligently with authorities, the business sector and knowledge institutes, by making a number of our units scalable and by simplifying personnel exchange with other industries, we can increase our agility and striking power, and further embed the Defence organisation in society.

The working environment, too, is improving. Our real estate, for example, is severely outdated. Transforming our real estate portfolio is the only way to make it future-proof. In addition, for the benefit of the national security task, the Defence organisation will also invest in those capabilities that contribute to cooperation with our partners.

### **EFFICIENCY**

The actions described here are a mix of personnel actions that lead to the maximum possible effect within the current financial framework. Investments reinforce each other by contributing to the same goal from different angles in the form of different themes. Better employment conditions, a safe working environment and decent accommodation increase the desirability of the Defence organisation as an employer and appeal to a larger target group. It is efficient to revise the real estate policy along the lines of concentration, renewal and sustainability.

With regard to investments in national security, specifically the Defence organisation's obligations towards its national and international partners have been assessed. By specifically investing in national security, we will be contributing to a stronger security chain.



In our part of the world, too, security and stability are decreasing. This calls for the best conceivable reinforcement of collective operations. That is: the further development of our specialisations and cooperation on the basis of specialised contributions.

### COURSE OF ACTION 3 STRENGTHENING OF SPECIALISATIONS

The Defence organisation has decided to make additional investments in those capabilities and qualities that our armed forces excel at and that add the most value to collective operations with our allies and partners. This will enable us to, together, win battles. Being able to do so is the greatest deterrence against potential opponents engaging in battle in the first place. Not all partners have the same skills, and partners have different capabilities through which they distinguish themselves, for example due to their geographic location and specific qualities. Thanks to our alliances, we do not have to be able to do everything ourselves. Strengthening specialisation through extra investments is a smart way to increase overall combat power. This contributes to the effectiveness of the Defence organisation.

The specialisations in which the Defence organisation will invest are intelligence

capabilities, cyber domain capabilities, special operations forces, and integrated air and missile defence, which includes strengthening the frigates, submarines, fighter aircraft and ground-based air defence systems. Furthermore, we are intensifying the integration of the Royal Netherlands Army with the German army by providing these units with the combat support necessary to increase collective combat power. Training and advice for security institutes that promote the international rule of law will also be further safeguarded and extended.

The next step in strengthening cooperation is coming to agreements with partners and allies about specialisation. Specialisation is a more advanced form of cooperation, the goal of which is to use the individual strengths of partners and allies. The Netherlands is a driving force in Europe when it comes to achieving further specialisation.

### INTEGRATED AIR AND MISSILE DEFENCE (IAMD)

One of the rapidly changing threats the Netherlands is facing is the air and missile threat. Innovations in these weapon systems are taking place at speed. At the same time, arms control agreements and international control mechanisms are increasingly under pressure. The Netherlands' answer to this is to invest in IAMD, in line with the selected area of focus. The objective of having integrated air and missile defence capability is to protect NATO territory, our vital interests, our civilians and our armed forces. IAMD provides defence against conventional air threats such as aircraft, helicopters and unmanned systems (air defence) and against ballistic and cruise missiles (missile defence).

We are developing an integrated system in which military assets such as fighter aircraft, radar systems, air command and control and space capabilities are connected to frigates, submarines and ground-based air defence systems. We will also invest in additional capabilities to combat unmanned aircraft such as drones. These capabilities are known as counter-unmanned aerial systems (C-UAS). The Defence organisation will also expand its short-range and mid-range air defence capabilities. These investments are reflected in the various courses of action.

Through these actions, we aim to strengthen integrated air and missile defence capabilities, both nationally and internationally. They enable the Netherlands to be of greater value in the context of EU and NATO and address a collective shortfall.

### **COURSE OF ACTION 3**



This is a lengthy process, but together we have a greater impact and together we can deliver higher operational effectiveness.

More collective combat power and interoperability are needed to ensure that Europe can take greater responsibility for its own security. Course of Action 4 regarding European cooperation addresses this issue.

In addition to strengthening our specialisms, in the years ahead we will invest in the timely replacement of systems with modern, high-tech materiel. In the coming years, we will focus on replacing our submarines, frigates and fighter aircraft and on improving various vehicle types.

## ACTIONS EXTRA CAPABILITIES

The global security situation is deteriorating. That is why the government is making targeted investments to increase the Netherlands' contribution to collective deterrence and combat power. The government is also investing in the Netherlands' role as a logistics partner and in the unique expertise that the Netherlands has built up over the past decades when it comes to training and advice.

■ The Defence organisation is expanding its F-35 fleet in order have three complete squadrons at its disposal. That brings the total number of available aircraft to 52. This is how the Netherlands, together with other European NATO countries, will give further substance to the collective protection and defence of European airspace.

The entire F-35 fleet will be equipped with modern long-range and precision-guided weapons that can attack strategic targets, such as integrated air defence systems, in a heightened threat environment.

• Air and missile defence at and from the sea will be expanded with ballistic missile detection and interception systems. This entails interception radar systems, as well as firing mechanisms and armament for air defence and command frigates and the unmanned vessels of the future.

 Furthermore, for the RNLN we will invest in long-range and precision-guided weapon systems that can be launched from frigates and submarines.

The Defence organisation will also invest in rocket artillery systems and associated precisionguided munitions that can reach long-range targets with a high level of precision. This will further boost cooperation with Germany.

• We are reinforcing the capability to combat small enemy drones with a dedicated unit, as well as detection systems and countermeasures for the protection of, for example, air bases and sea ports. This capability can be deployed in support of operations abroad, as well as in support of civil authorities in the protection of critical infrastructure and processes within the Kingdom, against this growing threat. Further research is needed to make a final choice with regard to the procurement of these systems.

The Defence organisation will double its MQ-9 capabilities. This will improve maritime and landbased intelligence, surveillance and reconnaissance (ISR) capability, which will enable high-quality information gathering in multiple locations at once, both over land and over sea. The Defence organisation will also invest in arming these unmanned aircraft. This will allow us to achieve the desired military effects more rapidly.

• The anti-torpedo capability for the self-defence of vessels will be modernised.

• The preparation and deployment of military instructors and advisers will be professionalised further. There will be more focus on training and advice in career paths, and training and advice missions will be managed centrally and across the various domains.

### COOPERATION

The Netherlands will play a leading role when it comes to enhancing standardisation and interoperability and in the long-term path towards specialisation.

Collaboration with allies and partners will be intensified and expanded, including the integration of the Dutch and German armies. The EU's Strategic Compass and NATO's Strategic Concept offer starting points for this intensification and expansion.

In talks with international partners and allies, the Netherlands will emphasise the urgency of the long-term path towards specialisation.

Standardisation and interoperability, both between the armed forces services and between European partners and allies, will be a standard aspect of the statement of requirement when procuring materiel.

### MATERIEL PROCESS

Defence materiel often has a long life cycle, but will eventually need to be modernised or replaced to allow our troops to have the latest technology at





their disposal. Important replacement projects are scheduled to take place during this government's term of office. The Defence organisation will also increase agility in this regard.

 Deficits in the investment programme will be addressed. This will allow replacement projects to go ahead in a timely manner.

In consultation with the House of Representatives, the Defence Materiel Process (Defensie Materieelproces, DMP) will be updated to make it a smoother process. The aim is to adopt the new DMP in 2023. Defence will also examine how the internal part of the procurement process can be made more agile, from the initial statement of requirement to the delivery of goods or services.

The 'off-the-shelf procurement, unless' policy remains in force, in line with the COTS/MOTS policy review. If off-the-shelf materiel is not available on time, not suitable, not desirable or not affordable, deviation from the general rule may be considered. This will be explained as and when applicable.

• The remaining deficits in the investment programme will be remedied.

### SUSTAINABLE MATERIEL

The environmental and climate footprint of our organisation and our new materiel should be as small as possible. The Defence organisation will explicitly consider sustainability as a guiding principle in the procurement of materiel, on the one hand in order to reduce dependence on fossil fuels, and on the other hand in order to contribute to national and European objectives in this regard. At the same time, the necessary effectiveness of systems and weapon systems must be maintained. The Defence organisation will reserve a part of the budget to cover the possible extra costs of sustainability measures for modern materiel in investment projects when compared with traditional materiel. We will therefore present a plan that at minimum covers the following points:

Defence will replace more non-operational vehicles with zero-emission alternatives; during this government's term of office 700 to 800 vehicles will be replaced. This course of action will continue after this government's term of office and will ensure that, in 2030, the Defence organisation will have at least 2,800 zero-emission vehicles at its disposal, which amounts to almost 80% of the non-operational vehicle fleet. However, government policy is that this should apply to 100% of the non-operational vehicle fleet by 2028.

• The Navy's new naval support vessels will be zero-emission vessels.

Defence aims to increase the proportion of biomass or synthetic fuels used in combination with kerosene, diesel and marine diesel to an average of 30%.

• The Defence organisation is working together with Dutch industry and the knowledge sector to find sustainable solutions that set us apart internationally.

Defence will include sustainability in the assessment frameworks used in the decisionmaking phase of the procurement process regarding materiel and real estate projects.

Sustainability requirements (and the identification thereof) will be a standard part of regular business operations in, for example, the purchasing process. Capacity will be freed up for this purpose. The Defence organisation also aims to use its procurement volume to encourage sustainability throughout the chain by, for example, setting sustainability requirements for suppliers.

### Accountability

### **EFFECTIVENESS**

Specialisation is a more advanced form of cooperation. Its starting point is to make better use of the individual strengths of partners and allies. Thanks to our alliances, we do not have to do and be able to do everything ourselves. Strengthening specialisations through extra investments is therefore a smart way to amplify overall combat power. This will allow the Defence organisation to better meet international obligations and realise more deployment.

#### **EFFICIENCY**

In the targeted reinforcement of specialisations, we will select capabilities that increase the added value of the Defence organisation in relation to European partners and that fit within the selected area of focus. Outdated materiel will be replaced before the running costs rise significantly. That is more efficient than continuing to invest in the maintenance of old materiel.

## MORE EUROPEAN COOPERATION

The Defence organisation cooperates with many allies and partners, for example in the context of NATO and the EU. This cooperation takes place at three levels: the politico-strategic level, the operational level, and the materiel-related level.

Specifically, this involves collaboration in the fields of training and exercises, missions and operations, the procurement of materiel and systems to promote interoperability, and standardisation.

Like the Netherlands, other European countries are increasing their defence spending. Germany, for example, is investing significantly in its armed forces. This is therefore the time to work together in a smarter way.

The Netherlands will play a leading role and will thus contribute to achieving increased collective operational readiness more quickly, to combating fragmentation and to reinforcing the European security infrastructure. This will make the Netherlands stronger and Europe safer.



POOLING AND SHARING

MILITARY MOBILITY









SPECIALISATION



30





The world order is changing rapidly. To ensure its security, Europe needs a strong NATO and a strong EU. European armed forces must together make a greater contribution. This requires more European and international cooperation. The Defence organisation will play a leading role in this cooperation.

### COURSE OF ACTION 4 MORE EUROPEAN COOPERATION

European countries must be better able to defend themselves and their interests. The freedom, security and prosperity of European citizens must be protected. The Netherlands can only do this together with our allies and partners: the whole is greater than the sum of its parts.

A strong NATO and a strong EU are essential. NATO is the cornerstone of our collective defence. At present, European countries are not able to make a sufficient contribution to European peace and security. No less than 70% of NATO capabilities belong to the US. The situation in Europe is leading European partners to increase their contribution to the collective security architecture. In 2022, Germany decided to increase its defence spending to the agreed upon 2% of GDP. The Netherlands is also substantially increasing its defence budget in order to contribute to European security. Europe will be a stronger partner in the transatlantic relationship if European countries can play a greater role in protecting their own interests. That is why Europe must have independent access to basic capabilities such as strategic air transport. Business as usual is a thing of the past; the European security situation calls for action.

For decades, the Netherlands has worked together with allies and partners, both multilaterally and bilaterally, in alliances and ad hoc coalitions. Cooperation is ingrained in everything the Defence organisation does. Working together has its benefits. By working together smartly, for example by pooling and sharing transport capabilities, we can create room for investment in other capabilities. Through smart investment, we can make better use of our added value and meet the needs of the EU and NATO. In buying the same materiel, we are taking steps with regard to interoperability and standardisation. Synchronising our investments will improve collective striking power.

In the coming years, the Netherlands aims to play a leading role in expanding and intensifying this European and international cooperation; within NATO and the EU, in small coalitions and bilaterally. This is particularly crucial now in order

### STRATEGIC COMPASS

The EU's new Strategic Compass and the forthcoming NATO Strategic Concept offer many starting points to expand and intensify European and international cooperation.

The EU's Strategic Compass gives direction to the European security and defence policy over the coming five to ten years. In the Strategic Compass, the EU has set itself the goals of improving the execution of crisis management operations, increasing resilience against cyber, hybrid and climate threats, investing more in joint capabilities, and strengthening cooperation with NATO.

NATO is reviewing the 2010 Strategic Concept to better guide the Alliance's actions in the coming years. The NATO Allies will adopt the Strategic Concept at the Madrid Summit in June 2022. The Strategic Concept will extensively cover the protection of the NATO treaty area. Hybrid threats are also expected to be addressed.



to ensure that different countries do not invest in their own national armed forces in isolation and in a fragmented way. Because the whole is greater than the sum of its parts — we are stronger together. The Netherlands will intensify the close multilateral and bilateral cooperation that has been established in the past years with strategic partners Germany, France, Belgium, Luxembourg, Norway, the UK and the US. Further agreements will be made with neighbouring countries regarding statements of requirement, the development of capabilities, procurement and maintenance of materiel, training personnel, joint training, and participation in missions. But the Netherlands is also explicitly considering other partners; because we use the same systems, because we naturally enjoy good cooperation, or because we are good at the same things and complement each other. The Netherlands aims to strengthen cooperation, especially within Europe in order for Europe to be able to protect its own citizens.

The growth of the Netherlands' defence budget, and that of our partners, offers opportunities for even better international cooperation. Within the EU, the Coordinated Annual Review on Defence (CARD) provides starting points for international cooperation. For this purpose, we can use EU instruments such as Permanent Structured Cooperation (PESCO) and the European Defence Fund (EDF). We intend to make use of those opportunities in order to invest effectively, by, for example, selecting the same weapon systems, so that we can carry out maintenance together and can exercise and deploy more easily and better. This will increase the interoperability and thus the striking power of European countries. Collective European purchasing will allow us to achieve economies of scale. Through cooperation, the Netherlands will strengthen certain specialisations, such as in the field of cyber. The Ministry of Defence will use the current momentum to boost the development of European defence capabilities this year. By exercising together with allies and partners, the Netherlands ensures that we do not meet each other only in a crisis or conflict situation. The Netherlands does this because we are aware of the differences in cultures, ways of

working, systems and tactics; conducting international exercises teaches us to adapt.

The Netherlands uses existing instruments such as the NATO Defence Planning Process (NDPP), PESCO, the EDF and the European Peace Facility (EPF) to strengthen international cooperation. Within PESCO, the Netherlands already plays a leading role when it comes to military mobility. We will build on this now that the US, Canada and Norway are also participating in this EU project. Within the EDF, the Netherlands has the ambition to play a leading role in projects concerning the cyber and maritime domains, such as semiautonomous platforms. Further possibilities for pooling and sharing of capabilities are also being explored, as is already being done for multi-role tanker transport capability (MRTT), for example. Such NATO and EU projects are amplifying collective European striking power.

The most intensive form of cooperation occurs during deployment. At present, the Netherlands is contributing to the defence of the NATO treaty area, among other things through forward presence at sea, on land and in the air along the eastern border of NATO territory. In light of the current developments on the eastern flank, the focus will remain on protecting national and treaty territory. In that context, the Netherlands will strive for a comprehensive approach, where the deployment of the armed forces, diplomacy and development cooperation go hand in hand.

In addition, the Netherlands aims to remain capable of contributing meaningfully and proportionally to peace and stability operations at the edges of Europe in EU, NATO and UN contexts by increasing its readiness and deployability. This will allow the Netherlands to continue to contribute to security efforts in the Middle East, including combating terrorist organisations that undermine stability in the region. Through these forms of deployment, against the backdrop of a diverse range of threats, the Netherlands contributes to a secure and self-reliant Europe. Lessons must also be learned from previous deployments, such as the mission in Afghanistan.



### ACTIONS cooperation within nato and the eu

The Netherlands continues to strive towards better interoperability and increased standardisation within NATO and the EU, as this is an essential foundation for effective cooperation, with the objective of increasing military capability.

In order to achieve better international alignment, the Ministry of Defence will adapt its own planning processes to match those of the EU and NATO.

The Defence organisation will increase its ability to participate in PESCO projects and strengthen the European network, among other things by increasing Dutch presence in EU institutions, which will boost collaboration before the end of the year.

The Defence organisation will invest in EU projects for capability development by increasing national co-financing for this purpose.

• The Defence organisation will also increase its contribution to EU military missions and operations. In addition, the Defence organisation will contribute to the EU rapid deployment capacity that will be led by Germany in 2025.

• The Netherlands will strengthen its contribution to the EU headquarters in the coming years.

Within the EU, the Netherlands will intentionally adopt a leading role in a number of fields, as we are currently already doing in the field of military mobility. Within the European Defence Fund, the Netherlands will focus on, for example, projects in the fields of maritime security, energy and cyber.

Together with its partners, the Defence organisation will work out concrete steps for the collective development and procurement of materiel and means, shared maintenance and the pooling and sharing of capabilities. In this regard, the Defence organisation will explicitly seek out opportunities within the measures announced in the Commission report on defence investment.

### OTHER MULTILATERAL COOPERATION

• The Defence organisation will cooperate with European partners with regard to the readiness, deployment and maintenance of the F-35.

• The Defence organisation is committed to more intensive military cooperation in, for

example, the Northern Group, the Joint Expeditionary Force and the European Intervention Initiative, but also in military partnerships such as the Arctic Security Forces Roundtable and user groups for materiel, such as the Boxer User Group and the F-35 European User Group.

Investing in strong support (Course of Action 1) will enable the Defence organisation to respond to national and international requests for assistance more frequently. An example of this is the formation of a specialised helicopter unit for SOF deployment.

The Defence organisation also works together with international organisations such as the International Criminal Court to support investigations into alleged war crimes.

### **BILATERAL COOPERATION**

• The foundation for cooperation, especially long-term bilateral cooperation with strategic partners, is the presence of a sufficient number of people with the right skills within the Defence organisation. Investment in this area (Course of Action 2) will enable us to continue and strengthen this intensive but constructive and efficient way of working together with our partners.

• Cooperation with Germany with regard to land operations will be strengthened through further integration of our two nations' armies, with investment in joint use of combat support such as fire support and vehicles, but also further accelerated digitalisation of land operations with tactical units.

 Cooperation with Germany will also be expanded with helicopters in support of rapidly deployable special units.

Strengthening support for the German-Dutch tank battalion (Course of Action 1), in order to enable the battalion to exercise and deploy independently, will allow this joint battalion to deploy more frequently and for longer periods of time.

Maritime cooperation with Belgium will continue and expand with regards to training personnel, procurement and maintenance of materiel and operational readiness of sea units such as frigates and mine countermeasures vessels.

### **COURSE OF ACTION 4**



By investing in areas where the Defence organisation has the greatest added value (Course of Action 3), the Netherlands armed forces will gain a clearer identity for partners and become more attractive to work with. An example of this is the expansion of air and missile defence at and from the sea with ballistic missile detection and interception systems. This is valuable for maritime cooperation with the US.

In the coming years, the Netherlands' efforts in the field of military diplomacy will be further professionalised. This will allow us to strengthen our international networks and information position and improve cooperation with international partners.

### Accountability

### EFFECTIVENESS

The Defence organisation will commit to strengthening cooperation with European partners. Investing in programmes that aim to build collective capabilities, increase interoperability and strengthen European industry, such as the EDF, for example, reinforces cooperation in all aspects. That is essential, and that goal can be achieved now.

### EFFICIENCY

Through cooperation, the Defence organisation will arrive at an efficient use of means and will achieve the maximum amount of striking power for each euro spent, increased effectiveness and a higher degree of interoperability and standardisation. The Defence organisation will, for example, achieve economies of scale together with European partners by reducing the variety of types and versions.

In addition, EU funding will be claimed through the EDF. Participation in international projects has a positive effect on the position of the Dutch defence industry and knowledge institutes.





The battlefield is expanding into the cyber and space domains. Science and technology increasingly make the difference between winning and losing. Knowledge development and innovation will be decisive. The Defence organisation must be one of the winners.

### COURSE OF ACTION 5 NEW DOMAINS AND THE ABILITY TO INNOVATE

The Armed Forces must be able to win the war of today and the war of tomorrow. Having the ability to do so is a deterrent. That is why the Defence organisation will continue to take the lead in research and development, as well as in the exploration of new domains. We will do this in cooperation with our allies and partners. This is in alignment with the strengths of the Netherlands as a knowledge and network economy. A strong ability to innovate guarantees that the high-tech Defence organisation can and will react to relevant developments.

The Dutch defence industry and knowledge institutes can contribute optimally to this course of action if they can work together smoothly with European and international partners. The Defence organisation facilitates this by, for example, participating in the EDF. This fund provides financing for innovative projects in the fields of defence and security and encourages cooperation between European industry and knowledge institutes. This enables the defence industry and knowledge institutes to participate internationally as fully fledged, high-quality partners and suppliers in the development, production and sustainment of innovative products and technologies. This is how we will improve strategic autonomy' and contribute to a more self-reliant Europe.

A thriving defence sector is essential to strategic autonomy, as also indicated in the coalition agreement. The Ministry of Defence and the Ministry of Economic Affairs and Climate Policy are jointly responsible for the development of measures in this area. The focus will be on defence research within knowledge institutes and the development of technology by defence companies, including innovative start-ups and scale-ups, with the Defence organisation actively contributing to the competitiveness of the Dutch defence sector. We will also further intensify and expand our cooperation with knowledge institutes and the business sector by reinforcing knowledge and innovation ecosystems together with these parties. Short-cycle innovation, participation in international defence materiel projects and the positioning of the Dutch defence industry and knowledge institutes within the European Defence Fund will also be focus areas.

Through the development and implementation of the measures set out in the 2018 Defence Industry Strategy (DIS), the Defence organisation also encourages collaboration in the field of defence and security. With each outlay, the Defence organisation will look at ways to not only invest in security, but also to create added value to society. The Defence organisation will further expand its cooperation with knowledge institutes and the business community by strengthening knowledge and innovation ecosystems with these parties and by examining innovative forms of cooperation. Innovation for military purposes can also provide opportunities for other industries. This will also enable us to take advantage of the opportunities offered by, among other things, the Security Knowledge and Innovation Agenda of the Ministry of Economic Affairs and Climate Policy's Mission-

Strategic autonomy is the guaranteed access to and availability of national and international knowledge, rights, people and means necessary to maintain military capabilities and carry out operations, regardless of the coalition of which the deployment is part. In this respect, the government focus is on a more self-reliant Europe.

driven Top Sectors and Innovation Policy (*Missiegedreven Topsectoren en Innovatiebeleid*, MTIB). Protecting sensitive technologies is an important aspect in this area.

In support of this course of action, an implementation plan will be sent to Parliament in the near future that will bring more focus and concrete substance to the 2021-2025 Strategic Knowledge and Innovation Agenda. This focus and substantiation will be brought into line with the needs of the Defence organisation and its allies and partners, as well as with the knowledge and skills of Dutch knowledge institutes and the business sector. In this way, we can achieve the greatest possible added value. One example is radar technology, a field in which the Netherlands has traditionally had a strong knowledge base. Other focus areas will also be determined. Examples of concrete focus areas within the innovation programme are new domains, labour extensive working methods and sustainability:

#### **1 NEW DOMAINS**

Owing to technological advances, new threats are to an increasing extent emerging in new domains. Examples include the cyber and space domains. This requires knowledge building and innovation, and subsequently, new capabilities. That is why the Defence organisation will specifically boost its combat power in these new domains. The Defence organisation must be able to operate more forcefully and innovatively in the cyber domain, because the battlefield is becoming increasingly digital. The Defence organisation must establish a presence in space because Europe, the Netherlands and the Defence organisation itself depend on satellites. The Defence organisation must therefore keep track of what is happening in space and enable secure communication between units. With these two new domains, in addition to the existing sea, land and air domains, it will become more important than ever to think, organise, operate and exert command and control across domains in a multidomain environment.

#### 2 LABOUR-EXTENSIVE WORKING METHODS

The Defence organisation can become more labour-extensive through more intensive use of knowledge, innovation and new technology. Automation, digitalisation and robotisation can help to make certain kinds of work safer and easier. This will allow people to concentrate on those aspects that we do not want machines to take over: interaction, situational understanding and ethical considerations. In certain cases, physical selection criteria will be adjusted too: remote-control work with a drone places other demands on military personnel than when marching with full equipment for four hours.

**COURSE OF ACTION 5** 

#### **3 SUSTAINABILITY**

Climate change is one of the greatest challenges of our time. The Defence organisation wants to take responsibility when it comes to combating climate change and, due to its size, it can have a real impact. As well as combating climate change through sustainability measures, the Defence organisation must also be able to respond better and more rapidly to its effects with regard to security. This encompasses, for example, the ability to provide humanitarian assistance and disaster relief in the event of disasters caused by extreme weather, and the ability to respond to problems arising from, for example, drought in mission areas or potential mission areas; and to quite simply include the effects of climate change in military strategic analyses. Here, too, cooperation with our partners within the EU and NATO plays a major role.

Where possible, the Ministry of Defence will join initiatives by other governments, the market and society. Defence will participate in climate projects for which government-wide resources have been made available. There are also opportunities for Dutch industry. Real estate will be made more sustainable, dependence on fossil fuels will be reduced and the Defence organisation will take steps to become more and more self-sufficient, both operationally and within business processes. Not only society, but the Defence organisation itself benefits from reduced dependence on (foreign) oil and gas. The Defence organisation will achieve this by, for example, making more use of renewable energy and circular goods.

Since there are many opportunities for progress in this area, sustainability measures are included in various courses of action set out in this Defence White Paper. Implementation of all of these measures will make the Defence organisation more agile, less vulnerable and less harmful to the (operational) environment. In addition, through



these measures the Defence organisation will contribute to the climate goals set by the Netherlands, the EU and NATO. The sustainability measures will be further developed in a sustainability implementation plan.

An important prerequisite for successful innovation is the step from innovation to implementation. The results of research and development (R&D) must be applicable in the field, an issue that will remain a point of focus for the Defence organisation.

# ACTIONS COOPERATION

Innovation, research and engagement with new domains are key areas to address together with allies and partners. This saves us from all having to reinvent the wheel.

The Defence organisation will contribute to European strategic autonomy by (co)funding initiatives of other departments (such as the National Growth Fund) and of the EU, including PESCO and the EDF. This will allow Europe to take more responsibility for its own security, while at the same time boosting the Dutch technology sector.

The Defence organisation will continue to stimulate partnerships with industry, universities and knowledge institutes, for example with regard to concept development and experimentation.

#### INNOVATION AND RESEARCH

• The Defence organisation is working on an implementation plan to bring focus to and set concrete objectives in the 2021-2025 Strategic Knowledge and Innovation Agenda.

• The Defence organisation will invest in applied scientific research for knowledge building and technology development. Spending to that effect will increase in line with the defence budget to ensure that the percentage spent on research and technology remains at the same level.

The Defence organisation will cooperate with several countries to research and develop future systems and unmanned systems such as fighter aircraft, combat vehicles and helicopters.

The Defence organisation will keep funding available in order to be able to respond rapidly to projects for the joint research and development of capabilities, and to scale up successful innovation projects. International cooperation plays a key role. The Defence organisation will, for example, participate in the NATO Innovation Fund and strengthen the research and technology collaboration with strategic partners, such as Germany.

During this government's term of office, the Defence organisation will make an extra investment in short-cycle innovation, which will include the consolidation of the Defence elements' innovation centres.

#### **SPACE DOMAIN**

In the near future, the Defence organisation will publish a space agenda describing Dutch activities in the space domain. The Netherlands is committed to closer European cooperation in the space domain, and is seeking closer bilateral cooperation with Belgium, Germany, France, Luxembourg, Norway, the UK and the US.

• The Defence organisation will expand the Defence Space Security Centre (DSSC), enhance its knowledge of the space domain and invest in the development of its own small satellites.

#### SUSTAINABILITY

Existing sustainability solutions will be applied in areas such as real estate and materiel, as described in other courses of action. In the coming years, there will be a strong focus on innovation and more sustainable ways of working. In terms of operations, the armed forces will also prepare for the consequences of climate change. The Defence organisation will draw up a plan that contains at least the following points.

Defence will increasingly use simulation for training and exercises. This will provide opportunities to conduct training and exercises together with foreign partners remotely.

In the coming years, the Defence organisation will carry out a pilot scheme to assess the suitability of zero-emission vehicles for operations.

• The Defence organisation will, together with Dutch industry, examine how to produce less waste and how to make waste streams as circular as possible.

The Defence organisation will set up a dashboard to provide better insight into its energy consumption.



• With regard to climate security, the Defence organisation will focus even more intensively on international cooperation within NATO and with the EDA. The Defence organisation will further increase professionalism with regard to disaster response tasks and will take the consequences of climate change into account in strategic regional analyses.

In the coming years, the Defence organisation will focus on sustainability measures such as reducing residual waste, making facilities and IT services more sustainable and circular procurement.

The Defence organisation is exploring opportunities for operational sustainability. This encompasses utilising materiel that reduces the use of fossil fuels, such as the hydrogen powered sloop, and making the maintenance of vessels more sustainable. We will also research circularity, for example through waste management on vessels and in camps (waste to energy) and the reuse of materials and components in the operational domain. There will also be long-term investments in knowledge development at the intersection of sustainability and operational effectiveness.

#### LABOUR-EXTENSIVE WORKING METHODS

In the coming years, the Defence organisation will invest in technology and practices that will make our personnel's work safer. The aim is to enable Ministry of Defence personnel to concentrate on those tasks to which human interaction is indispensable.

 The Defence organisation will rely more on knowledge and technology and less on labour.
 The Defence organisation will use new technology to become more labour-extensive where possible. With regard to labour-extensive working methods, the initial focus will be on support processes.

### Accountability

#### **EFFECTIVENESS**

The operational needs of the armed forces are changing. Technological innovation is needed in response to these changes, and, thanks to decades of cooperation between the Defence organisation and its strategic knowledge partners, that is within reach. Technological cooperation leads to interoperable systems and the increased importance of operational cooperation.

The Defence organisation will focus on amplifying combat power in a targeted manner by, for example, expanding capabilities in the cyber and space domains.

#### EFFICIENCY

Since strategic knowledge partners also use their personnel and facilities for other clients, the Defence organisation can benefit from their knowledge and experience, and investments in knowledge building and technology development will thus be more efficient than if the Defence organisation were to go it alone. In the cyber and space domains, the Defence organisation will opt for strategic autonomy where necessary, and international cooperation if possible. In this way, we will be killing two birds with one stone: the development and operating costs will be shared with partners while the interoperability of systems is increased.



Our security situation has seriously deteriorated. Conflict is increasingly taking place in the digital domain. Successful operations depend more and more on data and information, which are both safeguards and weapons. The Defence organisation chooses to invest in optimal control of both functions.

### COURSE OF ACTION 6 INFORMATION-DRIVEN ORGANISATION AND OPERATIONS

The battlefield is becoming digital. The amount of data is increasing tremendously. Information technology and technology in a broader sense are developing at a rapid pace. Therefore, the Defence organisation must be able to gather, process and disseminate information more rapidly and more smartly in order to provide targeted guidance and thus be successful in modern conflict and crises: that is the essence of information-driven operations. This is not a matter of choice, but a matter of necessity. Dutch military personnel may face opponents who use information technology to become faster and more powerful, for example in the cyber domain. The Defence organisation must be resilient in the face of disinformation, must be able to protect its own systems against cyber-attacks and must be able to carry out offensive cyber operations.

The Defence organisation must be able to gather operational data and process it to produce information. Our personnel and systems will increasingly use sensors to obtain an overview of the environment in the deployment area. Processing that data to produce information and sharing it with other military personnel participating in the operation in a targeted manner will enable them to quickly compile the fullest possible picture, which will enable them to make the right decisions during operations. Throughout this process, our armed forces must be able to shift gears more rapidly than potential opponents. That is why the Defence organisation is investing in modern support systems and software. This also includes integrating technologies such as data science and AI into our processes. The Defence organisation is working together with knowledge institutes, industry, NATO and the EU to take advantage of new opportunities in this field.

The increased supply of information sources opens up new possibilities, but also comes with risks: not everything that is technically possible is desirable. The Defence organisation operates within the prevailing legal and ethical frameworks and with full attention to the protection of personal and other data at all times. The capacity needed to guarantee this requirement is met is part of the planned investments. The Defence organisation is researching the possibilities and limitations of exercises and readiness in the information environment, and how to use the leeway that exists within the current legal frameworks as efficiently as possible.

An effective legal framework that aligns with operational intelligence practices will remain a top priority for the Defence Intelligence and Security Service (DISS) over the coming years. The Jones-Bos evaluation committee concluded that the 2017 Intelligence and Security Services Act (Wet op de inlichtingen- en veiligheidsdiensten, Wiv) does not adequately reflect the complexity and dynamics of the operational circumstances of the intelligence services. The Netherlands Court of Audit (Algemene Rekenkamer, AR) states that the effectiveness of the intelligence services is under threat due to the effects of the law on operational striking power. This means that the intelligence services cannot effectively make use of their legal powers in order to address threats, particularly in the cyber domain. The temporary Cyber Operations Act is intended to remedy urgent operational bottlenecks and enable the services to better and more rapidly perform their duties in the cyber domain, with effective supervision. The temporary act will not remedy all bottlenecks faced by the services. In order to resolve the remaining bottlenecks, a proposal to amend the 2017 Intelligence and Security Services Act will be made

### COURSE OF ACTION 6

transparent with regard to weapor during missions, in line with article Constitution of the Kingdom of the

Finding and searching through data and establishing links between that data is at the heart of the investigations carried out by the services. Sometimes, data are acquired that turn out to be irrelevant to the services' investigations. In those cases, these data will be destroyed by the services as soon as possible. Data reduction is not only important to the protection of privacy, but is also essential to conducting effective intelligence investigations.

as soon as possible, partly based on the

committee.

recommendations of the Jones-Bos evaluation

An important prerequisite for information-driven operations is getting the IT infrastructure of the Defence organisation in order. IT support does not start only at the time of deployment: the entire organisation must be information-driven at all times. The scope and importance of IT facilities has therefore grown in recent years, which places demands on the continuity, security and adaptability of the existing IT infrastructure. That is why the Defence organisation will invest in a robust IT infrastructure, an infrastructure that will enable faster and better analysis of data. This also includes data relevant to our daily business operations, for example with regard to maintenance and stock management.

Through optimal use of information, the Defence organisation can make the most of its personnel and materiel resources, allowing it to become more agile. The Defence organisation will achieve this by digitalising business operations and using new data processing technology. For example, the Defence organisation is working on improving insight into costs, as well as on a cost-to-readiness model in order to better understand the relationship between costs and readiness.

Information management within the Defence organisation is also being improved. Information must be easy to find and useful in order to increase our agility and improve both command and control and business operations. Better information management also improves transparency. Defence aims to be a transparent organisation where possible, and therefore will invest in meeting the new requirements of the Open Government Act (*Wet open overheid*, Woo). The Defence organisation will also become more transparent with regard to weapon deployment during missions, in line with article 100 of the Constitution of the Kingdom of the Netherlands, as well as with regard to the risks associated with weapon deployment. In doing so we will, however, always consider the security of the personnel and operations as well as the national security of the Netherlands, its allies and its partners. Within information management, we will invest in the ability to independently assess and value the entire range of information and intelligence that the Netherlands has at its disposal within the targeting process.

# ACTIONS COMMAND AND CONTROL

Timely and reliable information improves the agility of the Defence organisation: it increases and accelerates the possible options for deployment, enables us to keep up with opponents or even to get ahead of them, and offers more opportunities for customisation. That is why in the coming years the Defence organisation will invest in the quality of command and control through operating in an increasingly information-driven manner.

- The Defence organisation will procure sensors to gather data in deployment areas. This offers new possibilities for reconnaissance and mapping of areas during operations, for example.
- Analysis capabilities will be expanded to support operational commanders.

The command and control chain will be improved through the modernisation of support systems and software. This will allow commanders to have the necessary information at their disposal more rapidly, and will also make the planning and control of complex operations more straightforward.

In order to improve control of maritime operations, the Defence organisation will establish a binational maritime operations centre together with Belgium. This operations centre will allow for 24/7 planning, control and support of maritime operations.

Investments in the FOXTROT programme will be initiated sooner. FOXTROT increases connectivity between mainly ground-based units by using secure, modern long-distance communication means.







The Defence organisation is investing in satellite communication capabilities. This will improve long-distance communication and command and control capabilities.

Technologies such as data science and AI will be integrated into our processes, taking legal and ethical considerations into account. Data is quickly and intelligently translated into relevant information for command and control and decision-making.

The Defence Operations Centre will be reinforced and structured as a permanent operational headquarters in order to better direct multidomain operations in a hybrid context.

Information handling will be improved through investment in information management and mission archives. We encourage the internal and external sharing of unclassified information and are investing in the IT systems that support this way of working. This allows for decision-making on the basis of the best and most current information and also improves the provision of information to parliament and society. The Defence organisation will join the governmentwide 'Open in Order' programme with regard to this topic.

In order to obtain access to correct information enabling faster and more decisive action in military operations, the RNLA will cluster capabilities for command and control support, intelligence collection and processing, cyber resilience, communication and engagement, and electronic warfare. The Defence organisation will be governed at all times by the legal and ethical frameworks applicable in the Netherlands, such as privacy legislation. The lessons of the independent committee that is investigating the Land Information Manoeuvre Centre (LIMC) will be taken into account before setting up this entity.

#### INTELLIGENCE

Accurate intelligence can make the difference between life and death for military personnel in the field. In the coming years, the government will invest in the possibilities offered by new technology in order to further strengthen the intelligence position of the Netherlands.

In order to facilitate information-driven operations, the Defence Intelligence and Security Service (DISS), and through DISS also the operational commands, will invest in strengthening their capabilities for intelligencegathering.

Intelligence processes will become more data-driven: available data must lead to authoritative intelligence in real time. This will enable the Defence organisation to carry out military operations around the world more precisely, rapidly and securely.

The Defence organisation will invest in smaller, remote-controlled reconnaissance vessels, vehicles and aircraft.

• Capacity for new developments such as data science and artificial intelligence (AI) will be built up at an accelerated pace.

#### **MULTIDOMAIN OPERATIONS**

The threat assessment shows that conflicts can take place in various domains simultaneously: on land, in the air, at sea, in space and in the cyber domain. In order to detect these threats early and in conjunction, and then be able to counter them, synchronised action in the various domains is necessary. That is why in the coming years, the Defence organisation is investing in interoperability: systems and units must be able to communicate with each other and work together, both within the Defence organisation and with partners.

The IT infrastructure will be modernised in order to facilitate better and more rapid exchange of information and increase connectivity with partners.

Mobile communication devices will be replaced to enable units to communicate more securely with each other and with international partners and allies.

#### **CYBER CAPABILITIES**

In order to be and remain able to withstand the constantly growing cyber threats, the Defence organisation will continue to invest in digital striking power in the coming years. More cyber specialists must be recruited for this purpose and Course of Action 2 describes how the HR transition will contribute to recruitment.

 Offensive and defensive cyber capabilities will be expanded.



• The cyber readiness of the Defence organisation will be bolstered by a better cyber intelligence position and by enhancing the digital resilience of units and systems.

Commanders will have cyber protection capabilities at their disposal and investments will be made in the integration of cyber resources within and between all operational commands.

• Cyber and electromagnetic capabilities of the Defence elements will be reinforced.

There will be more training opportunities created in the cyber and information domains on private networks that are not connected to the internet.

#### COOPERATION

The Netherlands is facing cyber and influencing campaigns conducted by for example Russia, China and non-state actors on a daily basis. These parties are not averse to spreading disinformation. That is why the Netherlands is actively working on bolstering national resilience to hybrid threats.

### Accountability

#### **EFFECTIVENESS**

Now that the threat in the digital domain is increasing, effective operations in this domain are a necessity. Investing in information-driven operations will increase the readiness, deployability and agility of the Defence organisation. The availability of relevant, reliable and current information allows decision-makers within and outside the Defence organisation to make better, faster and more effective decisions with regard to the deployment of military instruments. This increases our ability to anticipate and to act.

#### EFFICIENCY

Information-driven operations enable the optimal deployment of Defence personnel and materiel. This applies both to preparation for their tasks and to deployment. Our IT infrastructure will be put on a strong footing. This will lead to overall efficiency gains. The same applies to information management. • Cooperation with national and international security partners will be strengthened in order to, for example, join forces against hybrid threats. Knowledge building with regard to hybrid conflict will be boosted, including in the international context.

Together with national partners, the Defence organisation will explore which role the Defence organisation can play in strengthening the Kingdom's resilience in the face of hybrid threats.

• The Defence organisation will increase information-sharing with regard to threats and hybrid threats if doing so can help allies, partners (NATO and the EU) and Dutch society to better protect themselves against these threats.



# ANNEXES

Given the deterioration of the security situation, a substantial increase in the deployability and readiness of our military units is urgently required to allow these units to be deployed more frequently and for longer periods of time.

### ANNEX 1 TRANSITION, READINESS AND DEPLOYABILITY OF THE ARMED FORCES

This annex sets out the transition that each element of the Defence organisation must make in the coming years. It describes the actions that individual elements are undertaking to increase operational readiness and the various deployment options for units in terms of their composition and mutual cooperation. It begins by defining the concepts of **operational readiness** and **deployability**.

#### READINESS

The readiness of a unit is the extent to which it is ready to perform a task. While a unit may lack the necessary training to perform tasks in highintensity conflicts, it may be capable of performing less complex tasks such as guarding critical infrastructure, training personnel of security organisations in developing countries or providing disaster relief. Units still in training for highintensity conflicts can, however, thus be utilised for these less complex tasks. In order to increase operational readiness, three interrelated components must be optimised.



**PERSONNEL READINESS** refers to the extent to which units have sufficient qualified personnel to perform core tasks. Measures being taken by the Defence organisation to increase personnel readiness include:

Implementing new terms and conditions of employment;

Drawing up an implementation plan for 'Recruit, Engage and Retain';

Increasing training capacity;

Improving working conditions (including aspects such as real estate and IT);

Creating regional concentration and a permanent presence near major cities to ensure an adequate labour supply.



MATERIEL READINESS refers to the extent to which units have appropriate, functioning materiel to perform core tasks. Measures being taken by the Defence organisation to increase materiel readiness include:

Reducing maintenance backlogs;

Topping up stocks of spare parts;
Replacing and modernising materiel;

 Increasing deployment stocks (including ammunition).



**LEVEL OF TRAINING** refers to the extent to which units have followed the training and exercise programmes required to perform core tasks. Measures being taken by the Defence organisation to improve levels of training include:

Increasing the use of simulation in training programmes;

Providing more frequent and intensive training;

• Reinforcing combat support so that more units can train simultaneously;

Increasing training and instruction stocks (e.g. ammunition);

Placing training units with operational units.

Combined units possessing different areas of expertise are generally deployed for more complex tasks and are put together for a specific task or mission. For example, when a ground-based combat unit is deployed in a complex military operation, it is supplemented with bomb experts, medical support, fire support and sometimes even helicopter capabilities. Before a combined unit can be deployed, all elements ranging from ammunition, medical supplies, spare parts and operational rations to joint training must be in place.

#### DEPLOYABILITY

The deployability of a unit concerns how quickly, how often and how long the unit can be deployed for a specific task with unique features and requirements. Is it equipped for the intended purpose? Can it be moved to the deployment location? Can it be resupplied? The need for the armed forces to be deployed more rapidly, more frequently and for longer periods of time places high demands on the readiness of units and the organisation as a whole. By meeting these demands we can ensure the availability of units of any required size or composition. This will enable us not only to deploy individual units independently but also to operate on a large scale by combining units from different branches of the armed forces or as part of an international coalition.

#### **DEVELOPING READINESS AND DEPLOYABILITY**

We must systematically ensure that all of the necessary preconditions for improving readiness and deployability are firmly in place in the coming period.

On the basis of investment made by this cabinet, we can increase the readiness and deployability of our armed forces. The improvements will be immediately evident in some units, while others may first experience a slight decline in operational readiness and deployability before the effects of the government investments become visible. For example, this may be the case if certain types of ammunitions or spare parts have long delivery times, or if specific personnel are difficult to recruit or require an extended period of training.

The Defence organisation is developing a dashboard with clear indicators in order to closely monitor progress in these areas. From autumn 2022, we will consider how reporting processes can be developed further in order to clearly reflect progress in the area of operational readiness. In the coming years, we will issue confidential annexes and briefings to the House of Representatives containing information on the steps being taken to improve the operational readiness and deployability of our units, and the effects of such action.

### **TRANSITION – ROYAL NETHERLANDS NAVY**

#### **DEPLOYMENT AND COOPERATION**

Current and anticipated threats and technological developments necessitate a different approach to military operations at and from the sea. Distributed operations will enable our fleet to act more decisively and render it less vulnerable to the growing threats posed by submarines and hypersonic missiles, for example. By operating with a combination of manned and unmanned ships, helicopters and aircraft with modular sensors and weaponry, the fleet will be better equipped to combat submarines, conduct maritime strike operations, defend against missiles and support amphibious and land operations worldwide.

Marine Corps units will have their own combat support, enabling even faster operations in both small, scalable formations and larger formations. Improved long-range fire support will be provided by ships, landing craft and unmanned systems. Marine Corps units will also become special operations capable, ensuring greater operational agility across the entire spectrum of force. The Maritime Special Operations Forces will receive additional personnel and new materiel to conduct special operations. In the Caribbean region, the focus will be placed on the further professionalisation of the Caribbean militias.

The fleet and the Marine Corps collaborate with national and international partners, for example through participation in international maritime task forces and in the UK/NL Amphibious Force. The navies of Belgium and the Netherlands are integrated, and in the coming years the Royal Netherlands Navy (RNLN) plans to intensify cooperation with the navies of Germany and France. It is also working to expand operational cooperation with Norway in the far north of Europe. Furthermore, the RNLN is reinforcing its close ties with the US and the UK, while in the Caribbean it is intensifying cooperation with its European and transatlantic partners. Since our security does not begin at Europe's borders, the RNLN will conduct more frequent operations with partners east of the Suez Canal.

In the national domain, the RNLN is intensifying cooperation with the coastguard and other departments and civil partners. The maritime situational understanding in the North Sea and the Caribbean region is being improved by making more frequent use of sensors, conducting more intensive patrols and facilitating the exchange of data between the naval and coastguard headquarters.

#### PERSONNEL AND ORGANISATION

The RNLN will deliver greater combat power and in the long term will achieve this with an equivalent or smaller workforce. It will adhere to the set course aimed at reducing crew numbers, utilising the opportunities offered by advanced technologies. As part of the HR transition throughout the Defence organisation, the RNLN will focus on matching the unique qualities, competencies and talents of the individual with the needs of the organisation more closely. The RNLN will concentrate its fleet, Marine Corps and initial training activities at the three main sites in Den Helder, Nieuw Milligen and Rotterdam, modernising the buildings and making them more sustainable.

#### **MATERIEL AND SUPPORT**

The RNLN will increase its striking power partly by introducing long-range missiles for frigates and submarines. It will expand its air defence capability against ballistic and supersonic air threats and increase the Marine Corps' striking power by introducing modern long-range fire support, tactical air defence weapons and unmanned systems. In an international context, the RNLN will also reinforce its space and cyberspace capabilities. Ten auxiliary vessels will be replaced by eight new ships, and the amphibious transport ships and four patrol vessels will be replaced by one type of ship suitable for conducting amphibious operations and maritime patrols and for providing emergency assistance. The additional budget for personnel and training, sustainment and spare parts, deployment stocks and ammunition will boost deployability.

### **TRANSITION – ROYAL NETHERLANDS ARMY**

#### **DEPLOYMENT AND COOPERATION**

The transformation of the Royal Netherlands Army (RNLA) into more independent commands, each with their own expertise, competencies and support, will increase its speed and flexibility and thus improve its operational readiness and deployability. This will enable units to be deployed either independently or jointly across the entire spectrum of force in both national and international contexts. Units can also be integrated into a combined arms team, battalion task group or brigade combat team. The duration of a unit's deployment depends on its type and size.

The RNLA plans to work even more closely with the German army, with collaboration evolving into integration and eventually specialisation. For example, Germany may provide tank capabilities while the Netherlands contributes fire support capabilities. Cooperative arrangements such as these, with German capabilities incorporated into Dutch units and vice versa, are being explored further, and weapon systems will be purchased jointly wherever possible from now on. In addition, the RNLA will participate in more joint training exercises with France and Norway.

Intensified cooperation is also set to take place on a national level with the Royal Netherlands Marechaussee in the area of military mobility and with the civil authorities in the area of national security.

#### PERSONNEL AND ORGANISATION

The new HR model allows the RNLA to deploy military personnel for military operations – their core business. The model also facilitates upscaling and downscaling. For example, a military staff officer could reinforce an operational headquarters, a soldier with a flexible contract could be used for Train, Advise and Assist tasks, or a partner company could assist with maintenance tasks.

The establishment of the Heavy Infantry Command and the Medium Infantry Command will strengthen the combat power of the 43 Mechanised Brigade and the 13 Light Brigade respectively, enabling the army to deliver the deciding blow in a battle or protect civilians in high-intensity conflicts or pre-conflict and postconflict situations. The Commando Corps and 11 Airmobile Brigade will be integrated into the SOF / Rapid Reaction Command, which will be capable of delivering swift blows, gathering intelligence, creating preconditions for the deployment of other units, and assisting in the evacuation of Dutch citizens from crisis areas. The Integrated Air and Missile Defence Command and 1 German-Netherlands Corps will also be developed further. In order to obtain access to correct information enabling faster and more decisive action in military operations, the RNLA will cluster capabilities for command and control support, intelligence collection and processing, cyber resilience, communication and engagement, and electronic warfare. The Defence organisation will be governed at all times by the legal and ethical frameworks applicable in the Netherlands, such as privacy legislation. The findings of the independent committee that is investigating the Land Information Manoeuvre Centre (LIMC) will also be taken into consideration before this entity is established.

In addition to the need to revitalise existing buildings, the creation of a faster and more flexible organisation places new demands on the RNLA's real estate. Buildings will consequently be modernised or decommissioned, and concentrated regionally along with units in a bid to strengthen cooperation with regional partners.

#### MATERIEL AND SUPPORT

Besides improving individual military equipment, the RNLA will upgrade or replace almost everything that runs on wheels or tracks, including its four main weapon systems: the CV-90, the Fennek, the PzH2000 self-propelled howitzer and the Boxer. It is also consolidating its ground-based air defence capability. Operational wheeled vehicles will be replaced with cleaner, multifunctional variants with improved off-road performance and better protection. Joint investments with commercial partners and knowledge institutes will target the development of autonomous systems, robots and other forms of advanced combat technology in order to ensure that the RNLA is future-proof and automation is optimised.

### **TRANSITION – ROYAL NETHERLANDS AIR FORCE**

#### **DEPLOYMENT AND COOPERATION**

The Royal Netherlands Air Force's (RNLAF) transformation has already been initiated and will be continued, accelerated and optimised. This includes the ongoing development of an organisation that generates air and space power and contributes to allied deterrence and defence. The RNLAF will increase its operational readiness and deployability and reinforce its striking power, and its squadrons will become more independent and deployable for longer periods within the four commands. It will slot seamlessly into European and NATO operations thanks to the modular composition of its squadrons and its capacity for close international cooperation, thus enabling the RNLAF to contribute its distinctive capabilities.

The RNLAF also participates in various international cooperative alliances for the deployment of combat and air transport capabilities and airspace monitoring. For example, Belgian and Dutch fighter aircraft take turns to guard the airspace of Belgium, the Netherlands and Luxembourg. The RNLAF is also a member of the F-35 partnership, which comprises European users and the US, and works with these partners at training and instruction locations. The Netherlands is the lead nation for the prestigious multi-role tanker transport capability stationed at Eindhoven Air Base. Moreover, the Movement Coordination Centre Europe (MCCE), which also operates from Eindhoven Air Base, coordinates strategic military air transport and air-to-air refuelling in the 28 participating EU and NATO member countries. In addition to these partnerships, the Netherlands participates in the international C-17 Strategic Airlift Capability alliance.

#### **PERSONNEL AND ORGANISATION**

The RNLAF is evolving into a fifth generation air force. By 2025 at the latest, this transition will result in a forceful, agile organisation with four commands – the Air Combat Command, Defence Helicopter Command, Air Mobility Command and Air Support Command – which together will guarantee the provision of future-proof air power in multidomain operations. The RNLAF focuses on the recruitment and retention of military personnel and on increasing adaptivity by creating a flexible workforce to facilitate and improve the temporary availability of military personnel. Concentrating and renewing real estate, while making it more sustainable, also constitutes part of the transformation, with a view to creating room for growth, noise zones, longterm affordability and a safe and sustainable living and working environment for personnel.

#### **MATERIEL AND SUPPORT**

The RNLAF is establishing a fully manned third F-35 squadron and exploring future possibilities with respect to unmanned fighter aircraft. Its investments in high-value ammunition will enable it to deploy long-range weapons and suppress or eliminate hostile integrated air defence systems. It will also double its MQ-9 capability in the coming years to allow simultaneous deployment over two axes. Furthermore, the MQ-9 will also be armed and its signals intelligence, maritime surveillance and communication systems will be improved.

The Cougar squadron will be reinforced with a view to supporting special operations, and its Cougar helicopters will eventually be replaced with medium utility helicopters intended to support special operations on land and at sea. Investments will be made in modern electronic self-protection for all helicopter types, and the capabilities of combat and transport helicopters will be adapted to meet the new requirements for land and maritime operations.

The C-130 will be replaced, allowing the Netherlands to retain its tactical airlift capability while increasing its availability and range, and one extra aircraft will be added to this fleet.

The development of the Defence Space Security Centre will continue, and will include the creation of a satellite constellation and the adaptation of existing radars for space observation. This will enable the Netherlands to build a military space capability that will open the way to smart and effective international cooperation.

### TRANSITION – ROYAL NETHERLANDS MARECHAUSSEE

#### **DEPLOYMENT AND COOPERATION**

The Royal Netherlands Marechaussee (RNLM) is being transformed along the two axes of militarisation and digitalisation into an armed forces service capable of performing policing duties even in wartime conditions. The entire intelligence spectrum will provide the basis for interventions, giving the organisation access to digital support for national tasks and for international operations in times of crisis or war. The RNLM will also create specific units that will perform military policing tasks and can also be deployed in the event of heightened tensions or hybrid threats. A key development will be to increase personnel resilience, partly by placing more emphasis on military requirements.

European military police forces work together intensively in various partnerships, such as the European Gendarmerie Force, a multinational partnership of police forces with military status. The RNLM also contributes to Frontex, the European border and coastguard agency charged with strengthening European border control. In addition to these pan-European operations, individual member states carry out their own border checks using naval vessels, coastguard aircraft or gendarmerie personnel. Dozens of RNLM servicemen and women officers guard the outer Schengen borders within the Frontex framework. Frontex also acquires knowledge and expertise from the Defence organisation via the RNLM training centre and the Netherlands Defence Academy.

With its experience in training police officers for deployment in war zones, the RNLM can assist other organisations by helping them increase the resilience of their personnel so that they can continue to perform their civilian duties in crisis situations and wartime conditions. The RNLM's strength lies in the fact that it understands both the civilian and the military world and can function as a bridge between the two.

#### **PERSONNEL AND ORGANISATION**

In line with the RNLAF and the RNLA, the RNLM is considering a transition to a command structure that will involve setting up a new RNLM mobile command, similar to the Gendarmerie Mobile model, which will operate in parallel with the National Tactical Command. Besides headquarters, this command would consist of mobile flexible units, such as the squadrons referred to in Course of Action 1, the High Risk Security Platoon, the National Assistance Organisation and the Special Security Missions Brigade.

The education, training and knowledge domain will also be examined to determine where reinforcement is needed. This domain is essential for the provision of HR development, doctrine, education and training, including the necessary civil and military certifications. Such reinforcement should be in line with the command structure to ensure alignment with both the military and civilian training domains.

#### **MATERIEL AND SUPPORT**

The GRENADE-29 project will be expanded with the addition of the IBIS-30 intelligence based intervention system, which will enable the RNLM to base future interventions on the ever growing volume of information.

The RNLM will establish an MP squadron charged with combat support tasks and a multifunctional squadron to support civil authorities and the military mobility plan.

### **TRANSITION – DEFENCE CYBER COMMAND**

#### **DEPLOYMENT AND COOPERATION**

The capacity and performance of the Defence Cyber Command will be enhanced over the next four years. Improving operational readiness does not depend on the availability of kinetic weapon systems but rather on the readiness and level of training of unique, highly qualified cyber professionals. To achieve its transition, the Defence Cyber Command will focus on developing the knowledge, people and conceptual operational framework required in order for cyber capabilities to make an effective contribution to military operations.

Military cyber operations constitute part of the multidomain operations of the armed forces. The Defence Cyber Command can be deployed to produce an independent strategic effect, for example in response to a socially disruptive cyber attack. It also supports the deployment of the armed forces services, and strengthens the operational striking power of the armed forces by promoting the development of cyber concepts and capabilities for these operational commands. Digital striking power is being developed by cyber mission teams in close cooperation with the Defence Intelligence and Security Service (DISS).

Cyber security is a challenge for society as a whole, calling for cooperation both within and outside the Defence organisation. Since the Defence Cyber Command is a partner in the national cyber security chain, the motto for the further operational embedment of digital striking power is therefore: 'Digital striking power through cooperation'. The Defence Cyber Command will achieve this in the government's term of office by intensifying cooperation with DISS in cyber mission teams and with the operational commands through the integration of cyber operations in operational concepts.

The Defence Cyber Command contributes to the digital security of the Netherlands by strengthening the security network, seeking alignment with the National Response Framework for State

Threats, which is currently under development, and working closely with knowledge institutes to develop cyber expertise and technology.

#### PERSONNEL AND ORGANISATION

The operational readiness of the Defence Cyber Command depends on personnel, infrastructure – including accommodation – and adequate governance.

The Defence Cyber Command aims to boost personnel readiness by offering cyber professionals flexibility, challenges, career opportunities and appropriate remuneration. The Defence Cyber Command has a flexible workforce comprising 150 cyber reservists with additional cyber expertise. In anticipation of the new concentrated accommodation that will be constructed in the Hague region, the Defence Cyber Command will operate from three locations, which will be adapted in phases in the coming period to form a single hybrid work environment that is fit for purpose.

Within the Defence organisation the various roles, tasks and powers in the cyber domain are shared between NLD DISS (intelligence), the Defence Cyber Security Centre (DCSC), the RNLM (law enforcement) and the Defence Cyber Command (military cyber operations). In the coming period, governance of the cyber domain will be re-evaluated and efforts will be made to optimise mandates in order to increase the potential of all cyber organisations and improve national and international cooperation.

#### **MATERIEL AND SUPPORT**

In the coming years, the Defence Cyber Command will invest in the further development of the cyber security training and testing facility for cyber specialists, known as the Cyber Range.

### **TRANSITION – SPECIAL OPERATIONS FORCES** (INCL. NLD SPECIAL OPERATIONS COMMAND)

#### **DEPLOYMENT AND COOPERATION**

Special operations forces (SOF) have the necessary operational capabilities to be deployed in operations serving national interests at any time and anywhere. They offer a strategic option for special operations, which are often strictly covert or are conducted in high-risk situations in which substantial politico-strategic or military-strategic interests are at stake. These special units must be deployable in conflicts of equal strength or superior state actors or heavily armed groups.

Special operations are conducted in all domains including land, sea, air, space and cyber. SOF must be fast, scalable, agile and effective when transitioning from one phase of a conflict to another. Operations fall into two categories: foreseeable and unforeseeable. In the complex security environment, special units are on standby 24 hours a day to act promptly and decisively under national authority should an unforeseen operation be deemed necessary, such as the evacuation from Kabul. The focus of SOF activities will be shifted to the pre-escalation phase of a crisis or conflict so that situations can be assessed more accurately and special units can facilitate operations in crisis or conflict situations, thanks in part to the investments made in networks and relationships.

SOF are always deployed jointly with other forces. The Special Operations Command, which falls directly under the Chief of Defence (CHOD), is responsible for the planning, command and control, execution and evaluation of special operations. Along with Belgium and Denmark, it makes a joint contribution to the Composite Special Operations Component Command, a deployable NATO headquarters that commands and controls special operations. Special units will therefore continue to be essential national and international partners. Although SOF will continue to focus on the global special operations forces network, contacts with public and private partners will also be established, creating a foundation that will guarantee the effectiveness of its activities. Special units will concentrate increasingly on

conducting integrated operations with various SOF components while remaining primarily a scarce strategic capability. The importance of digitalisation increases during SOF deployments and joint operations, when rapid and accurate exchange and analysis of information is vital.

#### **PERSONNEL AND ORGANISATION**

The RNLA, RNLN and RNLAF will strengthen and broaden support for special units by providing specifically allocated, selected and trained personnel, thereby increasing capacity, scalability and diversity with a view to conducting special operations. The Commando Corps and 11 Airmobile Brigade will be integrated into the RNLA's SOF / Rapid Reaction Command, which is yet to be established. The transformation of the Cougar squadron will provide the RNLAF with an SOF Air Rotary Wing capability incorporating specifically allocated, selected and trained personnel and adequate materiel, enabling prompt and integrated action with other SOF components.

#### **MATERIEL AND SUPPORT**

Operational support for special units during deployment is essential and will be further reinforced in the land, maritime and air domains. The RNLA and RNLN will establish units that have been specifically trained and equipped to provide support to special units. The RNLAF will convert part of its helicopter fleet into an SOF air capability that can support special units and can form the core of a tactical headquarters for the command and control of its own or other air capabilities. In this way, the Netherlands will create a complete joint NATO Special Operations Forces capability.

Finally, the SOF will also undergo digital transformation to ensure a more rapid and effective exchange of covert information anywhere in the world. Its digital capabilities will be expanded further by reinforcing various elements including specific networks, intelligence software and specific hardware such as sensors and communication devices. ANNEX 1

### **TRANSITION – JOINT SUPPORT COMMAND**

#### **DEPLOYMENT AND COOPERATION**

The Joint Support Command will be transformed along two lines of development: improving existing support and developing new forms of support. The basic principles governing this transformation are scalability, flexibility and cooperation with other Defence elements and external partners.

At the same time, the Joint Support Command will apply a data-driven approach in order to further modernise Defence-wide support. It will invest in and scale up robotisation and intelligent automation with the aim of creating a modern data-driven business model in which the ever smaller numbers of humans that are deployed perform those tasks for which they can offer the highest added value.

Performance, cooperation and innovation are the guiding principles for the implementation of these changes. Cooperation has an internal dimension, but also an external dimension involving industry and knowledge institutes. Initiatives focus on aspects including initial officer training, regular health care, recruitment and selection, personnel administration, personnel care, host nation support, infrastructure and accommodation, sustainability, strategic transport, surveillance and security, and nutrition.

#### **PERSONNEL AND ORGANISATION**

Innovation and professionalism are key factors in the further development and transformation of the Joint Support Command. Touchstones in this regard are safety, reliability and predictability for everyone in a diverse and inclusive organisation.

#### **MATERIEL AND SUPPORT**

Major Defence-wide backlogs can be eliminated by making additional investments, particularly in real estate, strategic transport, medical support, and surveillance and security capacity.

### **TRANSITION – DEFENCE MATERIEL ORGANISATION**

#### **DEPLOYMENT AND COOPERATION**

The Defence Materiel Organisation (DMO) supports the transition of the armed forces to an information-driven, technologically advanced organisation equipped with the best possible IT and materiel. The DMO itself is being transformed into an integrated IT and materiel command in order to consolidate its role as the strategic partner of the CHOD, operational elements and international partners. It is increasing the impact of the support it provides by adopting an integrated, innovative approach to IT and materiel projects, systems (including weapon systems) management, and chain logistics.

The DMO supports the operational readiness and deployment of the armed forces by providing advice, IT resources, materiel, clothing and equipment, ammunition, fuel, chemicals and maintenance products. It is also responsible for the IT Operation Centre, which monitors the Defence organisation's operational IT 24/7. The Cyber Rapid Response Teams provide the expertise required to respond to cyber attacks on a national level and on behalf of our allies. The DMO also provides 24/7 user support for information management and IT services.

The implementation of innovative projects calls for greater cooperation with the business sector, knowledge institutes and other government and social organisations. Under the flag of the National Armaments Director, the DMO develops and reinforces international cooperation in the areas of IT and materiel, working in multinational and bilateral partnerships including NATO and the EU.

#### PERSONNEL AND ORGANISATION

The DMO invests in the quality of its personnel and in a more flexible and diverse workforce. Its main capabilities are embedded in the knowledge and expertise of its personnel.

Its four executive directorates – Joint IT Command, Weapon Systems and Agencies, Projects, and Purchasing – are supported by staff departments and directorates in the areas of HR, finance and control (F&C), governance and business operations, and innovation.

#### **MATERIEL AND SUPPORT**

In order to speed up the provision of IT and materiel to the armed forces, in addition to technological innovation the DMO is focusing on process innovation and social innovation in relation to project management, the procurement and decommissioning of defence materiel, and personnel and logistical support.

## **FINANCES**

The courses of action outlined in the 2022 Defence White Paper will enable the Defence organisation to take important steps towards strengthening its foundation and shaping its transformation towards the future. But even with the additional resources allocated to it, the Defence organisation must prioritise its choices. The Defence White Paper therefore sets priorities based on selected areas of focus with the aim of achieving futureproof armed forces. Due to the dire security situation, the initial emphasis will be on increasing the readiness and deployability of the armed forces at a more rapid pace. Like other organisations, Defence is dependent on developments over which it sometimes has little control, such as labour market developments and international market developments affecting the procurement of materiel.

Defence is working towards financial sustainability by striking a balance between retention of its current capabilities and procurement of capabilities to withstand new threats, and between combat power and the provision of support, including business operations. Although the financial tide has turned since 2014, Defence's tasks and resources have remained unbalanced in the past years, resulting in a lack of sustainable funding for business management, maintenance and modernisation.

It takes time to build capabilities, yet Defence must stand at the ready whenever it is called upon to do so. For this and other reasons, the Defence organisation stands to benefit from making long-term budget and policy commitments that will enable it to focus on a wide variety of urgent threats in the future. The lengthy completion time of materiel projects will be shortened where possible, although some projects initiated during this government's term of office will not take effect until after 2025. The measures detailed in the 2022 Defence White Paper are in line with the realistic growth path set out by the cabinet. Based on Defence's areas of focus, targeted choices will be made to replace specific capabilities and implement new ones in the future. From 2026, the defence budget will be given a structural boost of €5 billion per year.

Defence expenditure growth path, including development of NATO GDP percentage (in € million)	2022	2023	2024	2025	2026
<ol> <li>Defence expenditure (source: 2022 Spring Memorandum, excluding resources from the Coalition Agreement and including the current allocation)</li> </ol>	14,091	13,215	13,310	13,094	12,762
2.a Rutte IV coalition agreement	500	1,900	4,100	4,200	3,000
2.b Rutte IV coalition agreement (DISS resources)	17	36	72	72	72
3. Decided in 2022 Spring Memorandum	0	400	1,700	2,000	2,000
<ol> <li>Additional allocations originating from other budget(s)</li> </ol>	200	200	200	200	200
5. Total Defence expenditure	14,808	15,751	19,382	19,566	18,034
6. Total (as percentage of GDP)	1.61%	1.68%	2.03%	2.01%	1.83%

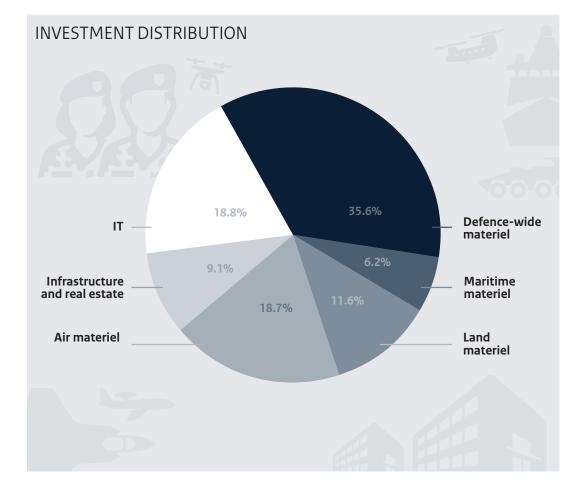
The following table shows the expenditure per course of action for the 2022 - 2026 period.

Financial overview, 2022 Defence White Paper courses of action (in € million)	2022	2023	2024	2025	2026
1. Strong support	0	327	815	1,307	1,577
2. A good employer, embedded ≌∰⊽ in society	335	739	987	1,087	1,161
3. Strengthening of specialisations	0	521	957	1,020	2,107
4. More European cooperation	0	110	120	135	135
5. New domains and the ability to innovate	0	119	233	284	275
6. Information-driven organisation and operations	0	434	733	918	885

N.B. In a given year, the available funds determine the exhaustion of the budget. As the course of investment spending is volatile, the sum totals per year deviate from the yearly budget totals. However, over multiple years, expenditure is equal to the budget. Furthermore, the remaining budget in the Supplementary Item (Aanvullende Post) has not yet been included in the courses of action stated above.

# INVESTMENT PROGRAMME – A LOOK AHEAD

The look ahead into the investment programme provides insight into major materiel-related projects scheduled to be carried out in the next 15 years. Each year, the Defence Project Overview system is used to inform the House of Representatives of any changes made to the schedule, usually as a result of market developments, such as the current increased international demand for materiel and ammunition. These circumstances impact the completion time of projects. The schedule is therefore an estimate serving mainly to set milestones. The manner in which project preparations will proceed in the materiel requirement phase does not become clear until after the A letter has been dispatched. Defence is looking into options for speeding up this process, for instance by mandating more projects and by utilising the Fast Track Procurement process (FTP) more frequently. In the coming years, the Defence organisation will invest in the timely replacement of systems by modern hi-tech materiel. The figure and the tables below indicate the intended investments across the various domains.



#### **DEFENCE-WIDE**

Project name	Financial volume	2022	2023	2024	2025	2026	2027 ai	nd beyor	nd		
Defence-wide Replacement of Operational Wheeled Vehicles (Defensiebrede Vervanging Wielvoertuigen, DVOW).	1,000-2,500 million									Α	
Improved Operational Soldier System (Verbeterd Operationeel Soldaat Systeem, VOSS)	250-1,000 million										
Replacement of Improved Operational Soldier System (VOSS)	250-1,000 million						A				
Defence Operational Clothing System (Defensie Operationeel Kledingsysteem, DOKS)	250-1,000 million									Α	
Flatrack systems, Tractor-trailer combinations and wheeled recovery vehicles	250-1,000 million	В									
Specialised transport and storage containers	25-100 million										
Defence-wide replacement of small-calibre weapons (partial replacement of Colt)	100-250 million		A								
Joint Fires	25-100 million							1	Ą		
Replacement of combat gear	25-100 million										
Defence-wide replacement of hand-held thermal imagers	25-100 million						Α				
Operational infrastructure for the rapidly deployable units in the armed forces	25-100 million										
Defence-wide replacement of Multiple Use Night Observation System (MUNOS) night vision sights	25-100 million								А		
Procurement of image-intensifying goggles	25-100 million										
Increase in ICMS/CBRN capabilities	25-100 million										
Increase in ICMS/CBRN capabilities (phase 2)	25-100 million		A								
Counter-UAS	25-100 million										
Counter-IED	25-100 million										
Counter-IED Block 4	25-100 million	A									
Mobile power supplies for ground- based operations	25-100 million									Α	
Replacement of Amarok	100-250 million	A									
Increase in deployment stocks for first core task (phase 1)	250-1,000 million	LHR									
Increase in deployment stocks for first core task (phase 2)	1,000-2,500 million		LHR								
Defence security and surveillance system (DBBS)	100-250 million										
Individual CBRN protective clothing	25-100 million										А
	Let	ter to F	louse o	f Repre	sentati	ves	Inflow	A Lette	er B I	.etter	D Letter

#### MARITIME

Project name	Financial volume	2022	2023	2024	2025	2026	2027 and beyond
Replacement of submarine capability (see progress report)	> 2.5 billion						
Replacement of air defence and command frigates (including studies)	> 2.5 billion		A				
Replacement of M-frigates	1,000-2,500 million		D				
Replacement of mine countermeasures capability	250-1,000 million						
ESSM Block 2: Procurement & Integration	250-1,000 million		D				
Procurement of Combat Support Ship (CSS)	250-1,000 million						
Future Littoral All-Terrain Mobility Patrol Vehicles (FLATM PV)	25-100 million						
Future Littoral All-Terrain Mobility-Band Vagn vehicles (FLATM BV)	100-250 million		D				
Replacement of LPD and OPV capability	1,000-2,500 million			A			
Sustainment of Goalkeeper	25-100 million						
Replacement of auxiliary vessels	250-1,000 million	В					
Replacement of MK46 Lightweight Torpedo	100-250 million						
Replacement of close-in weapon systems	100-250 million		D				
Sustainment programme for air defence and command frigates	100-250 million						
Enhancement of MK48 Torpedo	100-250 million						
Replacement of maritime surface-to-surface missile	100-250 million						
Addition to standard missile 2 block IIIA	100-250 million						
Mid-life update Ocean-going Patrol Vessel (OPV)	100-250 million						
Replacement of standard missile 2 block IIIA	100-250 million		A				
Replacement of MK48 heavyweight torpedo	100-250 million			Α			
Maritime ballistic missile defence (sensor)	100-250 million						
Procurement of Softkill torpedo defence system	100-250 million						
Replacement of 127mm gun for air defence and command frigates	100-250 million						
Sustainment of HNLMS Karel Doorman (JSS)	100-250 million	A					
Replacement of medium landing craft (LCVP)	100-250 million	A					
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Maritime, continued		_					
Project name	Financial volume	2022	2023	2024	2025	2026	2027 and beyond
Replacement of heavy landing craft (LCU)	100-250 million			Α			
Mid-life update of HNLMS Johan de Witt	25-100 million						
Sustainment of Walrus-class submarines	25-100 million						
Replacement and sustainment of Fast Raiding, Interception and Special Forces Craft (FRISC)	25-100 million						
Participation in developing replacement for SM-2 family	25-100 million		A				
Replacement of low frequency acoustic sonar (LFAS)	25-100 million				A		
Mid-life upgrade of landing craft utility (MLU LCU)	25-100 million						
Replacement of self-propelled variable depth sonar (SP VDS)	25-100 million		A				
ESSM Block 2: Participation in international production	25-100 million						
Improvement of remote-controlled weapon stations OP/JSS	25-100 million						
Continuation of air defence and command frigate service – electronic warfare	25-100 million	A					
Continuation of air defence and command frigate service – materiel seaworthiness	25-100 million		A				
Procurement of Maritime Strike	1,000-2,500 million		A				
Procurement of ballistic missile defence interception capability	250-1,000 million		A				
Procurement of precision-guided ammunition for the Marine Corps	100-250 million		A				
Procurement of anti-torpedo torpedo	250-1,000 million		A				
Upgrade of CORes sonar technology	25-100 million		A				
Procurement for Maritime Operations Centre Admiral BENELUX (MOC ABNL)	25-100 million	A					
Integration of maritime force command facilities	25-100 million		A				
Procurement of ISR capability for the North Sea	25-100 million		A				
Modernisation of RNLN command facilities	25-100 million		A				
Procurement of deployable ASW barrier	25-100 million		A				

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#### LAND

Project name	Financial volume	2022	2023	2024	2025	2026	2027 an	d beyo	ond		
Replacement of Fennek	1,000-2,500 million							Α			
Replacement of infantry combat vehicle (CV90)	1,000-2,500 million										Α
Mid-life update of infantry combat vehicle (CV90)	250-1,000 million										
Replacement of PZH2000 self-propelled howitzer	250-1,000 million							Α			
Replacement of medium range anti-tank (MRAT)	250-1,000 million					A					
Replacement of short range anti-tank (SRAT)	100-250 million										
Boxer large armoured wheeled vehicle, production	250-1,000 million										
Mid-life update of Fennek	250-1,000 million										
Mid-life update of Boxer	250-1,000 million				A						
Rocket artillery	250-1,000 million		A/B								
Replacement of Bushmaster	100-250 million							Α			
Procurement of C-RAM and Class 1-UAV detection capability	100-250 million										
Renewal of VSHORAD	100-250 million	A									
Service life extension of Patriot	100-250 million										
Replacement of medium-range air defence (interception capability)	100-250 million	В									
Addition to Patriot PAC-3 MSE	100-250 million										
Ground-based Area Access Denial (GAAD)	25-100 million										
Mid-life update of self-propelled howitzer	25-100 million										
Replacement of bridge-laying tank	25-100 million										
Replacement of light indirect firing weapon system	25-100 million										
155 mm precision-guided ammunition for PZH2000	25-100 million										
Replacement of floating bridging capability	25-100 million										
Mid-life update of Bushmaster	25-100 million										
Replacement of CBRN detection, identification and monitoring capability	25-100 million										
Service life extension of heavy recovery vehicle	25-100 million										
	Lett	ter to H	ouse of	Repres	entativ	res	Inflow	A Le	tter B	Letter	D Lette

Land, continued								
Project name	Financial volume	2022	2023	2024	2025	2026	2027 and beyond	
Replacement and Mid-life update of Squire	25-100 million			A				
Replacement of tents and climate control	25-100 million							
Replacement of operational catering system	25-100 million							
Replacement of construction equipment, earth- moving equipment and road-repair resources	25-100 million						A	
Multi-Mission Radar (MRR) - Continuous Improvement Programme (CIP)	25-100 million		Α					
Expansion of Role 2 medical treatment facility capability	25-100 million							
Replacement of 60/81 mm mortars	25-100 million							

#### AIR

Project name	Financial volume	2022	2023	2024	2025	2026	2027 and b	eyond			
Procurement of F-35	> 2.5 billion										
NH90	1,000-2,500 million										
Replacement of medium utility helicopter (Cougar)	1,000-2,500 million		A								
Replacement of NH90	1,000-2,500 million								Α		
AH-64 Block upgrade	100-250 million										Α
AH-64D Block 2 upgrade	100-250 million										
MSMT Block upgrade	25-100 million							А			
Construction and set-up of F-35 engine maintenance facility (F-35)	100-250 million										
Chinook Block upgrade	100-250 million										Α
F-35: Procurement of medium to long-range missile	100-250 million										
Mid-life update of NH90	250-1,000 million		D								
Replacement of outsized airlift capability	100-250 million									Α	
Replacement of initial pilot training capability	100-250 million	В									
Apache remanufacture	250-1,000 million										
Replacement and modernisation of Chinook	250-1,000 million										
	Let	ter to H	louse o	f Repre	sentativ	ves	Inflow	A Letter	B Letter	D	Letter

Air, continued	1											
Project name	Financial volume	2022	2023	2024	2025	2026	2027	and b	eyond	i		
Medium Altitude Long Endurance Unmanned Aerial Vehicle (MALE UAV)	250-1,000 million											
Mid-life update of AH-64	250-1,000 million								Α			
Mid-life update of Chinook	250-1,000 million								Α			
Mid-life update of tactical air transport	250-1,000 million											Α
Improvement of air-to-air armament for fighter aircraft	250-1,000 million											Α
Replacement of strategic air transport and AAR (MRTT)	250-1,000 million											
Replacement of tactical air transport capability	250-1,000 million	в										
Replacement of MALE-UAV	250-1,000 million										А	
Plan of action for with Cougar helicopter obsolescence	25-100 million											
AH-64 armament	25-100 million		A									
AH-64D armament improvement	25-100 million											
AH-64D self-protection (ASE)	25-100 million											
NH90 Block Upgrade	25-100 million								Α			
F-16 self-protection (ASE)	25-100 million											
F-35: Procurement of on-board gun ammunition, self-protection equipment and weapon loaders	25-100 million											
Infrared guided air-to-air missile	25-100 million											
Continuation of F-16 service, sustainment	25-100 million											
Continuation of F-16 service, operational self- protection	25-100 million											
Continuation of F-16 service, flight safety and airworthiness	25-100 million											
Service life extension of MASS radars	25-100 million											
Mid-life update of MQ-9	25-100 million						А					
Multi Ship Multi Type (MSMT) helicopter simulators	25-100 million											
Replacement of aircraft braking systems	25-100 million											
Replacement of AH-64 armament	25-100 million						А					

Air, continued							
Project name	Financial volume	2022	2023	2024	2025	2026	2027 and beyond
Replacement of fire engines	25-100 million						
Replacement of Gulfstream IV	25-100 million						
Replacement of instrument landing systems	25-100 million						А
Replacement of medium-power radars in Wier and Nieuw Milligen	25-100 million						
Replacement of F-35 on-board gun ammunition and self-protection equipment	25-100 million						А
Replacement of SRTUAV	25-100 million					Α	
Procurement of strategic air-to-surface armaments	25-100 million		A				
Procurement of tactical air-to-surface armaments	25-100 million		A				
Sustainment of C4ISR network	25-100 million		Α				
RNLAF CEMA capability (in country reprogramming)	100-250 million		А				
Restoring self-protection capability of helicopters and transport aircraft (EW)	25-100 million			A			
Improvement of visual guidance and flight range of transport helicopters	25-100 million		A				
Strengthening MQ-9 capacity: SIGINT/ESM Pod	25-100 million	A					
Setting up SOF Air R/W capability	250-1,000 million		A				
MQ-9 armament	100-250 million		A				
Strengthening MQ-9 capability: maritime surveillance pod	25-100 million		A				
Operational training infrastructure	250-1,000 million		Α				
Joint target support cell	25-100 million		A				
Anti-A2AD capability for F-35	250-1,000 million		A				
Procurement of operational space capability	25-100 million		A				
Deep strike capability Air	250-1,000 million		Α				

#### INFRASTRUCTURE AND REAL ESTATE

Project name	Financial volume	2022	2023	2024	2025	2026	2027 and beyond
Cooperation between DISS and GISS (previously: AMF)	250-1,000 million						
Camp Nieuw Milligen Marine Corps barracks	250-1,000 million						
Defence real estate adjustments	250-1,000 million						
Revitalisation of Bernhard barracks	250-1,000 million						
Improvement of defence-wide accommodation, phase 1	100-250 million						
Improvement of defence-wide accommodation, phase 2	100-250 million	A					
Fire safety building improvement measures	100-250 million						
Newbuild De Kooy	25-100 million						
Accommodation of health and dental centres	25-100 million						
Newbuild Soesterberg logistics centre	25-100 million						
Royal Netherlands Marechaussee NTC phases 1, 2 and 3	25-100 million						
Higher-echelon maintenance, Woensdrecht	25-100 million						
Technology Centre Land in Leusden	100-250 million						
Newbuild JITC Den Helder	25-100 million	A					
SF shooting facilities	25-100 million						
SOR component maintenance, Volkel	25-100 million	A					
RNLA brigade headquarters	25-100 million	A					
Army Prepositioned Stock Eygelshoven (APS-E)	25-100 million	A					
Maintenance programme for DISS building Frederik Barracks	25-100 million	A					
Runway renovation Leeuwarden Air Base	25-100 million	A					
Security programme for ammunition storehouses	25-100 million	A					
Social real estate sustainability programme	25-100 million						
Real estate transformation: concentration, renewal and sustainability	> 2.5 billion						

#### IT

Project name	Financial volume	2022	2023	2024	2025	2026	2027 and beyond
Groundbreaking IT programme (GrIT)	250-1,000 million			1			
FOXTROT (TEN) Spiral 0	100-250 million						
Roger S4 HANA	100-250 million	LHR					
Replacement of ESM capabilities, RNLA-EW system	25-100 million						
Renewal of TITAAN	25-100 million						
Modernisation of navigation systems	25-100 million						
Modernisation of shore infrastructure for High Frequency Radio	25-100 million						
Replacement of MILSATCOM ground terminals	25-100 million						
MOC Coastguard NL (KWNL)	100-250 million						
Modernisation of tactical indoor simulator	25-100 million	A					
Replacement of PRC152 and PRC117 radios	25-100 million	A					
Joint EW Electronic Attack	100-250 million						
C2LAN phase 1	25-100 million	A					
Reinforcement of RNLN intelligence capability	25-100 million		A				
Procurement of CEMA capability for RNLN's Marine Corps	25-100 million		A				

# **EVALUATION**

The investments made by this government will enable the Ministry of Defence to take significant steps towards realising a future-proof organisation in the coming years. This will require substantial funds and a major effort on the part of the Defence organisation, and an adequate reporting and evaluation mechanism will enable it to verify whether goals are being achieved, to correct its course if necessary and to provide political accountability.

Defence initially reports on its progress via standard reports, including those documents presented as part of the budget cycle, such as annual reports and the budget. However, it also utilises specific reports, such as personnel reports and deployability reports, to inform the House of Representatives of the deployment of military personnel both at home and abroad, the implementation of defence policy and the allocation of funds. In future reports, the Defence organisation aims to provide greater insight through the use of concrete indicators and to not only look back to the past, but also ahead to the future.

The measures listed in the Defence White Paper are also linked to the strategic evaluation agenda, which constitutes part of the budget published annually during the State Opening of Parliament (Prinsjesdag). The agenda is used to plan all monitoring activities, evaluations and investigations, enabling Defence to effectively measure the progress of its actions and therefore have timely access to relevant information on any necessary course corrections. An evaluation requirement and procedure is determined and investigations and monitoring activities are planned for each course of action. Based on the completed investigations, evaluations and monitoring activities, the Defence organisation compiles meta analyses and submits the results of these analyses to the House of Representatives.

The schematic representation below shows the following aspects of each portfolio: its link with the courses of action outlined in the Defence White Paper, the reports compiled by Defence, and the topics on the basis of which Defence will monitor policy implementation.

Portfolios and themes	Defence White Paper courses of action	Reports	Strategic evaluation agenda
Portfolio <b>Materiel</b>	<ul> <li>Strong support</li> <li>Strengthening of specialisations</li> <li>More European cooperation</li> <li>New domains and the ability to innovate</li> </ul>	Defence Project Overview     Submarine report     F-35 report	<ul> <li>Materiel exploitation and investments</li> <li>New domains and capabilities</li> </ul>
Portfolio <b>IT and Cyber</b>	New domains and the ability to innovate	• Defence Project Overview	IT foundation     Information-driven operations
Portfolio <b>Personnel</b>	• Strong support • Good employer, embedded in society	• Personnel reports	• Personnel and safety
Portfolio <b>Real estate</b>	• Strong support • Good employer, embedded in society	• Defence Project Overview	Concentrate, renew and increase     sustainability of real estate
Portfolio International defence cooperation	• More European cooperation	International defence     cooperation report	<ul> <li>Intensification and strengthening of European and international cooperation</li> </ul>
Theme Readiness and deployability Knowledge development, technology and innovation Sustainability	<ul> <li>Strong support</li> <li>Good employer, embedded in society</li> <li>Strengthening of specialisations</li> <li>Information-driven operations</li> <li>New domains and the ability to innovate</li> <li>More European cooperation</li> </ul>	<ul> <li>Deployability report</li> <li>Mission progress report</li> <li>Defence Project Overview</li> </ul>	<ul> <li>Operational readiness</li> <li>Knowledge development and innovation</li> <li>Sustainability</li> <li>Intensification and strengthening of national cooperation</li> </ul>

# LIST OF ABBREVIATIONS

AI Artificial intelligence
GDP Gross domestic product
CARD Coordinated Annual Review on Defence
CBRN Chemical, biological, radiological and nuclear
DCSC Defence Cyber Security Centre
DIS Defence industry strategy
DMO Defence Materiel Organisation
DMP Defence Materiel Process
DSSC Defence Space Security Centre
EDA European Defence Agency
EDFEuropean Defence Fund
EPF European Peace Facility
F&C Finance and Control
HR Human Resources (personnel)
IAMD Integrated air and missile defence
IPSInterdepartmental Policy Study
IDR Instituut samenwerking Defensie en Relatieziekenhuizen (Institute for Defence and
Partnership Hospitals)
ITInformation technology
IM Information management
DISS Defence Intelligence and Security Service
MRTT Multi-role tanker transport
NDPP NATO Defence planning process
PESCO Permanent structured cooperation
RbVs Rijksbrede Veiligheidsstrategie (Government-wide security strategy)
RNLA Royal Netherlands Army
RNLAF Royal Netherlands Air Force
RNLM Royal Netherlands Marechaussee
RNLN Royal Netherlands Navy
R&T Research and Technology
SOF Special operations forces
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