Ministerie van Defensie

Memorandum on Scope and Level of Detail

Environmental Impact Assessment of the National Space for Defence Programme

Date	15/12/2023
Status	Final

Publication details

Netherlands Ministry of Defence

Location	The Hague - Plein-Kalvermarkt. Kalvermarkt 32 The Hague
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1.1 The armed forces are transforming

Freedom, security and prosperity are not self-evident. Stability in Europe is under pressure from the Russian invasion of Ukraine in 2022. The preceding period saw a noticeable deterioration in the global security situation due to rising geopolitical tension, the impact of climate change, hybrid warfare, institutional distrust, increasing scarcity of resources, increased conflicts and migration. Presently, Defence has the important task of defending the interests of the Kingdom and promoting and enforcing international legal order. This is why the current cabinet has made considerable investments in Defence. As described in Defence White Paper 2022 (p. 14), these investments enable Defence to restore, modernise, replace and expand its military capabilities.

Those improvements are desperately needed. As a result of the deteriorated security situation, the armed forces must be able to deploy more quickly, more frequently and for a longer period of time. That is why Defence is undergoing a transformation process aimed at achieving three central objectives: increasing readiness and deployability, strengthening fighting power and improving the organisation's agility.

The past few decades were characterised by a period of relative political stability. As a result, the focus of Defence's activities has been on Main Tasks 2 ("promoting (international) legal order and stability") and 3 ("supporting civil authorities and providing assistance in disasters and crises"). The war in Ukraine and other developments on the world stage require larger, better equipped and well-trained armed forces. European allies, including the Netherlands, must be ready to defend their own and allied territory. The Netherlands must step up its efforts in NATO and EU context. In the meantime, maintaining and promoting the international legal order and supporting civil authorities, including in disasters and crises, continues to be of the utmost importance. This shift in focus calls for changes in operations, as well as in the amount of space taken up and the use of Defence's space. In order to continue to fully perform the statutory and constitutional tasks and to adequately ready the units, as a result of growth and an increased focus on the defence of allied territory, more environmental and other space is required than in the current situation.

1.2 Space for the armed forces of the future

In order to transform into forward-looking armed forces, Defence invests in its people, equipment and facilities and works together with its partners to strengthen its military capabilities. The focus of those investments is on current developments in security.

The consequence of this transformation is that the armed forces' presence in the physical environment will become more prominent in the future. Expansion of the armed forces goes hand in hand with a growing need for space to exercise and train, both abroad and in the Netherlands. In addition, Defence is investing in newer and more equipment, which also has an impact on its use of space. In the coming years, for example, considerable investments will be made in replacing, expanding and purchasing drones on land, in the air and on and in the water, new vessels, aircraft and vehicles, rocket artillery and submarines. All this requires more physical space and more environmental space in various places. There is also a need for training areas that are in tune with the nature of current conflicts, which are often concentrated in built-up areas.

In addition, some of Defence's activities are already starting to grow out of their space because of long-term cutbacks in barracks and areas, but also because other objects and activities requiring space, such as homes, leisure facilities and wind turbines, have increasingly been added in the vicinity of locations of Defence.

Dutch participation in the NATO partnership also has an impact on Defence's need for space. Joint protection also means being present in each other's space. This means that exercises, training and readiness - including with allies - will be conducted more often in the Netherlands. The Netherlands is an important military mobility link in the European network. The Netherlands' infrastructure is designed for this purpose. Seaports, railways and airfields are able to process large quantities.

Increasing the quantity of materiel and stocks, and thus increasing the existing (environmental) space is not automatically possible or desirable in all locations due to other functions or interests in the vicinity of Defence sites. Moreover, space is at a premium in the Netherlands and there are several social interests that require space, for example housing construction, the energy transition and nature restoration. This requires careful consideration at various levels of scale (national, regional and local).

Identifying the need for space, balancing the need for space for Defence against the other challenges and safeguarding Defence's new use of space is key in the **National Space for Defence Programme (*Nationaal Programma Ruimte voor Defensie*, or NPRD)**. The start of the NPRD is a national policy strategy, in which the government decides at which locations in the Netherlands the usefulness and necessity of increased military activities has been established[1]. Subsequently, this strategy will be further elaborated at regional and local level of scale based on area and/or specifically on location.

At regional level, only military activities with a large impact in terms of space, activities in sensitive areas or locations where many linking opportunities and synergy benefits are possible, are developed. Through design-based research involving local and regional authorities and civil society parties, it is shown for each area how the increase in military activities can be combined with other tasks based on that area. Based on this, a joint, area-based strategy can be drawn up in which there is agreement as to which course to take. Democratic legitimacy and social participation are the criteria in this regional process. Of course, many area-based processes are already underway, such as the National Programme for Rural Areas. Where possible, coordination between these programmes will take place in order to avoid separate area-based processes. All this can then be safeguarded in terms of planning and legality at the appropriate level. Depending on what is needed and the situation, the choice can be made for an airport regulatory enforcement decision, a project decision (State or province) or an environment plan (municipality) (or to amend such decisions) and the necessary permits can be applied for.

[1] Growth or increase in military activity includes not only the development of existing locations, but also establishing new locations.

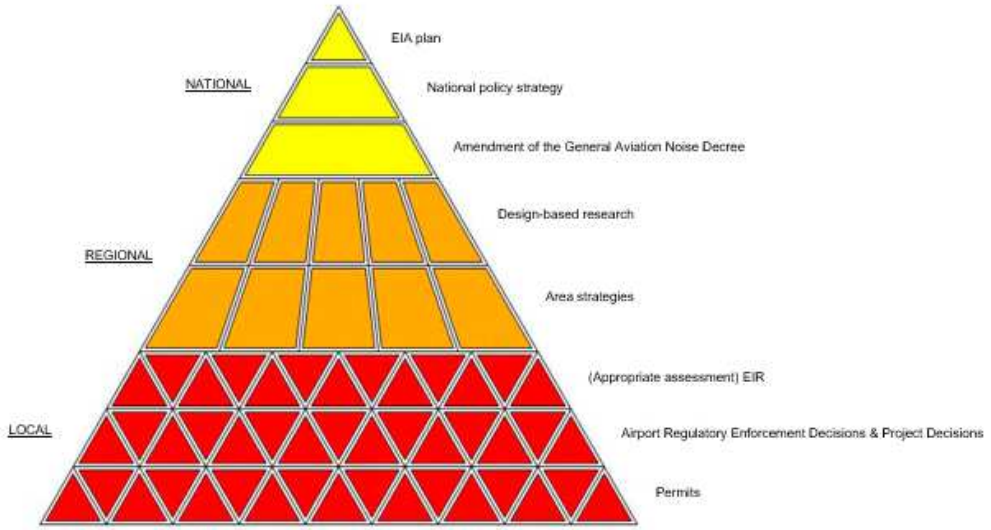

Figure 1.1: Operation of the NPRD, the needs that are part of the scope of the NPRD and the instruments corresponding to the various needs.

In order to arrive at balanced and substantiated choices in the national policy strategy, the Ministry of Defence will set up an EIA plan procedure in order to identify and assess the impact and alternatives of this demand for space, and then consider them in the decision-making. Other aspects can also play a role, such as the interests of other (domestic) facilities requiring space, support and costs. The first product in this process is this memo, which discusses the scope and level of detail of the EIA plan.

The EIA plan is the start of identifying the impact on the physical living environment of the various Defence needs that require space. In follow-up procedures, the importance of the physical living environment will always be part of the decision-making process, whether or not with a project or other EIA.

In the recent past, Defence processes relating to space have already been announced or started. For some of these processes, Defence considered it necessary to go through these needs for space (concentrating support units in 'central barracks' or increasing the fighter aircraft capabilities, for example) in a broad process with sufficient space for participation and communication. This EIA plan procedure provides for that broad process. In practice, the inclusion of these needs for space means alternatives must be considered, with space for participation, on the basis of which a preferred alternative can be selected. These considerations take into account previously conducted research as well as previous input from the regions. In this context, see also the letter to the House of Representatives dated 11 May 2023, 'Status of the central barracks project' (Parliamentary document 36 124, no.30) and the letter to the House of Representatives dated 5 July 2023, 'National Space for Defence Programme' (Parliamentary document 36 124, no. 33).

The Environmental Impact Assessment Report (EIAR) is in line with the current National Environmental and Spatial Strategy (NOVI) and also with the NRD drawn up for the EIA plan procedure for the Spatial Planning Memorandum that will replace the NOVI. This means that the EIA plan only relates to activities in the Netherlands. However, the activities relating to space necessary for the preparation are not all safeguarded in instruments of the Environment and Planning Act (*Omgevingswet*). These are: spatial requirements in the medium and higher airspace (above 2 km),

spatial requirements in the Caribbean part of the Kingdom (on the BES islands and the Caribbean countries within the Kingdom), spatial requirements in the North Sea, partly or completely outside the 12-mile area, and temporary or non-structural use of locations. For these spatial requirements, separate tracks are followed, such as the Airspace Review Programme, the Caribbean Spatial Development Programme and the North Sea Programme 2028-2033, each of which has its own preparatory processes such as an EIAR.

1.3 Application of NOVI assessment principles in the NPRD

NOVI sets out "ensuring national security and allowing space for military activities" as a national interest. "In order to perform its operational tasks, Defence needs sufficient usable space to exercise and train. The armed forces will be expanded and modernised. This development may lead to a greater burden on the environment. The anticipated growth of Defence activities must be accommodated." To face this challenge, NOVI (like in all other challenges) sets three assessment principles:

1. Combinations of functions come before single functions
2. Area characteristics and identity of an area are key
3. Prevent passing on

These three assessment principles are applied in the NPRD.

Combinations of functions come before single functions

Military training areas have long been managed with the interests of nature in mind. Figures show that ecological features on military grounds compare favourably with those elsewhere. Not only will multiple use of space involving nature and water & soil be continued and intensified where possible, different military uses will also be combined where possible. For example, new military activities - such as the use of drones - take place as much as possible on existing military training areas. Where new grounds and locations are required, other challenges and transitions are explicitly taken into account. After all, introducing a military activity and associated use of space can offer a solution for areas in which existing activities and use of space must transition.

Area characteristics and identity are key

Every area is different. For example, Defence operates in and around special areas, such as the Natura 2000 areas, but also in areas where there are many spatial economic synergy opportunities. Some military activities have a greater and wider impact on the living environment that goes beyond the military grounds and also determine the local identity of an area. Following the NPRD national policy strategy, an area-based and integrated policy will be implemented at the regional level. Through design-based research, an intergovernmental, integrated area strategy will be drawn up with social participation and governmental legitimacy. Where area-based plans have already been introduced, work will be done cost-efficiently as much as possible. Only then and on that basis will project decisions or airport regulatory enforcement decisions and permits be initiated.

Prevent passing on

Passing on is about preventing passing on in terms of time and place. This means that there is no passing on to other countries either. In key respects, the Dutch armed forces are and remain dependent on activities outside the Netherlands. For example, part of the fighter pilot training takes place in the US and large-scale training exercises at battalion level (level V) are only held in, for example, Germany, Sweden and Norway. In addition, Defence also goes abroad for specific training exercises under conditions that cannot be trained in the Netherlands. This applies, for example, to mountain training, cold weather training, or jungle training. Moreover, the alliance works both ways: The Netherlands can exercise abroad, but must also accommodate allies in the Netherlands. For example, the annual Frisian Flag exercise from Leeuwarden air base. To ensure that our armed forces are robust, space is needed in the Netherlands and elsewhere.

1.4 Safeguarding Defence's need for space in the (new) central government

policy

The demand for space ensuing from the NPRD is an elaboration of the current NOVI, in which Defence's increased need for space and the necessity to meet this need have already been mentioned. The current Decision activities are safeguarded in the NOVI and the rules of the State (General Rules on Spatial Planning Decree: *Besluit algemene regels ruimtelijke ordening*, or "Barro") The new activities included in the NPRD have not yet been safeguarded in spatial policy and/or legislation, such as the Barro or later

the Environmental and Planning Decree (*Omgevingsbesluit*) and the Quality of the Living Environment Decree (*Besluit kwaliteit leefomgeving*).

The Defence's new need for space must be balanced at national level against other interests that also require space. For many of these other interests, national programmes have already been set up or are being prepared. The scope of all these spatial challenges in the national programmes is such that the State, under the leadership of the Minister of the Interior and Kingdom Relations, is working on updating the NOVI, under the title Spatial Planning Memorandum. In this Spatial Planning Memorandum, the government makes well-considered choices about national interests and monitors consistency and spatial quality at national level. The Spatial Planning Memorandum makes these spatial choices for 2030, 2050 and 2100. The Defence's fully considered demand for space will also be included in the Spatial Planning Memorandum. The Spatial Planning Memorandum, the outline policy document published in October 2023, already announced that *"renewed attention to our national and international security throughout the Netherlands entails a demand for space for Defence".* The spatial impact of this demand for space is outlined in the Spatial Planning Memorandum.

2. Environmental Impact Assessment for NPRD: insight into the impact of spatial requirements

2.1 Why an Environmental Impact Assessment (EIA)?

In the Netherlands, an EIA is mandatory for plans and programmes that provide a framework for EIA projects subject to a case-by-case analysis. This also applies to plans and programmes for which an appropriate assessment (if significant impact on Natura 2000 areas cannot be excluded) must be made. Both apply to the NPRD.

The procedure for an environmental impact assessment (EIA[2]) is designed to include the environmental interest in the planning and decision-making process at an early stage and in full. An EIA is always linked to a spatial decree, for example an environmental and spatial strategy, a programme, project decision or environmental and spatial plan. Whether and, if so, what obligations apply to an EIA is laid down in Article 16.4 of the Environment and Planning Act and Annex V to the Environment and Planning Decree.

The difference between an EIA plan and a project EIA mainly relates to the level of detail and the objective. An EIA plan involves making assessments at a higher level of abstraction (including research at a higher level of abstraction). For example, the NPRD involves assessing various areas in the Netherlands for a particular need (for example for additional space for training villages, an additional location for ammunition storage or other low flying areas for helicopters). In part on that basis, choices can be made for particular areas. The further details are specifically considered in follow-up procedures (and possibly a project EIA).

2.2 Purpose of this Environmental Impact Assessment

Following an EIA procedure has various objectives, chief among which are shown in Figure 2.1. An EIA procedure resulting in the EIAR is an important tool for fully considering the impact on the physical living environment in the final decision-making.

Insight into the current state of the physical living environment and the reference situation

In order to achieve this, 1) we need good insight into the current state of the physical living environment (at and around the current Defence locations, 2) we need insight into trends (such as climate change and housing challenges) and 3) autonomous developments (policies that have been adopted and that are actually being implemented) and their impact on Defence (the latter being referred to as the reference situation).

Research into the impact of all space requirements from the NPRD

Subsequently, the impact of the various space requirements of Defence (from the NPRD) are outlined in this reference situation. The NPRD contains a large number of requirements. These are all examined for impact in the EIA plan. These are often new activities that are already being added at current Defence locations.

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[2] The abbreviations EIA and EIAR are commonly used. The abbreviation EIA stands for the entire procedure, the environmental impact assessment. EIAR stands for the environmental impact assessment report drawn up in this respect.

Study of alternatives for needs subject to a supra-regional assessment
Thirteen of such needs are assessed in the EIA plan. These are activities for which it is not clear in advance where in the Netherlands they can be accommodated and which have a major impact on the physical living environment. For these thirteen needs that are subject to supra-regional assessment, several alternatives are examined for each need in the EIA plan. This will be discussed in more detail in Chapter Four.

Verifiability is important

Finally, the EIA procedure and the EIAR to be drawn up serve to support both the choices and the decision-making regarding Defence's (additional) need for space. In doing so, it also substantiates why certain choices were or were not made and how a preferred alternative was arrived at.

Summary of the EIA's objectives for the NPRD
Figure 2.1 summarises the objectives of the EIA on behalf of the NPRD.

Figure 2.1 NPRD EIA objectives

2.3 What is the physical living environment for which the impact is outlined?

The Environment and Planning Act introduced the term 'physical living environment' in spatial planning. The Environment and Planning Act does not contain a strict definition of this term. However, the act does describe what the term includes in any event, namely structures, infrastructure, water systems, water, soil, air, landscapes, nature, cultural heritage and world heritage.

The EIARs made by the State use a broad approach in determining the impact on the physical living environment. This means that not only the classic environmental themes (such as soil, water, landscape, noise and traffic) are considered, but also themes that fall under the term "prosperity in a broad sense", such as health, well-being, economy and housing. For the EIAR with the NPRD, this broad approach also forms the basis for impact description and assessment, which is, of course, in line with the relevant activities. This will be discussed in more detail in Chapter five.

2.4 This Memo Scope and Level of Detail and the further EIA procedure

In the Letter to the House of Representatives on the National Space for Defence Programme (Parliamentary Document 2023019968, 05 July 2023), the State Secretary of Defence announced that an EIA procedure for said National Programme was to be followed.

This Memorandum on Scope and Level of Detail (*Notitie Reikwijdte en Detailniveau*, or NRD) is part of the public notification that is the formal start of the EIA procedure already announced. This NRD is the first step towards an environmental impact assessment report (EIAR). Figure 2.2 describes all the steps of the EIA procedure, which, where possible, run parallel to the steps for the NPRD.

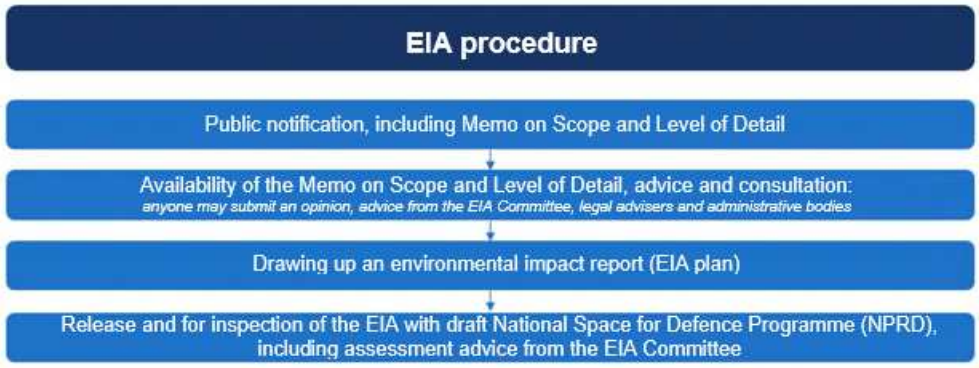


Figure 2.2 Steps in the EIA procedure

Public notice, including Memorandum on Scope and Level of Detail: start of the EIA procedure (December 2023)
The first formal step is a public notice. This notice informs everyone of the intention of the State Secretary of Defence – in agreement with the Ministers concerned – to draw up an EIAR with the National Space for Defence Programme (NPRD). In order to give more substance and context to this intention, this Memorandum on Scope and Level of Detail has been drawn up.

Availability of the Memorandum on Scope and Level of Detail, advice and consultation (December 2023)
After publication of the public notice and this Memorandum on Scope and Level of Detail, citizens, civil society organisations, businesses and institutions can send an opinion on the contents of this Memorandum on Scope and Level of Detail and the EIAR to be drawn up within eight weeks.

Because the plans may have an environmental impact on neighbouring countries, the relevant administrative bodies across the border will also be informed and citizens in these countries, Germany and Belgium, will have the opportunity to submit their views. No impact is expected outside territorial waters, therefore the United Kingdom, Denmark and Norway need not be consulted.

Some activities may take place close to the border with these countries and thus may have an impact. In addition, the State's legal advisors are consulted on the scope and level of detail of the impact study. These are advisers appointed by the Ministers of Infrastructure and Water Management, Education, Culture and Science and of Agriculture, Nature and Food Quality (such as the Cultural Heritage Agency).

The Netherlands Commission for Environmental Assessment is also asked to give an opinion on how to deal with the scope and level of detail in drawing up the EIAR. This opinion will be published publicly on the Committee's website.

The advice, opinions and views obtained during the consultation on scope and level of detail may, after assessment, be included in the implementation of the Environmental Impact Assessment. The EIAR indicates how the advice, opinions and the views submitted were dealt with.

Drawing up the EIA plan (Q1 and Q2 2024)
The EIA plan will be drawn up on the basis of this Memorandum on Scope and Level of Detail, the first drafts of the NPRD and the views, advice and opinions obtained.

Release and making the EIAR available for inspection together with the draft National Space for Defence Programme policy vision (Q3 2024) The EIAR will be made available for inspection at the same time as the draft NPRD. Any person may submit views on the two documents according to the procedure for expressing views. The neighbouring countries (Belgium and Germany) will be informed about the EIAR and the draft National Space for Defence Programme policy vision and their citizens can also submit their views. The Netherlands Commission for Environmental Assessment will also be asked to assess the EIAR.

The EIAR and the draft National Space for Defence Programme policy vision will be submitted to the House of Representatives at the same time as the previous steps.

Adopting the NPRD and EIAR (Q4 2024)
The State Secretary of Defence, together with the Minister of the Interior and Kingdom Relations, adopts the NPRD National Policy Strategy (including the EIAR). This comes with an explanation of how the environmental impact assessment report and the views, advice and opinions were taken into account.

3. Current use of space by Defence and challenges

3.1 Introduction

In the Defence Vision 2035, the Ministry of Defence concludes that "the current setup, prioritisation and state of the defence organisation means that we are not adequately equipped for the changing threats" (page 11). After a long period of austerity, additional investments in the armed forces resumed from 2014. These investments have only increased since the war in Ukraine, including among many of our allies. Investment is being made in more military personnel, more materiel and more activities to ensure that units can be deployed more rapidly, more frequently and for longer periods of time. Achieving this takes time, and necessitates additional direct and indirect space. Defence has reached the limits of what is possible from a planning perspective in the Netherlands. The problems are basically threefold:

1. **The pressure on the space is increasing**

   A small area needs to accommodate many activities: sufficient sustainable and affordable homes, switching to sustainable energy generation, the transition to circular agriculture while maintaining a healthy and diverse natural environment, etc., with the emphasis placed on socio-economic liveability of the city and rural area and where water and soil are decisive factors in the choices we make about the planning and development of the Netherlands. A study related to the NOVI showed that urbanisation alone (indicatively) already requires space equalling the surface area of the city of Utrecht. Demands for space have only become more prominent in recent years, putting more pressure on cities, rural areas and nature (housing, nature, energy). The spatial pressure on Defence has also increased. In the areas where Defence has had to make cutbacks for many years and expansion of activities and use of space was minor, housing, leisure facilities and other activities have increasingly encroached on the areas used by Defence in recent decades. This is clearly visible, for example, around highly urbanised areas, such as Eindhoven and the training areas in and around the Veluwe region in relation to recreational pressure. These space claims force Defence to conduct its current activities in already limited space (in terms of permits and area) with less surrounding 'buffer space'.

2. **In fact, more space is needed for Defence activities**

   Due to the changing geopolitical context, and the resulting increased public attention to the defence of the Netherlands, responsibilities towards NATO and international stability, there is a structural need for more Defence space, because of the increased focus on the defence of our own and allied territory. This necessity leads to a greater direct and indirect (such as sound quota and safety zones) amount of space taken up in the Netherlands. The demand for space manifests itself in existing areas (more intensive use, more environmental space) and on new locations to be used (new type of training exercises and expansion of existing capacity).

3. **The use of the current sites and the current real estate of Defence offers insufficient flexibility**

   The nature of Defence activities is changing at a faster pace than ever before. The regulations and policy in the Netherlands, and their implementation, are not designed for this development and offer little flexibility for the needs of Defence. Also, years of staff and budget cuts have made some of the sites obsolete and difficult to modify within the generally older permits already in force. However, due to the nature of various Defence sites, there is already

space and synergy between the activities of Defence and other activities requiring space, such as nature development, and energy generation and storage.

3.2 An overview of the current use of space by Defence

Defence is one of the major space managing entities in the Netherlands. In 2023, Defence has a total of around 460 objects at its disposal, with a total surface area of approximately 35,000 hectares. Defence uses the term 'object' to refer to a recognisable and independently functioning unit in the immovable property available, such as a barracks, an airbase or a port. An object usually consists of many buildings, works and sites. The term 'object' should therefore not be confused with a building. The real estate portfolio includes approximately 11,000 buildings with a gross floor area (GFA) of more than 6 million m_2. Almost 300 buildings of which are listed.
Defence is represented in all provinces, but not everywhere equally.

The military use of these facilities in a densely populated country such as the Netherlands has an impact on the environment. Not only does Defence need space for the armed forces to properly perform their tasks, the activities can also cause nuisance. This makes spatial planning, nature and the environment topics that are directly related to the use of objects by Defence. Moreover, where Defence establishes itself in the Netherlands, or actually leaves, this often has an economic impact on the region in question in the form of direct and indirect employment. The spatial choices made by Defence therefore also play an important role in the relationship between the armed forces and society.

Defence has shrunk in terms of materiel, staff and also buildings and sites in recent decades.

Table 3-1 gives a short overview of the locations in use by Defence (including in the Caribbean). Figure 3.1 shows the spatially relevant locations in the Netherlands in a figure (excluding small memorials, residential locations, old forts, etc.). The exercise locations are shown in Figure 3.2.

Location	Numb	Area (hectares)
Training area and shooting site	62	25,686
Airbase	9	3,895
Barracks	47	2,055
Logistics location	30	479
Port location	2	381
Transmission and receiving location	33	270
Storage location	25	256
Office location	116	234
Technical location	34	235
Training location	11	48
Educational location	11	150
Total	**380**	**33,998**

Table 3-1 Overview of location types (number and surface area, 2023)

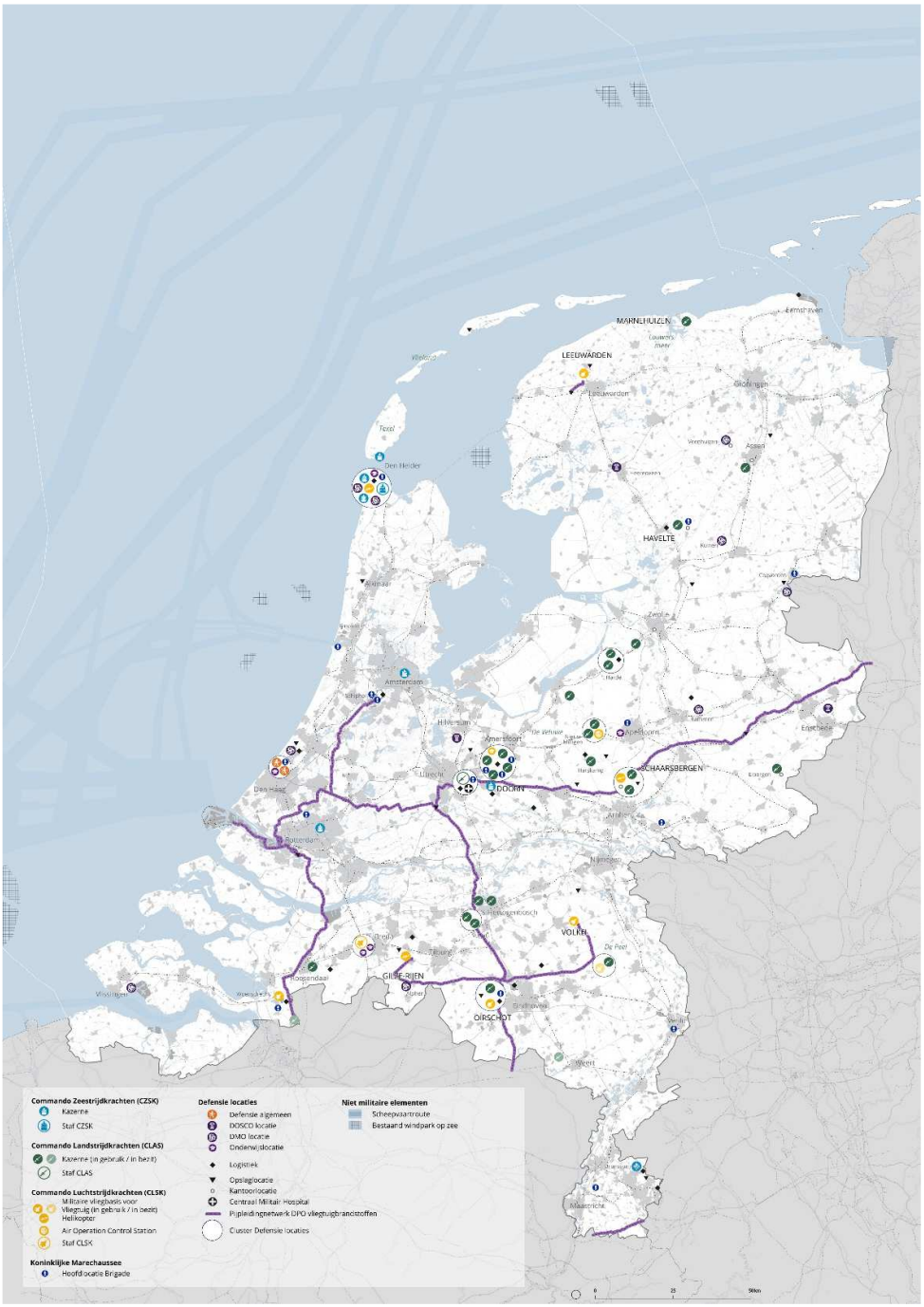


Figure 3.1 Overview of barracks, ports and air force bases, current status (2023)

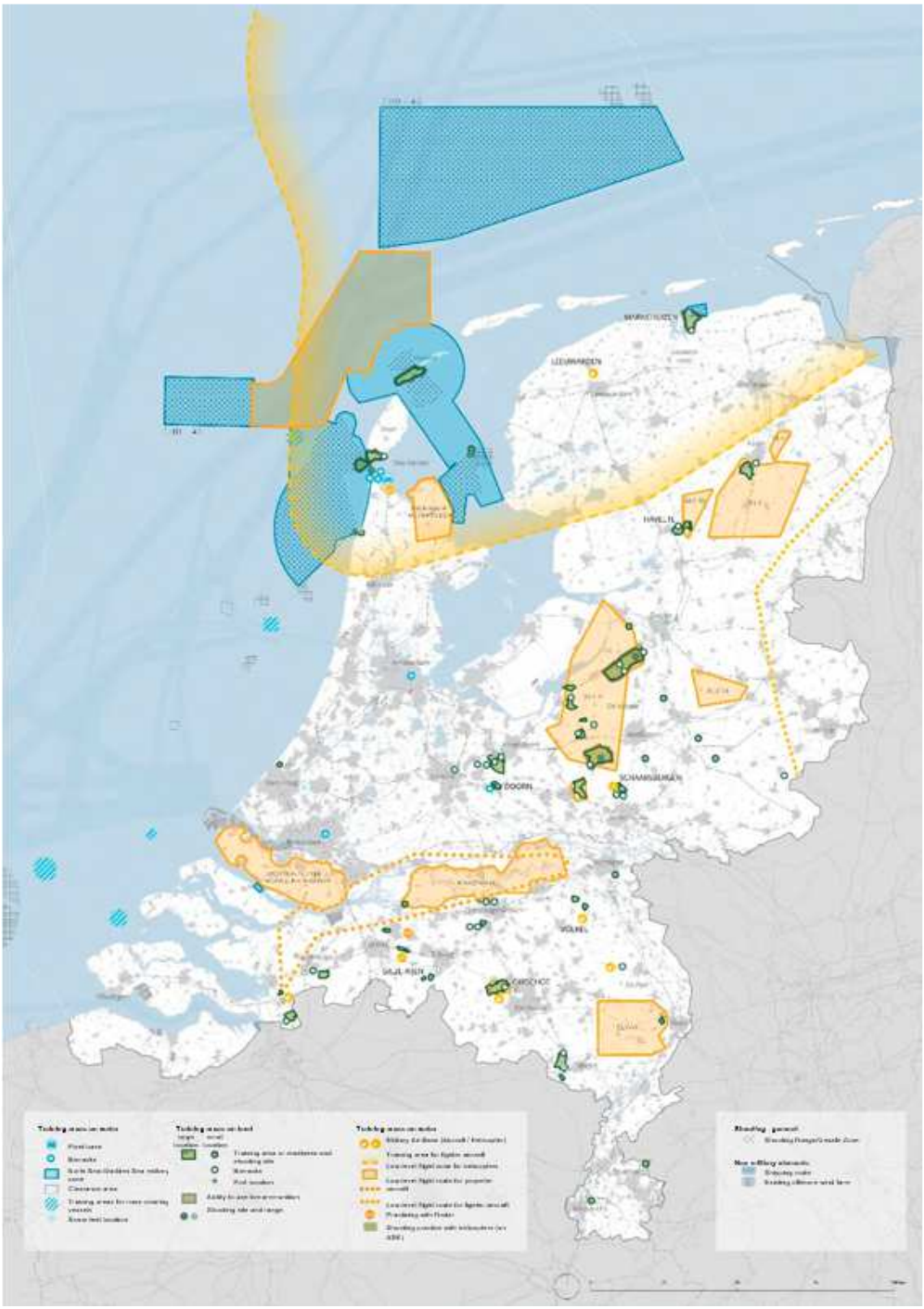


Figure 3.2 Training areas of the Army, Air Force and Navy, current situation (2023)

3.3 Insight into the pressure on space for current activities

The EIA plan sets out the current state of Defence locations and activities for all themes of the physical living environment (see Chapter five) and the impact of these themes on the physical living environment (in 2023) of Defence. The impact of the

physical living environment on Defence and vice versa is clarified in the EIA plan for each Defence location (Figure 3.1) for six defining themes. These defining themes (Figure 3.3) are frequently recurring themes that play a role in Defence activities. To this end, the EIAR will state whether there are aspects of the business operations for the relevant location that require attention. For the other themes of the assessment framework (see Chapter 5), this is considered more in a generic sense than for each location.

Figure 3.3 Defining environmental themes

The assessment scale for the defining themes is ranked in terms of urgency, see Figure 3.4. No point of interest (green colour) means that the theme does not play a role in the relevant activity at the relevant location, for example if there are no safety contours and/or risks. A major point of interest (red colour) means that this theme already has bottlenecks and that the pressure on the environment and/or Defence activity is high. This is the case, for example, around a number of airbases.

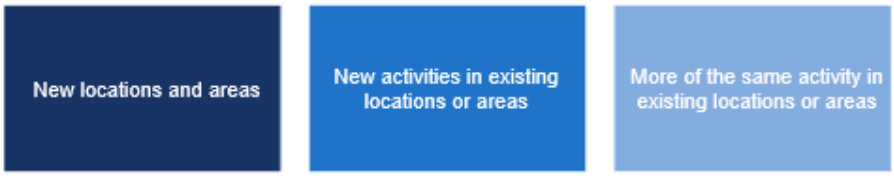
Figure 3.4 Assessment scale

In the EIA plan, all components of the assessment framework, but especially these defining themes, are clarified in an environmental photograph (see paragraph 5.2.2 of this NRD). When choosing a preferred alternative, the points of interest from this environmental photograph are important: in the struggle for space, the interests of the armed forces must be balanced against the interests for which there are "major points of interest".

4. The content of the NPRD and alternatives to be considered

4.1 Three categories of Defence needs that require space

In order to cope with an increasing threat, it is necessary to accommodate the required space ensuing from the current growth and possible further structural growth in the Netherlands. In order to realise that additional space (see paragraph 3.1), Defence interest must become an integral part of the Netherlands. The space referred to is diverse: from modernising housing and making housing more sustainable to attracting staff. Within the armed forces, 57 needs that require space have been identified that also have a claim on the physical and/or environmental space. These needs not only vary greatly in nature, size and impact on space, there is also a clear difference between the activities of the armed forces Services. That is why these have been divided into three categories:



I. New locations and areas

This category encompasses the needs of Defence in new locations and areas that have not yet been decided in terms of planning. These include large-scale training areas, new low flying areas for helicopters, large-scale ammunition storage or a new barracks.

II. New activities in existing locations or areas

For the Netherlands, this second category contains an entirely new activity that is developed in an existing location or area, but which is also new locally as a result of concentrating existing activities in a single location. This could include, for example, new helicopter landing sites for Special Operation Forces activities at existing locations, stationing F-35s at other existing air force bases, the possibility of using drones and Apaches for shooting practice at the Vliehors nature area or a new unpaved runway for tactical air transport (dirt strip) and a short narrow runway.

III. More of the same activity in existing locations or areas

The latter category includes the most needs. This involves more of the same activity in a location or area already in use by Defence. In many cases, this does not so much require additional physical space (outside the site), but often requires the permit to be changed and additional environmental space, for example when expanding a shooting range. Sometimes this also involves new materiel use.

Distinguishing needs subject to a supra-regional assessment and location-specific needs

Needs that cannot easily be realised at an existing Defence location require a supra-regional assessment. This applies to thirteen needs. This will be discussed in more detail in the following paragraph.

For the other needs, it is clear why these can/must take place at a particular location and not elsewhere. This is due, for example, to the fact that these needs are strongly linked to units at a particular location or are linked to a specific location. This applies to many of the activities in category III. A total of 44 needs are involved. These are explained in more detail in paragraph 4.3.

4.2 Activities subject to a supra-regional assessment

4.2.1 Study of alternatives in the EIA plan

The EIA plan examines the impact on the physical living environment for all needs with a claim on space. Most of the attention in the EIA plan is devoted to needs where a supra-regional assessment is required to select locations where the demand for space can ultimately be accommodated. These are the categories where the activities are new and where areas are examined that may accommodate these activities. If this is not clearly an existing location, a broad and supra-regional spatial assessment of alternatives is required. There are a total of thirteen needs to which this applies.

The needs for which a supra-regional assessment is required differ greatly in nature and scope, but often have a significant claim on space and environment. For these activities, one or more alternatives are examined in the EIA plan. This is described per requirement in paragraph 4.2.2.

No spatial alternatives are considered in the EIA plan for activities that do not require a supra-regional assessment (this concerns 44 needs). This often requires local consideration and customisation. However, the impact of these needs on the physical living environment is set out, so that the usefulness and necessity can be decided in the National Policy Strategy. These – and all – new activities are followed by follow-up procedures, with or without EIAs and/or assessments, and follow-up decisions.

Figure 4.1 provides a schematic summary of how the two types of needs (supra-regional and location-specific) that come with a demand for space are addressed in the EIA plan.

Figure 4.1 Overview of alternatives and subdivision of different activities with a need for space

An important foundation for how the alternatives come about and the final choice of an integral preferred alternative pertain to the three NOVI assessment principles:

1) Combinations of functions come before single functions.
2) Area characteristics and identity of an area are key.
3) Passing on is prevented.

In addition to these assessment principles, the considerations based on the "Every

region counts" advisory report are also taken into account in selecting the preferred alternative. Defence already has a presence in many regions across the Netherlands. This aspect is explicitly discussed when considering the departure of Defence from locations.

4.2.2 *A closer look at the needs subject to supra-regional assessment*

Table 4-1 lists the thirteen needs subject to supra-regional assessment for which alternatives are considered in the EIA plan. These needs are briefly explained in the passages following the table. A more detailed description of these needs is included in Annex 2.

Table 4-1: Overview of demands for space subject to supra-regional assessment

Demand for space subject to supra-regional assessment	
(I)	Strengthening and concentrating support units
(II)	Additional location for large-scale ammunition storage
(III)	New RDC ammunition storage
(IV)	New site for training and exercising with explosives (explosives training area)
(V)	Urban warfare exercises
(VI)	Amphibious operations training area
(VII)	Guaranteed Host Nation Support port capability
(VIII)	Increase in use of fighter aircraft capability
(IX)	Unmanned maritime helicopters
(X)	Stationing and corridors for cargo drones
(XI)	Low flying areas for helicopters
(XII)	Helicopter landing sites
(XIII)	Short/narrow unpaved runway for tactical air transport

1. Strengthening and concentrating support units Supporting information for need

The Army has insufficient capabilities to adequately support its combat units. NATO has been pointing out these major shortfalls for years: "NATO is critical of continuing qualitative and quantitative shortfalls, especially in relation to strength and operational combat support (CS) and combat service support (CSS)) in the land domain". NATO has pointed out that there are shortfalls in the support units, for example in logistics and medical capability. NATO has also pointed out the need to strengthen Information Manoeuvre capabilities. At present, the support units are a weak link in the entire chain. Insufficient support units are available, which has a direct impact on the armed forces' effectiveness and sustainability. Strengthening these units is necessary. Concentrating these units is one of the operational adjustments to bring this about.

Three major challenges for the Army lead to a growing need for space for support units:

- restoring and strengthening the armed forces;
- creating synergy by concentrating units in the support chains: the medical chain, the operational logistics chain and the Information Manoeuvre chain;
- finding and retaining sufficient and qualified people by offering longer career perspectives and a healthy work-life balance.

On the one hand, this concentration is in the medical chain, the operational logistics chain and the Information Manoeuvre chain: comparable units will work at a single location, including their training units. Through clustering of training and operational units, students are trained in a professional context, resulting in better trained employees. By bringing together different units from the same field, units can better work together: they support each other and learn from each other. On the other hand, by bringing together these chains in a single location, mutual integration is also improved, resulting in more cooperation and coordination between the support units. This multi-domain approach, allowing synergy between units and domains, ensures that the armed forces can respond more quickly and effectively to sudden threats and crisis situations. By concentrating recruiting, educating, working and training as much as possible in a single location with sufficient labour potential, we strengthen

effectiveness. We enable our employees to build a diverse career with Defence without having to travel all the time. This ensures that our staff is well trained and skilled, and it creates peace of mind and stability for both staff and their families, which contributes to the ability to retain staff. Targeting investments on concentrating the support units will boost the deployability of the main tasks of Defence (NATO source: Defence Planning Capability Review, 2021-2022).

Growth of support units in the now fragmented locations is not possible without expansion. This is because there is not enough space in the existing barracks. This means that suitable locations must be found where the desired strengthening and concentration of support units can take place. Concentration of the three support units is being considered, as well as the options for concentrating medical and logistics personnel on the one hand and information manoeuvre on the other (arguments of necessity). A further concentration of all support units also has major operational benefits (better cooperation and training), for staff (e.g. flexibility in one's career without having to travel all the time) and financial benefits. The war in Ukraine demonstrates the importance of good cooperation between these support units.

Approximately 370 hectares are needed to accommodate the current units and the required growth. This number is made up of required space of approximately 125 hectares for the medical chain, approximately 120 hectares for the logistics chain and approximately 125 hectares for the Information Manoeuvre chain (including other Services). An entirely new location also requires a training area of 150 hectares located nearby. Small-scale exercises will be conducted in this area. This requirement does not apply to existing locations, since existing training areas are already located close to them. Thus, the spatial requirement for those alternatives is lower (around 370 hectares).

Alternatives to be reasonably considered

In order to find one or more suitable locations for this required growth, the current Defence locations where all or parts of the support units are already located have been examined. This gives us three options:

1. Strengthening and concentrating all support units on several existing locations.
2. Strengthening and concentrating the various chains in one existing location to be expanded in size.
3. Strengthening and concentrating all support units in a new location.

An investigation was conducted into the size of the existing barracks, which space is already occupied (and will continue to be occupied) by other Services and which space is therefore still potentially free. The conclusion is that none of the existing Defence objects is large enough to accommodate the entire concentration of support units. Army sites Ermelo (82 hectares) and Stroe (196 hectares) offer possibilities to concentrate one chain of support units, which is why they have been identified as promising alternatives.

For these locations, if physical expansion is possible, there may be possibilities here to concentrate two or three support chains. That is why these two locations have also been designated as variants within the alternative that can reasonably be examined: 'Strengthening and concentrating in one existing Defence location'.

For a new location, a GIS analysis study into promising areas was performed (see factsheet in Annex 1). The results of this study were shared by the State Secretary of Defence (including the outlines of the Strategic Real Estate Plan), and in the letter from Minister de Jonge with the starting package for the provinces (12 December 2021). The results were also shared with residents. It was indicated that the provisional preferred location is in the municipality of Zeewolde, that there are two more options in Flevoland (Zeewolde and Dronten) and that a location in Gelderland is also being considered. In addition, the municipality of Zeewolde proposed a location (Oosterwold) for further examination. Finally, possible options in agricultural transition areas in central locations are also being considered in order to link potential opportunities arising from this track to the need for new barracks. By publishing this Memorandum on Scope and Level of Detail, this need is part of the National Space for

Defence Programme.

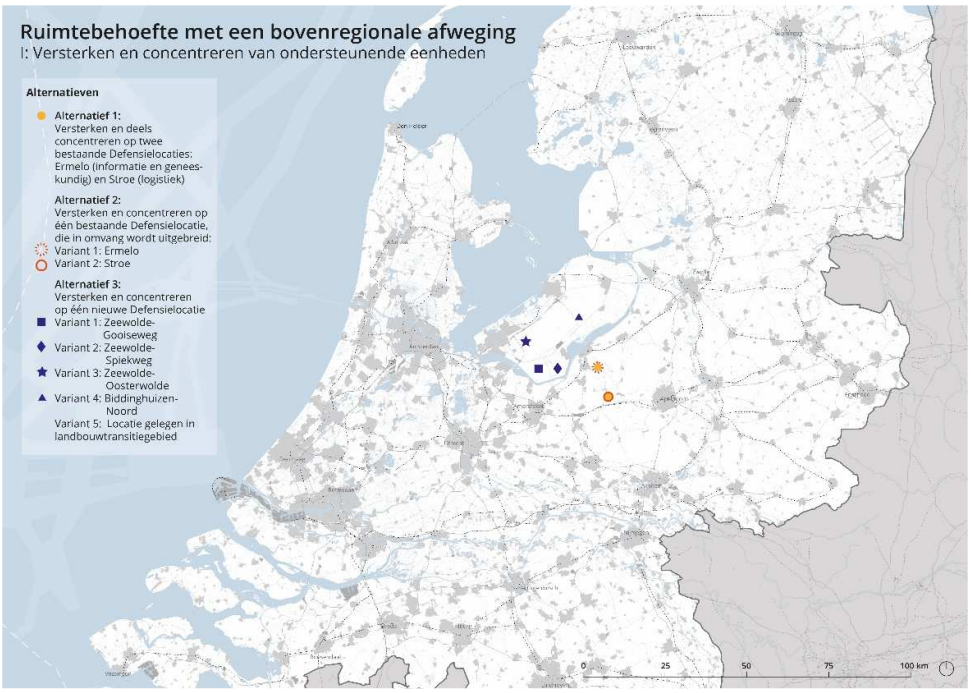


Figure 4.2: Alternatives for strengthening and concentrating support units

2 Additional location for large-scale ammunition storage Supporting information for need

As a result of the increasing importance of defending its own and allied territory and the growth of the armed forces (and those of our allies), ammunition is a hot topic. In the long term, ammunition stocks will be greatly increased on a structural basis in order to comply with statutory and constitutional tasks. This is linked to the capability to store ammunition, which must therefore also grow. The allies of the Netherlands are also greatly expanding their armed forces, including ammunition stocks. Several countries are either at risk of reaching their maximum storage capability, or want to spread out their stocks over multiple locations. The existing Dutch ammunition infrastructure is not designed for this type of international military cooperation.

There are three reasons why Defence needs more capability for large-scale ammunition storage in the future:

1. Although current ammunition stocks (including current orders) can be stored at the locations, the stocks may have to be further replenished in the future. More space is needed to secure strategic capability, including reserves.
2. The logistics concept in the Netherlands is changing. There is a need for one or more new, spacious and modern locations. It is also desirable to increase their scale because it will make it easier to set up business processes. In addition, strategic space is needed to create a buffer when existing storage locations need to be modernised (ammunition must be stored elsewhere during renovation of a location).
3. The position of the Netherlands in relation to its allies is changing. As the Netherlands is 'the hinterland' and serves as 'the transit port' across various axes, it can - perhaps temporarily - offer or be asked to offer ammunition storage capability to allies. The existing Dutch ammunition infrastructure is not designed for this type of international military cooperation.

This need is based on future growth. No specific instructions have been given at this time, but there are few opportunities for growth and the current infrastructure offers little room for manoeuvre.

Alternatives to be reasonably considered

Seven possible locations have been identified using exclusion criteria (see factsheet in Annex 1). These are depicted in the map below. For operational and business operations reasons, there is a strong preference for a single location. If a single location cannot be found, two smaller locations must be considered. A single location will thus be chosen as the ultimate preferred alternative. The locations are the same in both alternatives (but of course differ in size). Since this concerns a long-term spatial requirement, this may be an opportunity to consider agricultural transition areas. Defence spatial challenges provide opportunities to facilitate the transition of rural areas in areas facing a moderate or severe task. Concretely, by purchasing agricultural land and/or businesses, where surplus land may be made available for more extensive agricultural use suited to the water, soil and ecological conditions. The transition of the rural area also provides opportunities to consider these activities in the context of the redevelopment of the rural area. This enables Defence to contribute to the liveability and vitality of the rural area as an employer and as a user of local facilities (for example small businesses and public transport), in particular in places where agricultural businesses are being forced to stop production due to future Defence activities. In places where Defence needs to take up extra space/land, functions may be combined or compensatory nature conservation measures may be taken.

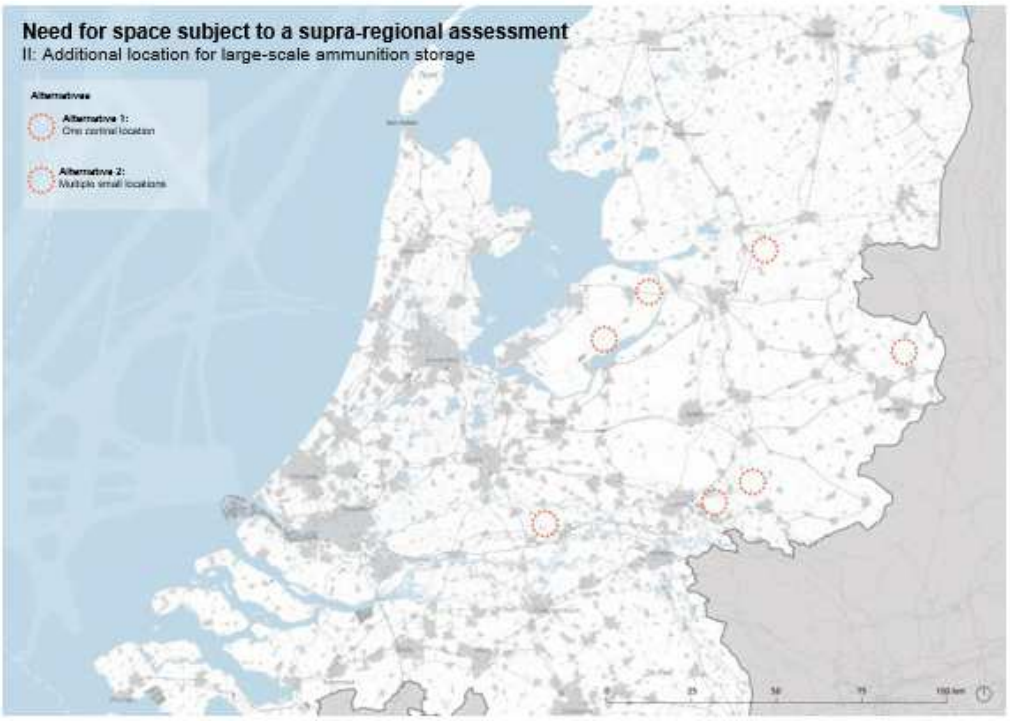


Figure 4.3 Alternatives to additional location for large-scale ammunition storage

3. New RDC (Rapid Deployment Capacity) ammunition storage
Supporting information for need

Arrangements have been made with NATO regarding RDC. For this purpose, ammunition and supplies belonging to the unit must be prepared for shipping in containers, in order to comply with the notice to move (NTM). These NTMs have become much shorter in recent years, and the amount of ammunition required for deployment has grown significantly. In order to prepare ammunition for shipping quickly and efficiently, a new large-scale ammunition storage is needed to store containers for RDC.

Laws and regulations have made storing and moving ammunition the key logistical problem. Containers measuring the standard sea container size (20 feet) are used. When loaded, these containers are placed in the regular ammunition warehouses (required by law). However, the current warehouses are not designed for this purpose, making it a very inefficient way of storing ammunition.

If the containers are stored without protective covering (bunker, warehouse, underground, etc.), a 7.5 km danger zone must be in place. Storing the containers with protective covering is therefore the preferred method. In addition, this ensures that the containers are stored at a constant temperature. To ensure efficient operations, clustering these logistics activities related to ammunition is desirable but not necessary. In addition, it is desirable to transport the ammunition as little as possible due to safety risks. This focuses the search for a new ammunition storage specifically for rapidly deployable capability (container storage) at the North-East of the Netherlands (Friesland, Groningen, Drenthe and Noordelijk Flevoland). This demarcation was chosen because of the proximity of the Eemshaven where the ammunition is shipped from the Netherlands.

Alternatives to be reasonably considered

Six possible locations have been identified using exclusion criteria (see factsheet in Annex 1). These are depicted in the map below. In principle, a single location will be

chosen as the ultimate preferred alternative, but distributing the activities across different locations can also be considered. The locations are the same in both alternatives (but of course differ in size).

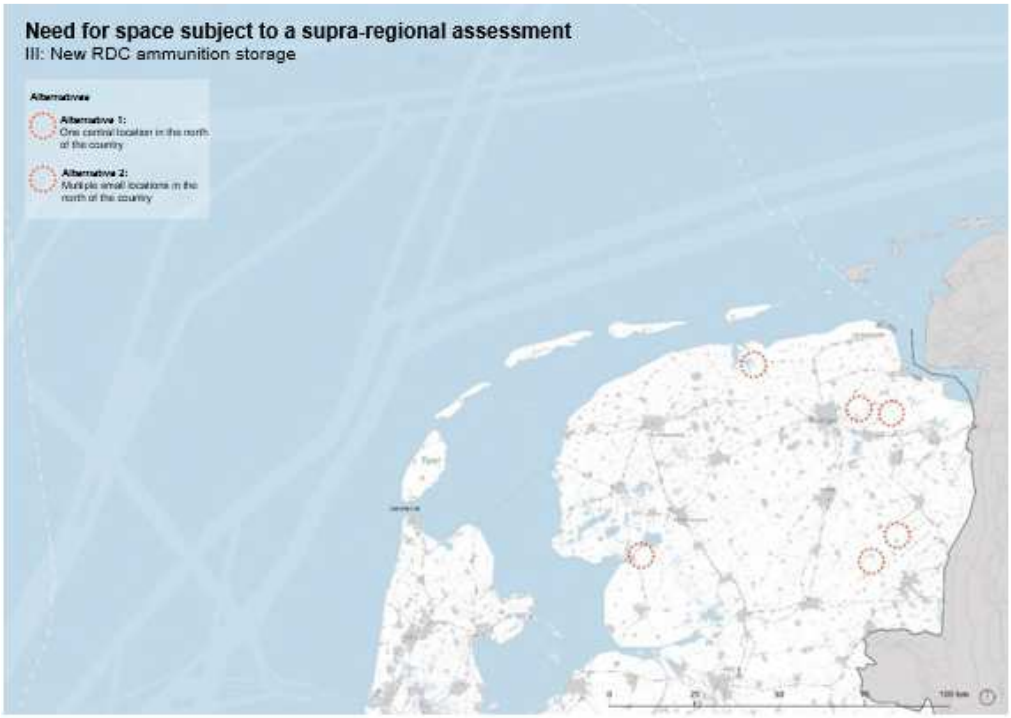


Figure 4.4: Alternatives for RDC

4 New area for exercises and training involving explosives

Supporting information for alternatives

The changing security situation shows that ever heavier explosive devices (including in Ukraine) are being used. At the moment, not all training and greater deployment of engineers can be sufficiently facilitated by the existing training area for explosives in Reek. Which is why such training is increasingly being held abroad. Pressure is also increasing abroad (especially among NATO partners in Europe). As a result, the operational readiness of the units that use the training area (see below) is under pressure.

The training area in Reek is used by RNLA engineering units from Oirschot, Wezep and Schaarsbergen. In addition, RNLA, DEODS, Commando Corps, CZSK and the Royal Netherlands Marine Corps Assault Engineers and MARSOF use these grounds for training exercises involving explosives in the Netherlands. Police units (such as the Special Security Missions Brigade (BSB) and the Special Intervention Service (DSI) also use the training area for explosives. All these units will also be the users of the new training capability. Due to the limited capacity (in numbers and size), a lot of training is done abroad (including Norway and the US). More possibilities for conducting training involving explosives in the Netherlands will have a positive impact on the readiness, growth, cost control and deployability of Defence units.

There are currently two problems with the grounds in Reek:

- The size and capacity of these grounds is limited in relation to the number of trainings and exercises required (in other words, the grounds are fully booked and there is a waiting list), while the demand is increasing. Due to the

nuisance caused, the use of the amount of explosives at these grounds is also limited.

- In practice, heavier explosives are being used for which the training area in Reek is insufficiently equipped. The grounds in Reek also offer insufficient space for all the needs of Defence units, for example horizontal impact weapons (weapon that impact the target from the side). The weapon is positioned at ground level). The current area (2 km^2) is too small to accommodate such needs.

Alternatives to be reasonably considered

The current area in Reek is approximately 2 km_2 in size. Greater safety distances around the detonation point are necessary to enable the use of more explosives. A safety distance of 1.5 km involves an area with a surface area of approximately 7 km_2. In addition, the nuisance caused by the explosions also affects the built-up environment. This must also be taken into account.

In view of the safety distances of such an area (and the impossibility of combining it with other training areas), there is no possibility of linking it to an existing training area. Alternatives to be reasonably considered include:

4. expansion of the existing training area for explosives in Reek;
5. the construction of a new, larger area in the vicinity of engineers units in the Arnhem-Apeldoorn-Zwolle region (near or at the artillery shooting range (ASK) and Wezep) or in the Marnehuizen region.

No analysis of possible specific locations within the search areas had yet been made when this NRD was drawn up. This will be done at the time of the EIA plan using a GIS analysis.

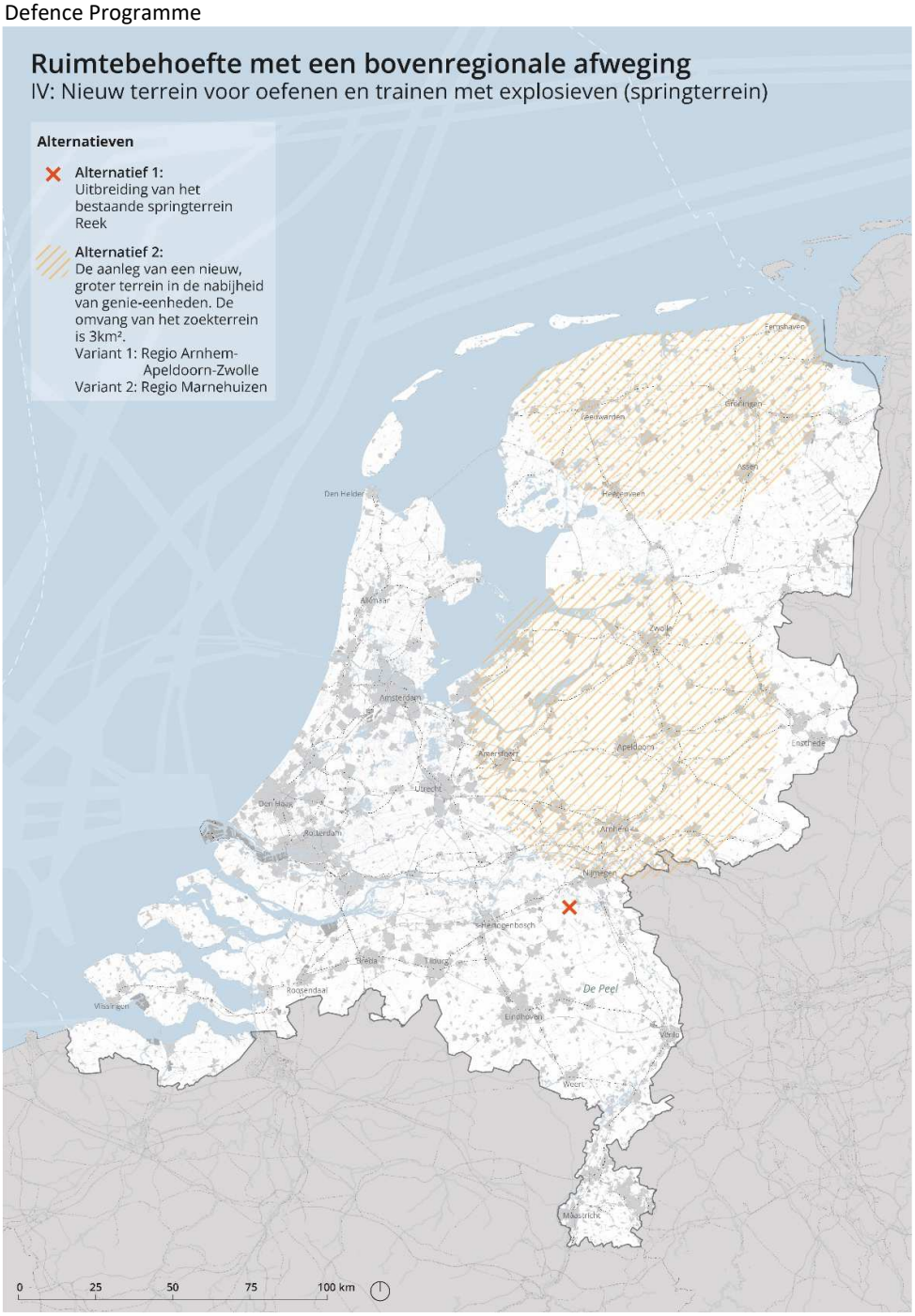


Figure 4.5 Alternatives to new explosives training area

3. Exercises conducted in urban areas (training village)

Supporting information for need

Current combat situations show that urban areas have increasingly become combat zones. As a result, NATO requires military units to be able to operate in urbanised areas when carrying out activities related to defending allied territory. Defence needs

more training areas to train in urbanised areas. The ratio between training in rural

and urban areas is expected to be 50/50; currently this is 90/10. Training in urbanised areas can now only be replicated in Marnehuizen. Structured training in Marnehuizen is not possible because it is simply "full".

The area is already tight, and demand is only expected to increase. The German training village of Schnöggersburg in the Altmark training area costs EUR 5.5 million for 12 days. The costs of this training are high and allocation of the training village is not a given. Having your own training villages ultimately limits the costs and allocation is guaranteed.

The training opportunities offered by Marnehuizen are insufficient for all the necessary training exercises in urbanised areas. For that reason, additional capacity, comparable in size, is required to perform the necessary exercises in the Netherlands. The estimate of the required capacity is included in the factsheet of this need in Annex 1.

Alternatives to be reasonably considered

There are two possible alternatives. One is to transform an already developed Defence site into a training village. The location in Budel and the nearby training area are suitable for this. Budel is currently an important reception centre of the Central Agency for the Reception of Asylum Seekers (COA), and talks on the long-term future of this location are still ongoing. The inclusion of Budel as an alternative in the EIA does not mean that a decision has been made with regard to potentially changing its current role or combining both roles, possibly in a phased manner.

A second alternative is to use an undeveloped site. In view of the proposed activities (drone use), the only conceivable alternative is to expand the exercise facilities in existing training areas. The most likely candidates are areas that offer development possibilities. These are depicted on the map (Figure 4.6).

(1) A new location for conducting exercises in urbanised areas. There are two options:
    a. Noord-Brabant, Budel, Nassau Dietz Barracks;
    b. Noord-Brabant, Budel, Weerterheide training area;

(2) One or more of the existing training areas. The selection criteria are:
    a. Possibilities for practicing with drones (no no-fly zones);
    b. Development possibilities (outside Natura 2000 areas);
    c. Training area of sufficient size (approx. 1x1 km).

Figure 4.6: Alternatives for exercises conducted in urban areas

5. Amphibious training area

Supporting information for need

There is much need for multiple possibilities for amphibious training and exercise in the Netherlands. At the current and only amphibious training and exercise location (Texel), Defence is running into morphological (coastal erosion) problems. The possibility of expansion to meet the current desired training is already being examined. With a view to the future and the anticipated increased activity, the

possibilities for amphibious training and exercise need to be expanded.

Small tactical landings (group level) are possible on Texel, but Texel is too small to adequately facilitate the basic landings. Larger training exercises with a higher degree of difficulty are not yet possible in the Netherlands, such as advancing towards a target (in a training area) after the landing.

There are two obstacles for amphibious exercises: Texel offers too little value in terms of training (qualitative) and has insufficient capacity to accommodate all training exercises (quantitative). An additional problem is that there are no possibilities in the Netherlands to exercise going deep inland (only landing is possible on Texel). In addition, certain wind directions and currents make it impossible to land at the southern tip of Texel, thereby restricting basic and other training. Having other landing points would increase the possibilities for training and practising landings and reduce the risk of basic and other training being postponed.

Alternatives to be reasonably considered

The alternatives are limited to areas situated at a reasonable navigable distance from Nieuwe Haven Naval Base. This makes sites situated on the southern coast a less obvious choice. In addition, the exercise frequency is high: the area for practising amphibious landing is used every day. Another limiting factor is the proximity of existing training areas (the locations to be approached by the navy). This gives the following alternatives:

(1) New location, including a strip inland
    a. Petten (LUAS)
    b. Marnehuizen
    c. Maasvlakte
    d. Vliehors
(2) Expansion of training sites for landing craft, including options for firing
    a. Vliehors

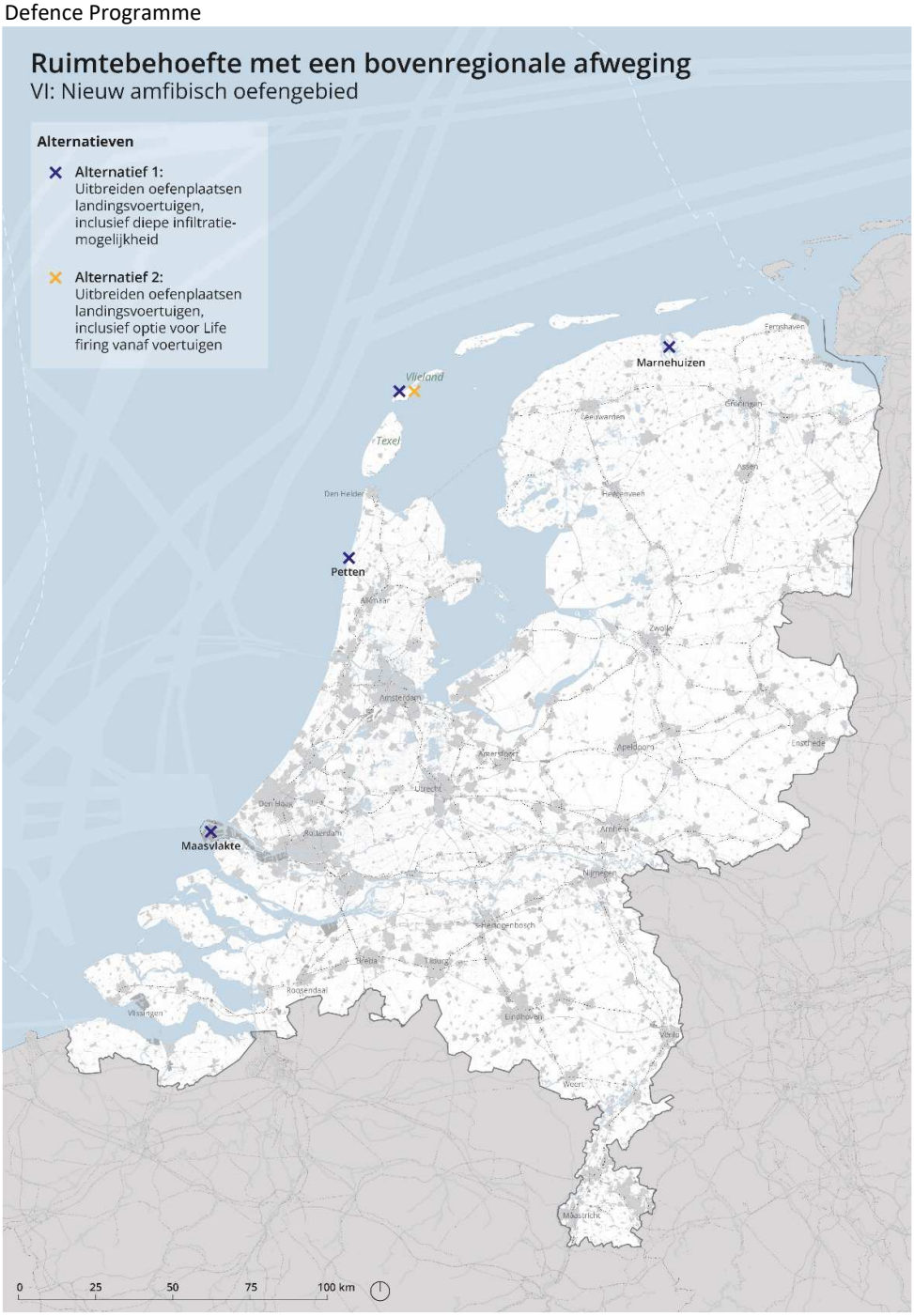


Figure 4.7: Alternatives for amphibious operations training area

6 Guaranteed port capability for Host Nation Support

Supporting information for need

Defence needs sufficient and guaranteed port capacities (mooring and transhipment capability) for handling multiple ships bearing military cargo at the same time. In this need, "guaranteed" means that Defence must be able to make permanent and ad hoc use of port capacity without having to coordinate. This is particularly necessary as the Netherlands has committed itself within NATO to Host Nation Support (HNS) activities and as a transition country.

Defence currently uses two ports for Military Mobility and HNS, the Eemshaven and Vlissingen. Vlissingen has been designated as a primary port for HNS operations. This involves units up to brigade size arriving in Europe in multiple ships before being transported by road, rail and inland waterway to their final destination. Because of the regular port activities (including the transhipment of containers and bulk goods) and the increased activities in connection with the energy transition, ad hoc free port space with the required size is very scarce. The transhipment of containers in particular, including dangerous goods, requires a location in the port of Rotterdam with guaranteed availability. In addition, a third port is necessary for redundancy and spreading the burden on the facilities and port and traffic infrastructure.

Temporary storage

As shipping military vehicles and stocks usually involves handling hazardous substances (including ammunition and fuel), it is essential that hazardous substances are permitted to be stored temporarily at the port locations used by Defence. If a port is used for HNS operations, it must allow for the large-scale transit of ammunition.

Preferably, a designated port site is purchased and arrangements are made for another site, for guaranteed use. This preference partly stems from the Security Strategy for the Kingdom of the Netherlands, which indicates that port sites are increasingly controlled by foreign powers (like China).

Alternatives to be reasonably considered

Currently, Defence does not have the guaranteed port capacity to meet this need. Of the existing large seaports, only a few meet the specific location requirements. For example, the ports of Amsterdam and IJmuiden are not promising, because they can only be accessed via a lock. This is undesirable for quick transit and the availability of an unobstructed shipping lane at all times. The port of Den Helder is not promising either, because it is too shallow for the heaviest cargo ships and the tide works against it. This means that the ports of Vlissingen, Rotterdam and Eemshaven are the remaining alternatives to be reasonably examined. The alternative locations are shown in Figure 4.8.

Figure 4.8 Alternatives to the guaranteed port capability for Host Nation Support

7 Increase in use of fighter aircraft capability

Supporting information for need

The space available for Defence to conduct its military flying activities in the Netherlands is small because in the previous decade Soesterberg Air Base, Twente Air Base and Valkenburg Naval Air Base were disposed of and De Peel Air Base was given a new designation.

However, in order to stay within the existing noise allowance, it was foreseen that continuous optimisation of business operations would be necessary. This means, among other things, intensive use of simulators, training exercises (and missions) conducted abroad, the use of other air bases and route optimisation. The limits of the existing noise allowance have been reached, and there are insufficient opportunities for additional aviation-related activities .

Meanwhile, the international security situation has seriously deteriorated Therefore, intensification of fighter aircraft activity in the Netherlands must be taken into account, both in terms of an increase in flight activities of Dutch fighter aircraft, and in terms of an increase of foreign fighter aircraft in the Netherlands. This increase takes place in the peacetime vigilance phase. This is the phase leading up to a conflict, in which Article 5 has not (yet) been triggered. In this phase, the usual laws and regulations apply. This intensification is not only taking place in the Netherlands, but also among EU and NATO partners.

The Russian threat is urgent and NATO plans, including the NATO concept for the Deterrence & Defence of the Euro Atlantic Area (DDA), have been recalibrated to increase readiness, deployability and preparedness in Europe.This leads to an increase in fighter aircraft activity in the Netherlands with regard to the following activities: :

- *Large-scale NATO training exercises*: The Netherlands is expected to contribute to large-scale NATO training exercises. The aim of these major international training exercises is to coordinate tactics while at the same time contributing to deterrence. This requires space for temporary accommodation of international aircraft, materiel and personnel at Dutch military airfields. This also requires noise allowance. Examples of major training exercises are Frisian Flag, Air Defender and NATO Flag.
- *International beddown*[3]: In 2012 and 2016, the Netherlands offered four locations for the beddown of international aircraft to facilitate possible troop build-up in Europe (Leeuwarden, Volkel, Gilze-Rijen and Eindhoven air bases). The increased threat has also increased the chance of practising or even activating this functionality and thus also on additional flight operations from Dutch territory and in Dutch airspace.
- *Agile Combat Employment* (ACE) concept: The war in Ukraine has shown that airfields are vulnerable to attack. To reduce this vulnerability, NATO has prioritised the ACE concept, a network of various types of airfields that aircraft can alternate between in order to reduce the risk of successful attacks by an opponent. This network and/or the practice of the concept requires additional available space in the Netherlands. This NATO priority resulted in, among other things, American F-35s and F-22s temporarily being stationed at Leeuwarden Air Base in October 2022.

These activities do not fit within the current (noise) allowance offered by the active air bases, as well as the potential intensification of flight activities of Dutch fighter aircraft in the peacetime vigilance phase, to increase readiness and deployability.

[3] Providing suitable facilities for airfield support to, as a host nation, provide support for the deployment of coalition troops.

Alternatives to be reasonably considered

With regard to the quantitative need in the peacetime vigilance phase, the question is which criterion is the most important. . In operational terms, this is the ACE concept. In this respect, 'the more locations, the better' applies. At the same time, the Netherlands offers little space for many locations and obtaining many noise contours is complicated, which is why we need to find a happy medium. To provide that medium, a summary and brief elaboration of the criteria follows:

(1) The number of locations must be sufficient for the beddown of 45 Dutch aircraft divided over 3 squadrons (current financing) and reserve airfield function.
(2) The number of locations must be sufficient for accommodating international beddown and offering Host Nation Support. The fact that in 2012 and 2016, the Netherlands committed to making a total of 4 locations available to NATO is a factor here. These locations must provide space for approximately 40 fighter aircraft and 10 air transport/air-to-air refuelling (lutra/AAR) aircraft (Leeuwarden, Volkel, Gilze-Rijen and Eindhoven air bases).
(3) The number of locations must be sufficient to implement the ACE concept. The more locations, the better the ACE concept can be implemented.

Quantitative substantiation of the current situation and the need.

1. The planning figure for the peacetime vigilance phase is 7500 sorties. This results from a mix of increases in international activities (ACE concept, international beddown and flag exercises) and/or the increase of the number of yearly flight hours per Dutch aircraft.
2. The Netherlands currently has two Main Operating Bases: Volkel Air Base (2.000 sorties) and Leeuwarden Air Base (2.700 sorties). In accordance with international agreements, Eindhoven Air Base and Gilze-Rijen Air Base offer international beddown for fighter aircraft. This comprises around 250 sorties at Eindhoven Air Base and around 250 sorties at Gilze-Rijen Air Base (secondary functions). In total, this means that the Netherlands has guaranteed operational space for 5200 sorties (2.700+2,000+250+250).
3. The Netherlands therefore needs operational space for an additional 2.300 sorties (7.500-5.200=2.300) in order to have enough planning space available in the peacetime vigilance phase. This includes finding a suitable air base for the reserve air base function. For Gilze-Rijen Air Base, it has already been agreed that an alternative air base will have to be found for the reserve air base function (the guaranteed use of 250 sorties at Gilze-Rijen is not affected by this).

A location must satisfy a number of conditions (see factsheet in Annex 2). Based on the criteria in combination with the conditions for each location, this leaves the following alternatives to be examined:

(1) Expansion of the current fighter aircraft locations (Leeuwarden and Volkel);
(2) Addition of one more fighter aircraft location (for temporary or permanent use): expansion at Eindhoven, Gilze-Rijen, Woensdrecht, reopening De Peel or cooperation with a civil airport;
(3) Addition of two more fighter aircraft locations (for temporary or permanent use): expansion at two locations, a choice between Eindhoven, Gilze-Rijen, Woensdrecht, reopening De Peel and/or cooperation with a civil airport.

In connection with the conditions for each location, Deelen and De Kooy are not suitable for fighter aircraft due to the specifications for infrastructure, runways and the location relative to built-up areas and/or nature.

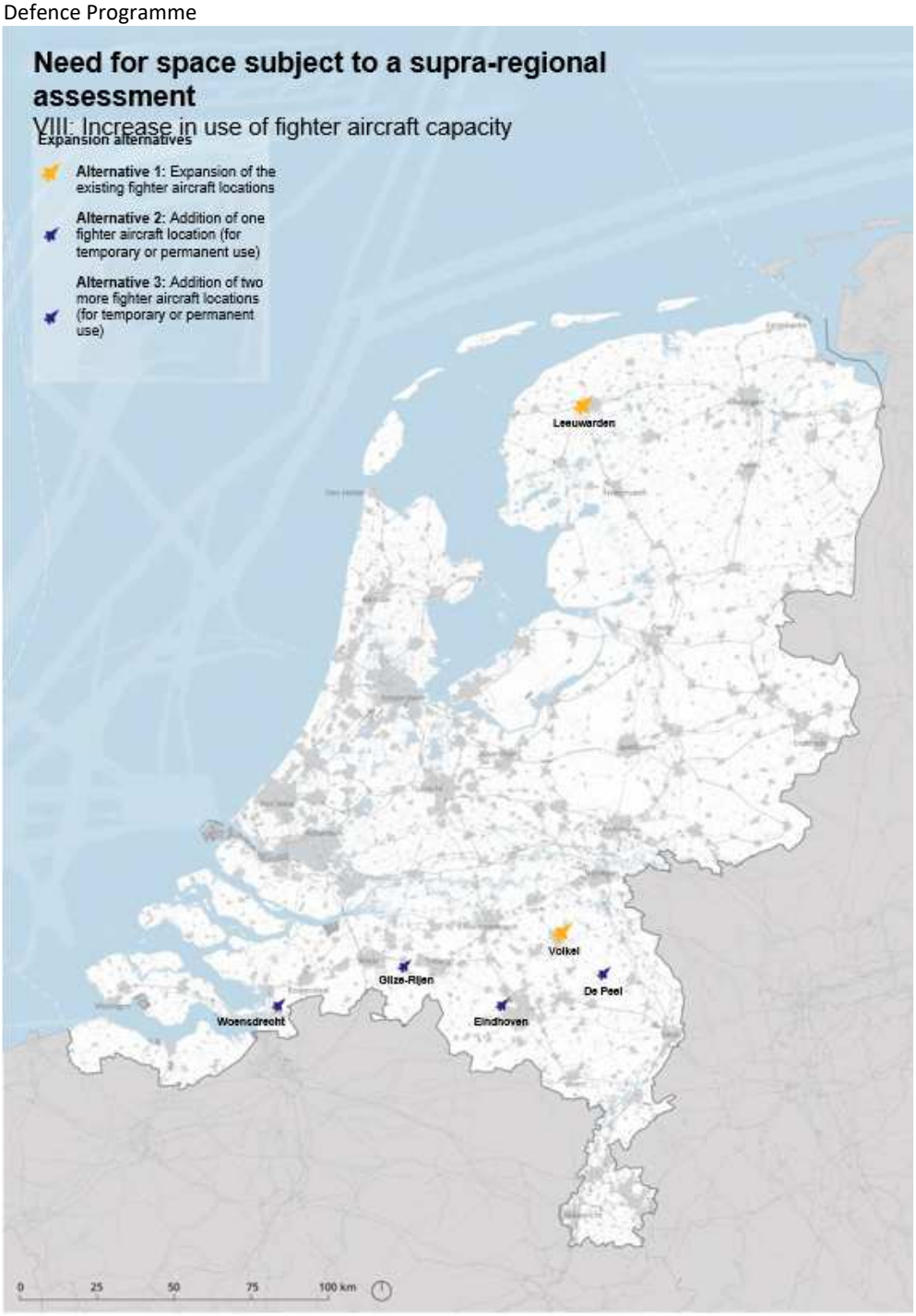


Figure 4-11 Alternatives to expanding fighter aircraft capability

8 Unmanned maritime helicopters Supporting information for need

Defence has a need for deployment of unmanned helicopters/drones. These include the Skeldar for mine countermeasures and maritime exploration: intelligence, surveillance and reconnaissance (ISR). The maritime nature of such operations makes De Kooy the only possible location.

The proposed unmanned helicopters and the Skeldars already purchased are primarily intended for operations in the maritime domain in combination with the NH-90 and ships. For this reason, the only logical location for unmanned helicopters is maritime aviation site Marinevliegkamp De Kooy (MVKK). Exercises and training with unmanned helicopters requires training areas. These corridors are not only used for training exercises, but are also necessary to protect vital infrastructure. The training areas to be used are EHD41, EHD42 and EHR8. Leaving MVKK and flying back and forth to these training areas requires space. In the current situation, the airspace would be shared with other air traffic. The airspace with the accompanying regulations does not provide sufficient possibilities to separate unmanned and manned air traffic. This is why corridors are needed between MVKK and the aforementioned areas.

Alternatives to be reasonably considered

The alternatives being examined concern corridors in a straight line from MVVK (De Kooy), in accordance with the shipping routes and corridors, and taking into account sensitive nature areas, see Figure 4.9.

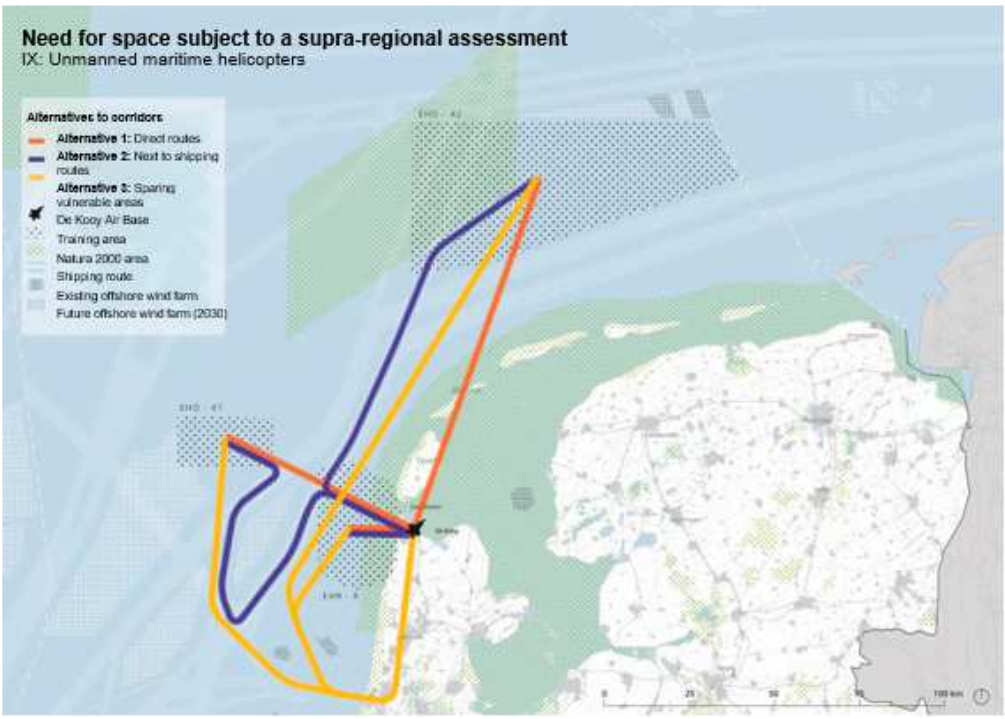


Figure 4.9 Alternatives to corridors for maritime drones

9 Stationing and corridors for cargo drones

Supporting information for need

Drones are a high Defence priority. Partly due to the war in Ukraine, it has become clear that drone use has a strong effect on combat situations. Drone training above land requires locations where the cargo drones can be stationed. Corridors to the existing training areas in the Netherlands are also needed.

The rate of drone development is rapid. Cargo drones can help Defence supply troops in the last tactical mile quicker, more safely and with less personnel.

Unmanned systems (drones) are already being used for transport and are expected to also be used for larger transport of materiel and other supplies: the cargo drones (over 150 kg). These are unmanned systems capable of transporting goods. The need for these systems is considerable because they secure supplies under dangerous combat conditions and during bad weather. These systems will be put on the market in the near future and CZSK/RNLAF will meet this need. Imports of such unmanned systems contribute to a more labour-extensive armed forces. This will have more effect with the same numbers of people, but with less risk for personnel.

Alternatives to be reasonably considered

In order to also be able to train and exercise in the land domain together with land armed forces, space is needed at existing airbases and also corridors for the cargo drones to one or more training areas. It must be possible to conduct these operations with other units in an integrated manner, as part of multi-domain operations. The integrated operations make Deelen Air Base the most logical location. This would mean adding flight movements and corridors at other locations, which is undesirable. The training areas to be reached are Arnhemse Heide, Stroese Zand, Ederheide-Ginkelseheide and ASK West. No physical interventions are anticipated (except for possible modifications to the site of the base itself). The corridors are 4,000 ft wide and around 1,500 to 4,000 ft high.

Deelen Air Base is already the proposed site for cooperation between RNLAF's helicopters and RNLA's 11AMB. Adding operations with unmanned helicopters makes sense, particularly given the future cargo drones. To facilitate this, a corridor is also needed between MVKK (Den Helder) and Deelen Air Base. Corridors are also desirable in order to connect the knowledge hubs at Twenthe Air Base and Marknesse.

The alternatives set out in the EIAR in this need relate to the search for corridors from Deelen Air Base to one or more training areas and corridors to MVVK De Kooy and the knowledge hubs located in Marknesse and at Twenthe Air Base, see Figure 4.10. There are two variants for each training area (one with the shortest route and one with a route that involves flying over sensitive areas (Natura 2000, strongly urban, quiet areas).

Figure 4.10 Alternatives to corridors for cargo drones

10 Low flying areas for helicopters

Supporting information for need

The risk of a large-scale conflict on the European continent was considered limited for years. For years this had put the focus on the second main task, with the expectation that any enemy could not have advanced weapon systems and that the benefits of the third dimension could be exploited to its full potential. The Russian invasion of Ukraine and the widespread use of anti-aircraft missiles in this conflict confirm the importance of the need for flying at low altitude. Defence must enable its flight personnel to adequately practise this way of flying.

In circumstances involving an increased threat, flying at high altitude is not an option. Helicopters must fly low to remain undetected by enemy units for as long as possible. They stay low to seek cover behind obstacles, such as rows of trees, hills or buildings. By flying low, helicopters can also stay off the opponent's radar. Weather conditions can also sometimes force helicopters to fly low. Low-level flight requires specific training and experience. low flying areas have been allocated for this training in the Netherlands, where helicopters may fly as low as is necessary to carry out the mission.

Defence expects a structural increase in the number of helicopter movements in low flying areas in the Netherlands. Reasons for this include the changing safety situation and the corresponding changing task of helicopters and the other Defence units actively involved, both during both the mission and training. Part of this is an increase in low-level flight training, because low-level flight is necessary during missions involving a higher spectrum of force.

The low flying areas need to be more diverse to provide for variety during training, thereby improving the quality of the training. Anticipating a wide range of variables and unknown situations are important elements that contribute to effective training for helicopter crews. This will ensure that the crews are always exposed to new situations and that they do not become complacent because they already know the area. The limited number of low flying areas means that the crew already knows all the routes, villages, forest complexes, etc. by heart. This makes situational awareness too high and not representative for deployment. During deployment, troops must manoeuvre into the unknown in every sense of the word. This must therefore also be addressed that way during preparation.

The situation in these areas is deteriorating because there is no planning regime serving the low-level flight interest. The lack of this regime has made the low-level flight zone in the Wieringermeer unusable for RNLAF. It is therefore important that the status of

low flying areas is legally safeguarded with regard to whether obstacles are to be placed in these areas.

In most cases, the low flying areas in the Netherlands are not training areas and are located across the Netherlands, sometimes around large cities (for example GLV X located just south of Rotterdam, but also GLV IX located just north of 's-Hertogenbosch), making large parts of these low flying areas unsuitable for their purpose – low-level flight. The low flying areas have villages, farms, horse meadows, nature reserves and duck decoys – obstacles that prohibit low-level flight or at least must be avoided as much as possible. Helicopter pilots also take into account the distraction they can cause when flying low along busy roads and avoid them at lower altitudes. All this limits the quality of the low flying areas. The available space within the areas is also becoming increasingly limited.

It is desirable to link practising low-level flight to exercising in urbanised areas (need 5) and the provision of a new amphibious training area (need 6). This will ensure efficient use of the space made available for multiple purposes.
Lastly, an expansion of the number of areas allows flight movements to spread out. This could alleviate the burden on the current low flying areas, including the Meuse and Waal areas.

Alternatives to be reasonably considered
Broadly speaking, there are two alternatives:

- the current areas subject to the introduction of a strict legal planning regime
- designate additional areas subject to the introduction of a light planning regime

The possible alternative locations for low flying with helicopters are shown in Figure 4-11.

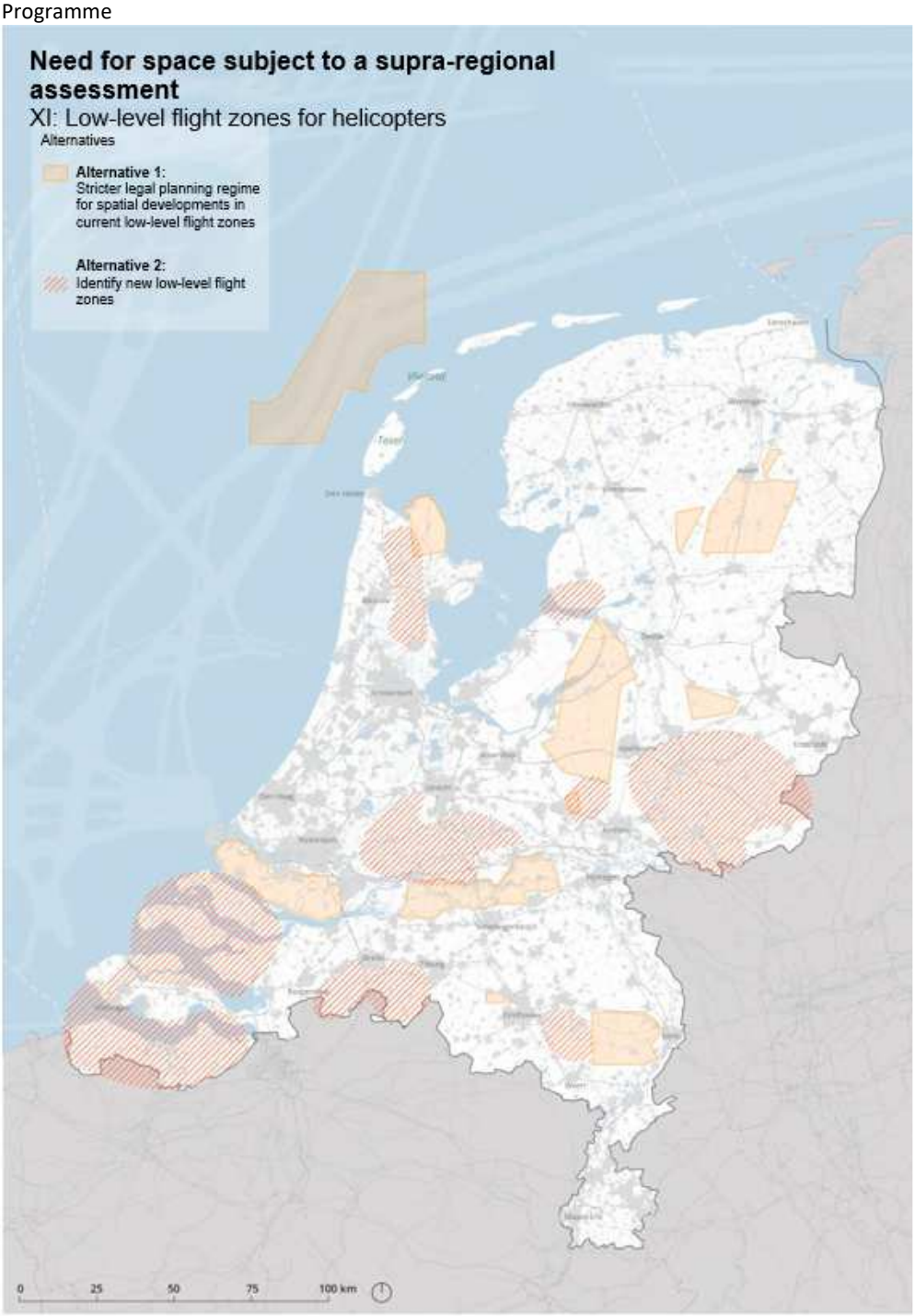


Figure 4.11 Alternatives for new low flying areas for helicopters.

11. Helicopter landing sites

Supporting information for need

The transport helicopters are used to transport personnel and materiel. This is often done under extreme conditions, such as under enemy threat, hazardous terrain or adverse weather conditions. This requires an intensive education, training and exercise programme. Not only for the helicopter crews, but also for and with ground units with which they work closely. Tactical landing and take-off under simulated combat conditions is the core activity in this programme.

The need for a good education, training and exercise programme along with space for tactical landing and take-off has increased in recent times. This has to do with the guidelines in the Defence Vision and Action Memorandum to strengthen operational readiness, shift the focus from Main Task 2 to 1, the establishment of Special Operations Forces (SOF) Air and the new amphibious task involving the NH-90. In addition to space for the RNLAF's own tactical activities, the RNLA, CZSK and Royal Netherlands Marechaussee (RNLM) also need extra space for their tactical helicopter operations.

Landing and taking-off is restricted to certain areas. For military helicopters, a legal framework for the use of helicopter landing sites (HLSs) at barracks and military training areas is in force. This is a collection of ministerial airport regulations (Dutch: LHR) to place any nuisance to the surrounding area in a framework. With this collection of LHR, 15 locations in the Netherlands have the status of HLS. These are ASK Oldebroek, Vliehors, Assen, Rijen, Waalsdorpervlakte, Beekhuizerzand, Eder Heide, Ginkelse Heide, Stroese Zand, Oirschot, Arnhemse Heide, Marnewaard, Garderense Veld, Vlasakkers, Leusderheide and Ermelose Heide. Each location has a few coordinates with a 50-metre radius, a maximum number of permitted aircraft movements (Dutch: VTB) and fixed approach and take-off routes.

There are several reasons for the need for more possibilities for helicopter landing sites:

- In addition to transporting goods and persons, helicopter units are tasked with carrying out air assaults and raids together with ground troops. These are types of mission in which various units of varying size (platoon, company, battalion) are dropped in the field, supported during combat and then extracted again. Such missions have to meet various requirements, such as precision, and swift and covert action. Units must also be able to deal with various weather conditions, enemy situations, types of terrain (including brownout/dust cloud conditions) and various internal/external loads. This was already the case for the support of 11 Airmobile Brigade, but is being expanded with SOF Air and amphibious operations. Higher requirements are also set as units are deployed in the higher spectrum of force with regard to Main Task 1. Due to this changed position of helicopters in combat, the number of VTB allocated is insufficient. Specifically for brownout training, only Oirschot and Leusderheide have adequate stretches of sand. The total number of VTB allocated for these locations is insufficient to be trained for landing and taking off in brownout conditions.
- Anticipating a wide range of variables and unknown situations are important elements that contribute to effective training for helicopter crews and ground units. It is therefore important that different types of HLS are available to achieve the desired variety. This will ensure that the trained units are always exposed to new situations and that they do not become complacent because they already know the location. Tactical landings at only a few locations condition crews and ground units, thereby limiting the added value of the training. Military action means adequately responding to unknown situations, making a variety of activities related to readiness a necessity.
- Freedom of choice is essential, both in the interests of the trained units and in the interests of the environment. Freedom of choice is needed to include such variables as the ground tactical plan, weather, enemy and terrain in the tactical planning processes. Freedom of choice is also needed for flight safety reasons. This is because landing locations are often temporarily unsuitable due to

conditions such as wind, soggy soil caused by abundant rainfall, and vegetation. Freedom of choice and variation applies not only to the helicopter crews, but also to the ground units with which they work. For example, freedom of choice is required in landing locations with varying formations (groups of helicopters) and approach and take-off routes. The need is to be able to use the entire military training area to carry out helicopter flight movements. In principle, every delimitation means a restriction of flexibility and a loss of exercise or training value. This also offers opportunities to link up with the need to exercise in urbanised areas (5) and to create a new amphibious training area (6). Combining these functions makes it possible to exercise landing on new terrain and to work together with ground units.

The future-proof deployment of helicopters requires flexible use of terrain (no fixed coordinates or fixed approach and departure routes) and an increase to up to 24,000 flight movements.

Alternatives to be reasonably considered

In the search for new locations, on the one hand, a variation in the type of area – stretches of sand, urbanised area and coastal area – is considered in order to be able to exercise in different circumstances. On the other hand, helicopter landing sites must be located within reasonable distance from the helicopters, the low flying areas and the ground units involved in the training.

This provides the following alternatives:

- Alternative 1 – Intensifying existing helicopter landing sites;
- Alternative 2 – Intensification, including expansion of helicopter landing sites on land, from Gilze-Rijen, Deelen and De Kooy, resulting in Schaarsbergen, Assen, Roosendaal and Nieuw Milligen being within a 60 km-radius.

The possible alternative locations for low-level flight with helicopters are shown in Figure 4.12. Two of the other needs also include the need to provide helicopter landing sites (practising in urbanised areas and new amphibious training area). The need applicable to those areas is made clear within those specific needs (in addition to this need).

Figure 4.12: alternatives to expanding helicopter landing sites in training areas

12 Short/narrow unpaved runway for tactical air transport

Supporting information for need

The Netherlands does not have any dirt strips (unpaved, narrow and short runways). Aircraft crews therefore have to exercise abroad for this type of training. However, this does not offer sufficient opportunities for the right level of training (this will be further elaborated below). Recent history shows us that the Notice to Move (NTM) for tactical air transport is regularly given at very short notice (24h). This makes it necessary to maintain a high level of training.

A large transport aircraft is not always the best option to fly in personnel, materiel and supplies for missions or humanitarian aid in situations of enemy threat or the conditions at the landing site. That is why Defence has tactical transport aircraft. At the moment this is the C-130, to be replaced by the C-390 in 2027. These aircraft must be able to land on dirt strips.

The quantitative need is a minimum of 240 flight movements per year. This requires space in the noise contour of an air base for an average of 24 flight movements/12 landings a month over a period of 10 months. This number is based on the total requirement of 625 flight movements. The majority of the training need is carried out abroad.

Landing and taking off on dirt strips obviously requires training of aircraft crew and operational units, such as the 11 Airmobile Brigade (11LMB) and the *Korps Commandotroepen* (Commando Corps). These units should be deployable by helicopter and transport aircraft. 11LMB also has pathfinders and rapid runway repair capability. This capability provides a suitable landing location in advance, marks it for landing and take-off and can quickly repair the runway.

Pilots are already training on simulators, thus saving 1,800 hours of tactical air transport annually . However, simulators do not perfectly mimic reality. This includes complex landings on dirt strips. The simulators are also not suitable for training together with the RNLA. For these reasons, there is also a need for additional training with the transport aircraft.

Alternatives to be reasonably considered

There is currently no Defence location that has a dirt strip. A dirt strip cannot simply be built at other airfields, because of the risk of loose rocks damaging other aircraft. This applies to all airfields with operations other than by helicopter. An option is to build a dirt strip at some distance from the paved road. However, this has major infrastructural consequences. It also requires changing the noise contour map.

Locating 11LMB in Schaarsbergen makes MLT Deelen a logical, important and highly desired (joint) exercise location with tactical air transport. This is because of 11LMB's task and the synergy with the helicopter tasks, and the possibilities for building the dirt strip at a central location at the airport. Alternative locations for these needs are conceivable, such as Gilze-Rijen Air Base and De Peel Air Base (depending on the air traffic permitted at those bases). A combination with an existing training area or new amphibious training area is also possible.

The alternatives to be examined are:

- MLT Deelen
- Gilze-Rijen
- De Peel
- Combination with existing training areas

Figure 4.13: Alternatives to short/narrow unpaved runway for tactical air transport

4.3 Other needs that require space

Most of the activities in the NPRD consist of needs for which no supra-regional assessment is required. Examples are activities that already exist but need to be expanded or activities that are already taking place at specific locations. For these activities, the EIA plan does consider the impact on the physical

living environment, but does not examine alternatives (because only one existing location/area will qualify). Depending on the size and impact of the activity in question, this is either a concise or extensive analysis.

The list of these needs is shown in Table 4-2. This list corresponds to the numbers from Figure 4.14.

Table 4-2 List of other needs

Location No.	Need No.	Need	Category	Command
1	1	Expansion of training area for larger/more versatile exercises on, in and above water EHD-42.	3	CZSK
2	2	Expansion of training area for larger/more versatile exercises including drones with corridors on water to, in and above water EHD-41.	3	CZSK
3	3	Shooting practice with Apache and MQ-9 at Vliehors Range, municipality of	2	RNLAF
	4	Review/adjustments of unsafe zone; now partly based at former cavalry shooting range Vliehors (Cornfield Range), municipality of Vlieland.	3	RNLAF
4	5	Expansion of environmental space for activities at Leeuwarden Air Base, municipality of Leeuwarden.	3	RNLAF
	6	Restricted area around Leeuwarden Air Base (specifically the outer horizontal surface)- Legal securing.	3	RNLAF
5	7	Expansion of Marnewaard Shooting Range for dynamic shooting using vehicles, municipality of Het Hogeland	3	RNLA
6	8	Expand and prepare EHR 8 for training using unmanned vessels on and in water.	1	CZSK
7	9	Alternative Fuels Learning Centre, Den Helder, municipality of Den Helder.	2	CZSK
8	10	Restricted area around MVK De Kooy (specifically the outer horizontal surface) and corridors - Legal securing.	3	RNLAF
9	11	Breezanddijk growth tests IJsselmeer, Barrier Dam (*Afsluitdijk*), municipality of Súdwest Fryslân.	3	COM-MIT
10	12	Expansion of the Heerenveen Barracks, municipality of Heerenveen.	3	DOSCO
11	13	Expansion of the Zuidwest Assen training area, municipality of Assen.	3	RNLA
12	14	Petten growth tests North Sea, municipality of Schagen.	3	COM-MIT
13	15	Relocation (in consultation with the region) of the private siding for vehicles 43. Mechanised Brigade Search Area 'Groot Havelte', municipalities of Westerveld/Steenwijkerland.	3	DOSCO
14	16	Expansion of shooting facilities (Royal Netherlands Marechaussee) at Schiphol Airport, municipality of Haarlemmermeer.	2	RNLM
15	17	Expansion of the 't Harde private siding, municipality of Elburg.	3	DOSCO
16	18	Expansion of Artillery Shooting Range (*Artillerie Schietkamp*, or ASK) (broad strip, Wezeperberg and Z-side), municipality of Elburg.	3	RNLA
	19	Expand ASK with 120 mm mortar shooting, municipality of Elburg.	3	RNLA
17	20	Expand planned scaling up of Royal Netherlands Marechaussee Randstad The Hague, Maaldrift, municipality of Wassenaar.	2	RNLM
18	21	Expansion of the Vlasakkers private siding, municipality of Amersfoort.	3	DOSCO
19	22	Housing including facilities for the Royal Netherlands Marechaussee Military Police, municipality of Apeldoorn.	2	RNLM
20	23	Expand live fire by helicopter facilities at shooting range (ISK) for level 3 and 4 RNLA exercises, municipality of Ede.	3	RNLA,
	24	Expansion of the environment and noise allowance by intensifying ISK and growth of Armed Forces, municipality of Ede.	3	RNLA
21	25	Expansion of the site for the purpose of meeting NATO standards, Defence Pipeline Organisation depot and truck loading station in Markelo, municipality of Hof van Twente.	3	COM-MIT
22	26	Expansion of the site for the purpose of meeting NATO standards, Defence Pipeline Organisation depot in Klaphek,, municipality of Lopik	3	COM-MIT

23	27	Additional environmental space for helicopter activities at Deelen Air Base, municipality of Arnhem.	3	RNLAF
	28	Restricted area around MTL Deelen (specifically the outer horizontal surface) - Legal securing.	3	RNLAF
24	29	Expansion of the site for the purpose of meeting NATO standards, Defence Pipeline Organisation depot in Poortugaal, municipality of Albrandswaard	3	COM-MIT
25	30	Expansion of environmental space for activities at Volkel Air Base, municipality of Maashorst.	3	RNLAF
	31	Restricted area around Volkel Air Base (specifically the outer horizontal surface) - Legal securing.	3	RNLAF
26	32	Shooting range for Koninklijke Militaire School Luchtmacht (KMSL) Woensdrecht Air Base, municipality of Woensdrecht.	2	RNLAF
	33	Expansion of environmental space for activities at Woensdrecht Air Base, municipality of Woensdrecht.	3	RNLAF
	34	Restricted area around Woensdrecht Air Base (specifically the outer horizontal surface) and corridors - Legal securing.	3	RNLAF
27	35	Expansion of environmental space for activities at Gilze-Rijen Air Base, municipality of Gilze en Rijen.	3	RNLAF
	36	Restricted area around Gilze-Rijen Air Base (specifically the outer horizontal surface) - Legal securing.	3	RNLAF
28	37	Physical and noise allowance at training area Oirschotse Heide: physically expand (200 ha) also in terms of noise allowance, municipality of Oirschot.	3	RNLA
	38	Expansion of environmental space for activities at RVS barracks in Oirschot, municipality of Oirschot.	3	RNLA
29	39	expansion of the Acht private siding for vehicles 13. Light Brigade, municipality of Oirschot.	3	DOSCO
30	40	IBT centre Eindhoven region for the Royal Netherlands Marechaussee and Defence Monitoring and Security Organisation on existing Defence Site, municipality of Eindhoven.	2	RNLM
	41	Change of layout of Eindhoven Air Base, relocating Hot cargo platform.	3	RNLAF
	42	Restricted area around the airbase (specifically the outer horizontal surface) - Legal securing.	3	RNLAF
31	43	Commissioning of Budel Barracks and expansion of Weerterheide, municipality of Cranendonck/Weert.	3	RNLA
XX	44	Training areas that allow excavation (excavation is not permitted everywhere).	2	RNLA

Figure 4.14 Overview of Defence activities that require space not subject to supra-regional assessment

5. Themes and method of assessment in the EIAR

5.1 Themes considered in the EIAR

Taking a broad look at the impact

The EIAR for the NPRD outlines the impact for a wide range of topics. This pertains to all relevant themes of the physical living environment (from noise to soil and from cultural history to health), but also to broader impact (prosperity in a broad sense), such as impact on housing, recreation and well-being where relevant. The primary focus in the EIAR is on the themes that have a spatial component. For example, the EIAR does discuss the impact on the local economy of alternatives, but broadly based on expert judgement.

Themes considered in the EIAR

The current situation, the reference situation and the impact of the various alternatives are examined for all relevant themes of the physical living environment. These themes are divided into a few main themes (further shown in Table):

- Healthy and safe living environment
- Soil and water
- Nature, landscape and history
- Climate adaptation
- Use of space
- Mobility
- Energy and circularity
- Social and vital
- Defence-specific aspects

The EIA plan describes the score for each aspect. In a general sense, a new development often has a negative impact (if no measures are taken) on existing values, such as cultural history and nature. There are also various aspects where this is reciprocal. A new development may cause more noise nuisance, but may also experience noise nuisance. There are also aspects where a need can have a positive score, for example on employment or energy generation opportunities.

Table 5-1 Assessment framework

Main theme	Theme	Aspects considered
Healthy and Safe Living Environment	Noise	Impact of the development on aviation noise, road traffic noise, railway noise, industrial noise and vice versa
	Air quality	Impact of the development on concentrations of nitrogen dioxide, particulate matter and ultra fine particulate matter
	External safety	Impact of location-bound risk, group risk of the development and vice versa, for example on account of the storage or transport of hazardous substances
	Light	Impact of light nuisance caused by the development
	Vibrations	Impact of vibrations on the development and vice versa
	Heat stress	Impact of urban heat islands on development and vice versa
	Health development	Impact on a green and pleasant living environment during a
Soil and water	Soil	Impact on the soil type, soil contamination due to the development, impact of subsidence and uncovered soil and sponge effect
	Surface water	Impact on the water system, the quality and quantity of present surface water

Nature, landscape and cultural heritage	Groundwater	Impact on groundwater (quantitative, qualitative) due to the development and impact on drinking water.
	Water safety	Impact on water safety
	Nature	Nature Network Netherlands, Natura 2000 (including nitrogen and
	Protected cultural heritage values	Impact on protected cultural heritage values (Unesco, national monuments and provincial/municipal protected values)
	Landscape	Impact on landscape values
	Geomorphology	Impact on geographical values
	Archaeology	Impact on archaeological expectation value, protected areas and
Climate adaptation	Floods	Impact of flood risk on the development
	Drought	Impact of drought on the development
	Rainproof	Impact of a heavy shower (120 mm in 2 hours) on the development
Use of space	Recreation	Impact of the development on recreational areas
	Agriculture	Impact of the development on valuable agricultural land and areas
	Land ownership	The extent of land owned by public authorities and/or the number of potentially affected
	Energy networks	Impact on underground and aboveground energy networks (and storage and generation) in the developments and vice versa (to the proposed space claims do or do not coincide with the current and future claims from the energy transition)
Mobility	Accessibility	Impact of travel time, congestion, proximity of public transport on and vice versa, impact on flows of goods
	Road safety	Impact of the development on accidents and black spots
Energy and Circularity	Grid capacity	Impact of grid congestion on the developments
	Circularity	Opportunities for raw material reuse in the development
	Energy	Opportunities for sustainable energy generation in the development
Social and economic	Economy	Impact and opportunities on employment, knowledge & innovation in the development
	Social cohesion	Impact on the social cohesion present, cohesion in the development
Defence-specific	Suitability for military use	Suitability of the alternative for the specific activity that the armed forces unit wants to carry out[4], but also costs and current labour market
Interfaces	Interference with national interests	Opportunities and threats from current Government programmes

Customisation in assessment framework for each need for space

The needs for space vary greatly in character. This means that not every theme from the table is relevant for every need for space. For example, the impact on social aspects and the economy is not relevant to describing the impact of a new training area, while this does have an impact on units for a new barracks. The

[4] This is customised for each need for space. For example, the location of a new barracks depends on whether it is suitable for flying drones. At the time this NRD was written, this had not yet been fully formulated for each need.

assessment of the impact of low flying areas also requires criteria to be considered other than a new location for large-scale ammunition storage.

The annex to this NRD therefore indicates for each need for space (and the accompanying alternatives) which themes are and are not addressed.

Use of criteria to arrive at alternatives: a 'selection framework'

The assessment criteria for assessing the impact of the alternatives are set out in Table 5-1. However, the creation of alternatives (locations) for the various needs for space requires a *selection framework*.

This selection framework can be used to determine which areas are suitable for Defence's need for space. For example, a new large-scale ammunition storage cannot be located at a random site in the Netherlands. Criteria such as distance to residential areas (vulnerable objects) and a certain size are important in this respect. In the search for locations for a new barracks for support units, other selection criteria apply in part, including the distance to protected areas (such as Natura 2000 and cultural-historical values) and travel distance.

The selection framework contains the criteria as to why a particular area is or is not suitable for a particular demand for space. Based on the areas remaining after these analyses, alternatives to be reasonably considered can be determined for various needs for space. These alternatives are then examined using the assessment framework (Table 5-1).

Table 5-2 shows the selection framework with various criteria. It is determined for each need for space which criteria are or are not relevant and are therefore applicable. This is shown for each need for space in Annex 1. The overview in the table thus provides an indicative (non-exhaustive) list of possible selection criteria.

Table 5-2 Selection framework for determining spatial alternatives

Selection criteria	Method of fleshing out criteria
Accessibility/location	• Distance to large cities (as an indicator for the labour market) • Distance to relevant Defence locations
Distance to buildings	• Distance to existing towns and villages
Nitrogen and nature	• Possible or not possible in Natura 2000 areas • Distance to Natura 2000 in connection with nitrogen-sensitive habitats • May or may not be fully or partly located in Nature Network Netherlands
Vital infrastructure	• Outside national and provincial roads, including reserved zones • Outside major waterways and dikes • Outside railway tracks
Sustainable energy generation	• Distance to existing and future energy generation installations (e.g. wind turbines), outside specific RES search areas for wind energy • Distance to existing and future energy system/energy network (storage, infra, storage, conversion) • Distance to existing and planned energy infrastructure
Cultural heritage	• Outside UNESCO World Heritage Site • Outside contours of national monuments (including archaeological monuments) • Outside country estates • Outside urban and rural conservation areas
Soil and water-guided	• Not in very deep polders, flood plains or areas with an excessive groundwater level • Suitable type of soil for the Defence activity

5.2 Means of assessment

5.2.1 *Study method*

Qualitative analyses based on existing data are used to examine the current situation, reference situation, alternatives and preferred alternative. The existing data pertain to, among other things, existing contours around certain Defence activities, publicly accessible living environment data (living environment atlas, Statistics Netherlands, etc.) and public policy documents. Lastly, data from the various planning agencies and information on the physical living environment from provinces, water boards and municipalities are used to make the assessments.

For the current situation, 95% of this information is present within these sources. For the future situations (reference situation, alternatives and preferred alternative), valid statements about the impact can often be made on the basis of these data. Additional quantitative analyses are then added for specific situations. These may be GIS analyses to determine how many homes are within a certain future contour, as well as calculations of noise or safety contours. The latter does not yet involve extensive mathematical exercises, but rather a worst-case determination that can generate a good indication of impact.

5.2.2 *Explanation of the current situation and reference situation in the environmental photograph*

The current situation and reference situation are shown for all locations and specific activities in an 'environmental photograph', see the summary in Chapter three. For all relevant themes of the physical living environment, this environmental photograph provides insight into the existing contours, values and the accompanying impact on the environment and vice versa.

An assessment is given for each location of both the current situation and the reference situation for the six most relevant themes (i.e. the most important themes in and around Defence locations) of the physical living environment. It is indicated here whether this theme is a major point of interest for the current activities, see Figure 5.1. For the other themes, a descriptive analysis is made in the environmental photograph.

Figure 5.1 Explanation of the current situation and reference situation for the six normative themes of the physical living environment

In the EIA plan, the living environment photograph is supplemented by an explanation of the current situation and reference situation for locations where one of the alternatives may come with a demand for space.

5.2.3 *What is the reference situation?*

EIA studies must use a reference situation to which the proposed activities (the needs from the NPRD) can be compared. Because the needs can be achieved in a future year varying from short-term to longer-term (2030/2040), the reference situation is also always a future year.

For the NPRD, the reference situation is based on 2040 and concerns the situation in which all major trends such as climate change and established policy with a specific implementation practice (housing development, energy transition) are included, but the activities of Defence have not yet been adjusted to what the future will hold. This makes the (spatial) pressure from the "outside world" on Defence clearly visible.

A specific implementation practice means that there must be a clear view of the (spatial) interventions from the various domains. Many domains are still in flux, such as nature restoration, the transition of rural areas, climate challenges, grid congestion, etc. Although policy and solutions are set out in outline, these are not yet specific enough to be included in the reference situation. Matters such as RES areas, housing plans and reserved spaces are, however, part of the reference situation. This also applies to draft programmes, such as the Energy Main Structure Programme

(*Programma Energiehoofdstructuur*, PEH). The criterion, however, is that it is clear where there is a "space claim".

Specifically for the impact of climate change, the impact for 2050 was considered, because the data here (from the climate impact atlas) is based on 2050. Where relevant, a forward view to 2100 is given in terms of climate scenarios.

5.2.4 *Assessment of alternatives for each need for space*

The various alternatives for each need for space are assessed at two levels:

- assessment of the impact
- goal achievement assessment (impact on ambitions)

Assessment of the impact

The assessment of the impact of the alternatives is performed using the assessment framework from Table 5-1. The impact assessment takes place on a seven-point scale, see table, and in relation to the on-site reference situation.

Figure 5.2 Assessment scale

Assessment	Explanation
- -	Strong negative effect compared to the reference situation
-	Negative effect compared to the reference situation
0/-	Slight negative effect compared to the reference situation
0	Neutral effect compared to the reference situation
0/+	Slight positive effect compared to the reference situation
+	Positive effect compared to the reference situation
++	Strong positive effect compared to the reference situation

Goal achievement assessment

In addition to the impact on the physical living environment of and for the various needs for space, it is important to know to what extent a particular alternative contributes to achieving Defence's ambitions/goals for the specific demand for space. The NPRD identifies various goals. These goals are identified and explained in more detail in the EIA plan. These ambitions/goals are also assessed against the needs based on achievement of the goal by means of a supra-regional assessment.

5.2.5 *Integral assessment of Preferred Alternative*

The impact on the physical living environment is outlined in the EIAR for all needs from the NPRD. To this end, the EIAR examines alternatives specifically for the needs subject to a supra-regional assessment. Partly on this basis, in addition to other impact such as costs and support, a preferred alternative can be determined in the NPRD.

In an EIAR, it is mandatory to also look at cumulative impact. The impact of the provisional preferred alternative (which therefore consists of all needs) are therefore assessed in conjunction – i.e. in full. For example, on the total impact on Natura 2000 (instead of all needs separately), see the following paragraph.

The preferred alternative is assessed using the same methods and assessment framework (see Table 5-1 and Figures 5-2 and 5-3). This assessment is qualitative.

5.2.6 *Dealing with impact caused by and inflicted on other countries*

As the Netherlands is not isolated in terms of challenges and the impact of global trends, it is likely that it will have an impact of and on neighbouring countries in particular (Belgium and Germany). The EIAR will concisely consider the impact of Defence's needs on foreign countries, but (as part of the description of the current state of the environment) will also concisely consider how developments abroad affect Defence's activities in the Netherlands.

5.3 Approach to appropriate assessment

The appropriate assessment is part of the EIAR because potential negative impact on Natura 2000 areas cannot be excluded. Research into the alternatives already considers the impact on Natura 2000 areas. The appropriate assessment is then performed for the Preferred Alternative in full.

At this stage of planning, it can never be ruled out that possible negative impact may occur on the conservation objectives of Natura 2000. The Appropriate Assessment provides insight into the impact and possible measures to limit or completely prevent impact. In the subsequent planning of the various demands for space, this will have to be detailed in order to determine the concrete impact and to weigh and deploy measures.

A number of global nitrogen deposition calculations are also part of the Appropriate Assessment. These calculations are designed to determine the extent of the effect. To be clear, these calculations are no accurate to the last decimal point, they mainly serve to provide insight into the scope of the challenge of mitigating impact.

Annex 1: Factsheet for each need subject to supra-regional assessment

FUNCTIONAL (OPERATIONAL) NEED: **Strengthening and concentrating support units**	
Explanation of the functional (operational) need	The Army has insufficient capabilities to adequately support its combat units. NATO has been pointing out these major shortfalls for years: "NATO is (...) critical of continuing qualitative and quantitative shortfalls, especially in relation to strength and operational combat support (CS) and combat service support (CSS)) in the land domain"[5]. This challenge is acknowledged in the Defence White Paper 2022, " allowing us to catch up and increase the deployability of the armed forces for all main tasks." In essence, three major challenges for the Army lead to a growing demand for space for support units: 1. **Recovery and growth**. There are persistent problems and shortfalls. The increased threat calls for improved readiness and deployability: Defence must speed up and increase its deployment capabilities and be able to sustain the deployment for longer. This challenge is largely dependent on the operational combat and other support provided by the Army, such as intelligence, fire support, operational logistics and medical support. These support units form the backbone of successful military action. Currently, both the Army and Defence Support Command (DOSCO) have insufficient capacity to adequately support the combat units. Various support units - such as the 400 Medical Battalion, Supply and Transport Command and JISTARC (Joint Intelligence, Surveillance, Target Acquisition & Reconnaissance Command) - are at 50% to 70% of the current capacity. And this is without any growth. Defence is working hard to get these units to 100% and then expand them even further. This leads to support units strongly increasing in size, in some cases doubling in size and a corresponding need for space for these units. 2. **Concentrate and strengthen**. For years, no investments were made in Defence's real estate. This partly explains why units had to be housed at locations that were available, but not properly equipped for their work – let alone offering room for expansion. In many cases, this has led to fragmentation. Investments are made in Defence's real estate based on the Strategic Real Estate Plan (2022). As a result, units do not train, work and exercise at a single location, but throughout the Netherlands. The Army and DOSCO want to improve this situation by concentrating similar units in the same locations as much as possible. Through clustering of training and operational units, students are trained in a professional context. By bringing together different units from the same field, units can better work together and bolster each other. This multi-domain approach, allowing synergy between units and domains, ensures that the armed forces can respond more quickly and effectively to sudden threats and crisis situations. By integrating recruitment, education, work and training as much as possible at the same locations, Defence enables its employees "to build a diverse career with Defence without having to travel all the time"[6]. Once combined, these challenges ensure that Defence can concentrate three supporting chains: the medical chain, the operational logistics chain and the Information Manoeuvre chain. 3. **Staffing**. Finding and retaining sufficient and qualified people is one of Defence's major challenges, particularly in light of the expected growth. This applies in particular to the support units. By way of indication: at the end of 2022, staffing of C2 Support Command was at 52%, 400 Medical Battalion at 56% and Supply and Transport Command at 60%. These three units together had more than 1,000 vacancies. The many vacancies hinder the readiness, and with it the deployability, of these units. Concentrating similar units in the same region will make the Army more attractive as an employer. Recruitment, training and work can all then be done in the same region, or even in one barracks. This leads to a longer career perspective and a healthy work-life balance.

[5] Ministry of Defence (2022, 15 November). Overview of the NATO Defence Planning Capability Review (DCPR) of the Netherlands (2022D47786), p. 1.

[6] Ministry of Defence (2022). Strategic Real Estate Plan 2022 (2022D51469), p. 6.

	Growth of support units in the now fragmented locations is not possible. This is because there is not enough space in the existing barracks. This means that suitable locations must be found where the desired strengthening and concentration of support units can take place. The concentration of the three existing units is being considered, but also the possibility of concentrating the medical and logistics services on the one hand and information manoeuvre on the other.
Supporting information for the functional (operational) need	The growth of the support units - medical, operational logistics and Information Manoeuvre - has been translated into what this means for the additional demand for space: *Medical chain* The entire medical chain is being restored and strengthened. According to the Defence White Paper 2022, Defence must again have sufficient high-quality operational health care from 2027. 400 Medical Battalion is thus expanded with personnel and resources, including three companies, ambulances and mobile hospitals with surgical and IC capacity. The unit will double in size. Several units from the medical chain will be combined. In addition, DOSCO must increase its storage and training capability within the Medical Logistics Centre (MGLC) and Defence Medical Training Centre (DGOTC). All in all, the medical chain's total demand for space will cover approximately 125 hectares, a growth of around 64 hectares. This demand for space cannot be accommodated at one of the existing locations at their current size. *Operational logistics chain* In the coming years, around 400 operational wheeled vehicles (such as trucks, trailers, semi-trailers and palletised load systems) will either be replaced or expanded, leading to greater demand for space. For example, the old Defence trucks – known as '4 tonners' – are being replaced by the new and considerably larger Scania Gryphus. These trucks require larger parking spaces, larger warehouses and garages, and more room to manoeuvre. It is estimated that this will lead to an additional demand for space of approximately 30% compared to the current take-up of space. Together with the growth of the Logistics Training and Education Centre (4%), the demand for space by the operational logistics chain comes down to approximately 122 hectares, an increase of around 21 hectares compared to the current situation. This demand for space cannot be accommodated at one of the existing locations at their current size. *Information Manoeuvre chain* Successful action increasingly depends on data and information. By providing high-quality information, intelligence and connections, three units contribute to Defence's ability to operate in a more complex operational environment: the Joint Intelligence, Surveillance and Reconnaissance Command (JISTARC), the Command & Control Support Command (C2OstCo) and the 1 Civil-Military Interaction Command (1 CMI Co). Substantial investments will be made in these units in the coming years: • JISTARC's current accommodation is woefully inadequate and does not meet security requirements. Investments will generate around 10% additional demand for space in the coming years. The growth of Fire Support Command will shrink the space allotted to JISTARC in 't Harde barracks. • The importance of the cyber domain and the electromagnetic spectrum for the armed forces is increasing sharply, which is why Defence is investing in 'cyber and electromagnetic activities' (CEMA). C2Ostco is joined by a CEMA unit consisting of 160 additional personnel and some 60 vehicles and containers. This will lead to an additional demand for space of approximately 30% compared to the current take-up of space, a growth of 7 hectares. The 1 Civil and Military Interaction Command (1CMICo) provides combat power in the cognitive dimension. Although the buildings in which 1 CMICO is housed are severely outdated, the unit has no additional need for space due to the further development of the Army. The demand for space from the *Information Manoeuvre chain* totals 78 hectares, a growth of 12 hectares. This demand for space cannot be accommodated at one of the existing locations at their current size.

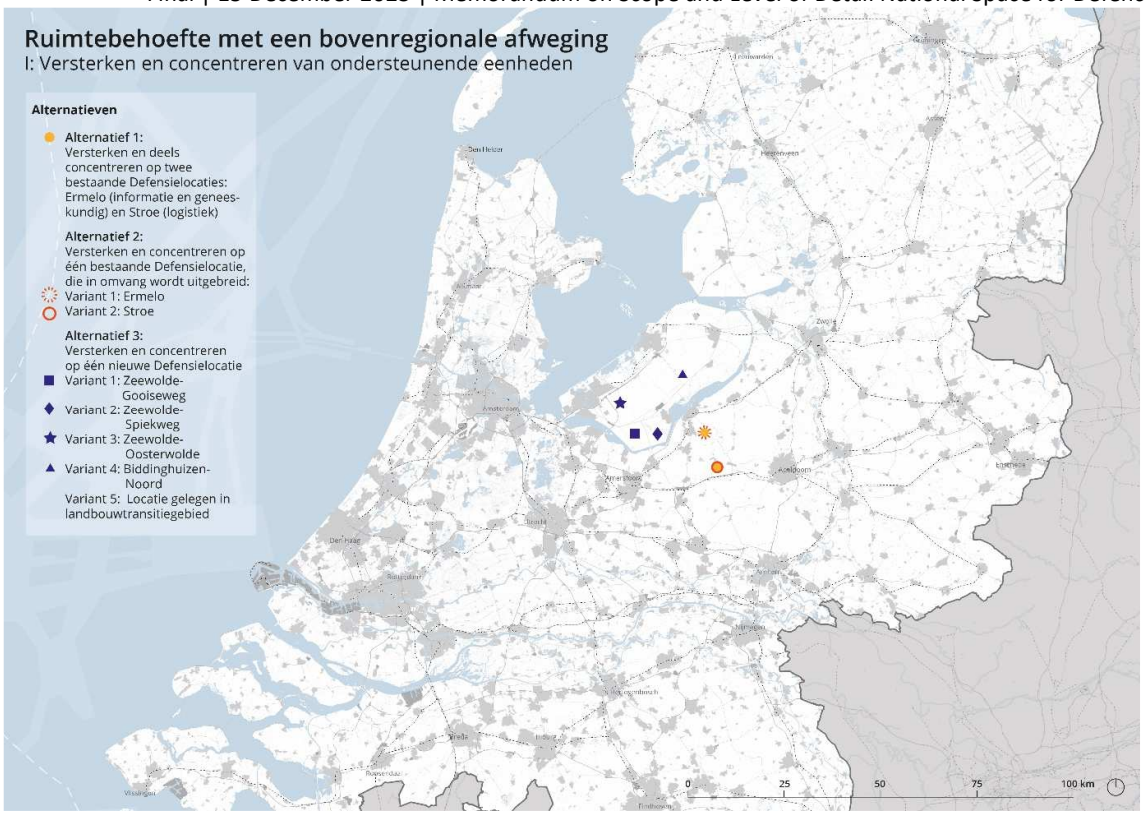
	Concentration It is clear that concentrating and strengthening each chain (i.e. including training) is highly desirable. A further concentration of all support units also has major operational benefits (better cooperation and training), for staff (e.g. flexibility in one's career without having to travel all the time) and financial benefits. The war in Ukraine demonstrates the importance of good cooperation between these support units. By concentrating all these units, we make it possible for these units to work together from the start and prepare for deployment, so that they understand each other better and can work together more easily in large and small formations. Concentrating all operational support units brings further economies of scale, for example by integrating all facilities and providing additional space for other smaller units. If all support services are concentrated at one location, it is desirable to have all training at that location, including the support staff of the Operational Support Command Land and *School Midden* (a school for troops).
	NATO has pointed out that there are shortfalls in the support units, for example in logistics and medical capability. NATO has also pointed out the need to strengthen Information Manoeuvre capabilities. At present, the support units are a weak link in the entire chain. Insufficient support units are available, which has a direct impact on the armed forces' effectiveness and sustainability. Strengthening these units is necessary. Concentrating these units is one of the operational adjustments from an operational point of view. On the one hand, this concentration is in the medical chain, the operational logistics chain and the Information Manoeuvre chain: comparable units will work at a single location, including their training units. By clustering training and operational units, students are trained in a professional context, resulting in better-trained employees. By bringing together different units from the same field, units can better work together: they support each other and learn from each other. On the other hand, by bringing together these chains in a single location, mutual integration is also improved, resulting in more cooperation and coordination between the support units. By concentrating recruiting, educating, working and training as much as possible in a single location with sufficient labour potential, we strengthen effectiveness. We enable our employees to build a diverse career with Defence without having to travel all the time. This ensures that our staff is well trained and skilled and it creates peace of mind and stability for both our staff and their families, which contributes to the ability to retain staff. Targeting investments on concentrating the support units will boost the deployability of the main tasks of Defence (NATO source: Defence Planning Capability Review, 2021-2022).
Can the need be quantified? Current situation and the requested growth (movements, days, hours, frequencies, etc.)	Approximately 370 hectares are needed to accommodate the current units and the required growth. This number is made up of required space of approximately 125 hectares for the medical chain, approximately 122 hectares for the logistics chain and approximately 78 hectares for the Information Manoeuvre chain (excluding other support and general functions (approximately 42 hectares)). By positioning the stationing, offices and teaching facilities in multiple floor buildings, the total surface area can be reduced in practice. However, this concerns a relatively limited share of the total required surface area, thus delivering at most (depending on the location) a few dozen hectares in efficiency gains.
Why need in the Netherlands and not abroad?	With this need, Defence wants to counter understaffing by housing these units close to a large labour force in the Netherlands. This makes housing abroad an impossibility anyway.
Are there international obligations and what is their source and status?	"NATO is (...) critical of continuing qualitative and quantitative shortfalls, especially in relation to strength and operational combat support (CS) and combat service support (CSS)) in the land domain".

Corresponding need for space	Approximately 370 hectares are needed to accommodate the current units and the required growth. This number is made up of required space of 125 hectares for the medical chain, approximately 122 hectares for the logistics chain and 78 hectares for the Information Manoeuvre chain (excluding other support and general functions (42 hectares)). By positioning the stationing, offices and teaching facilities in multiple floor buildings, the total surface area can be reduced in practice. However, this concerns a relatively limited share of the total required surface area, thus delivering at most (depending on the location) a few dozen hectares in efficiency gains. . In order to find one or more suitable locations for these required 370 hectares, the current Defence locations - with a building height of 2 or 3 floors - where all or parts of the support units are already located were considered. There are three options: 1. Strengthening and concentrating all support units in several existing locations. 2. Strengthening and concentrating the various chains in one existing location to be expanded in size. 3. Strengthening and concentrating all support units in a new location.
	After having considered all current Defence locations in the region, the conclusion is that no existing Defence Objects are large enough to accommodate the entire concentration of three support units. However, there are two locations (Army Sites Ermelo (82 hectares) and Stroe (196 hectares)) that may offer space for the concentration of one chain of support units. These locations may offer enough space to solve part of the Army's concentration challenge, preferably have enough remaining strategic development space to accommodate future growth, and have a large regional workforce that can help the Army find and attract new personnel. To facilitate concentration at these locations, the existing barracks will need to be expanded. This configuration (concentration in Stroe and/or Ermelo in combination with the expansion of these sites) is examined in the EIAR. To ensure the readiness of the support units, including training, approximately 150 hectares of training area must be available or be possible to be realised in the immediate vicinity of a potential location. In case of an entirely new barracks, it is desirable to also realise an adjacent training area of approximately 150 hectares, so that this need is also immediately met right next to the barracks. Small-scale exercises are carried out on this new site. This wish does not apply to the existing locations, because the existing training areas are already located at a short distance from those locations. The demand for space for these alternatives is therefore smaller (approximately 370 hectares).
Location requirements	• The location must accommodate the current and future growth of the Army. This means that there must be sufficient strategic development space available. • An existing or new training area of approximately 150 hectares to be situated nearby. • The location must allow the concentration of the three supporting chains as much as possible, based on 370 hectares at full concentration. • Fast realisation: in order to meet the urgent demand for space from a growing Army as quickly as possible, the preferred option is land that likely could be taken into use reasonably quickly (taking into account spatial procedures, number of landowners and, for example, existing lease structures, etc.). • Situated at a central location in the Netherlands, close to major workforce (meaning that there are plenty of young people in the area). • Defence use: the potential location must accommodate the operations and readiness of the units as much as possible. This entails considering aspects such as spatial integration (relief of the terrain, logical construction and few intersections) or specific operational activities, such as conducting exercises using drones.

Alternatives to be considered in the EIA plan	The following alternatives at various locations in existing and new areas are being examined: 1. Strengthen and partly concentrate in two existing Defence locations: From an operational point of view the combination of medical and logistics with information manoeuvre is obvious. 2. Strengthen and concentrate in one existing Defence location to be expanded in size: • Variant 1: Ermelo • Variant 2: Stroe 3. Strengthen and concentrate in one new Defence location • Variant 1: Zeewolde - Gooiseweg • Variant 2: Zeewolde – Spiekweg • Variant 3: Zeewolde – Oosterwold • Variant 4: Biddinghuizen – North • Variant 5: Location situated in agricultural transition area
Supporting information for how the alternatives were selected	Defence examined the size of the existing barracks, which space is already occupied (and will continue to be occupied) by other Services and which space is therefore still potentially free. The conclusion is that none of the existing Defence objects is large enough to accommodate the entire concentration of support units. Army sites Ermelo (82 hectares) and Stroe (196 hectares) do offer possibilities to concentrate one chain of support units, which is why they have been identified as promising alternatives. Where physical expansion is possible at existing locations, it should be examined whether concentration of two or three support chains could be made to fit. That is why these two locations have also been designated as variants within the alternative that can reasonably be examined: 'Strengthening and concentrating in one existing Defence location'. For a new location, a GIS analysis study into promising areas has already been performed. The results of this study were shared by the State Secretary of Defence (including the outlines of the Strategic Real Estate Plan), and in the letter from Minister de Jonge with the starting package for the provinces (12 December 2022). It was indicated that the provisional preferred location is in the municipality of Zeewolde and that there are other options in Flevoland (Zeewolde and Dronten). In addition, the municipality of Zeewolde itself proposed a location (Oosterwold) for further examination. Lastly, it is also being considered to link one or more possible options in agricultural transition areas in the middle of the country to opportunities

<table>
<tr><td></td><td>The EIA plan further substantiates for these locations whether and how they were selected. In summary, the promising areas (see the five variants) were selected based on the following criteria. These selection criteria only apply to an entirely new location, with the aim of arriving at potentially suitable locations.

<table>
<tr><th>Selection criterion</th><th>Method of fulfilling criterion</th></tr>
<tr><td>Required size</td><td>• A size of 500 hectares (350 ha for the barracks + 150 ha for the training area, of which at least 350 hectares outside NNN)</td></tr>
<tr><td>Accessibility/location (linked to location requirement)</td><td>• 45 minutes from 3 large cities (> 100,000 inhabitants)
• 45 minutes from the centre between the barracks to be clustered</td></tr>
<tr><td>Distance to built-up areas</td><td>• At least 1,000 metres from existing towns and villages</td></tr>
<tr><td>Nitrogen and nature</td><td>• Outside Natura 2000 areas
• A location without negative nitrogen impact (due to distance or offset possibilities)</td></tr>
<tr><td>Critical infrastructure</td><td>• Outside national and provincial roads, including reserved zones
• Outside NWB (Netherlands water boards bank) waterways and dikes
• Outside railway tracks</td></tr>
<tr><td>Sustainable energy generation</td><td>• At least 500 metres from existing wind turbines
• Outside RES search areas for wind energy</td></tr>
<tr><td>World heritage and special cultural historical values</td><td>• Outside UNESCO world heritage sites
• Outside contours of national monuments
• Outside country estates</td></tr>
<tr><td>Suitable surface</td><td>• Not on peat land or flood plains</td></tr>
<tr><td>Number of homes/residential properties</td><td>• <20 homes/residential properties in the areas present</td></tr>
</table>
</td></tr>
<tr><td>Assessment framework for the EIA plan</td><td>Based on the assessment framework for this need, all themes from Table 5.1 are considered. This is because the development explicitly involves a (new) take-up of space, but can also capitalise on all kinds of opportunities for environment, energy, etc.</td></tr>
</table>


Ruimtebehoefte met een bovenregionale afweging
I: Versterken en concentreren van ondersteunende eenheden
Alternatieven
Alternatief 1:
Versterken en deels concentreren op twee bestaande Defensielocaties: Ermelo (informatie en genees-kundig) en Stroe (logistiek)
Alternatief 2:
Versterken en concentreren op één bestaande Defensielocatie, die in omvang wordt uitgebreid:
Variant 1: Ermelo
Variant 2: Stroe
Alternatief 3:
Versterken en concentreren op één nieuwe Defensielocatie
Variant 1: Zeewolde-Gooiseweg
Variant 2: Zeewolde-Spiekweg
Variant 3: Zeewolde-Oosterwolde
Variant 4: Biddinghuizen-Noord
Variant 5: Locatie gelegen in landbouwtransitiegebied
0
25
50
75
100 km

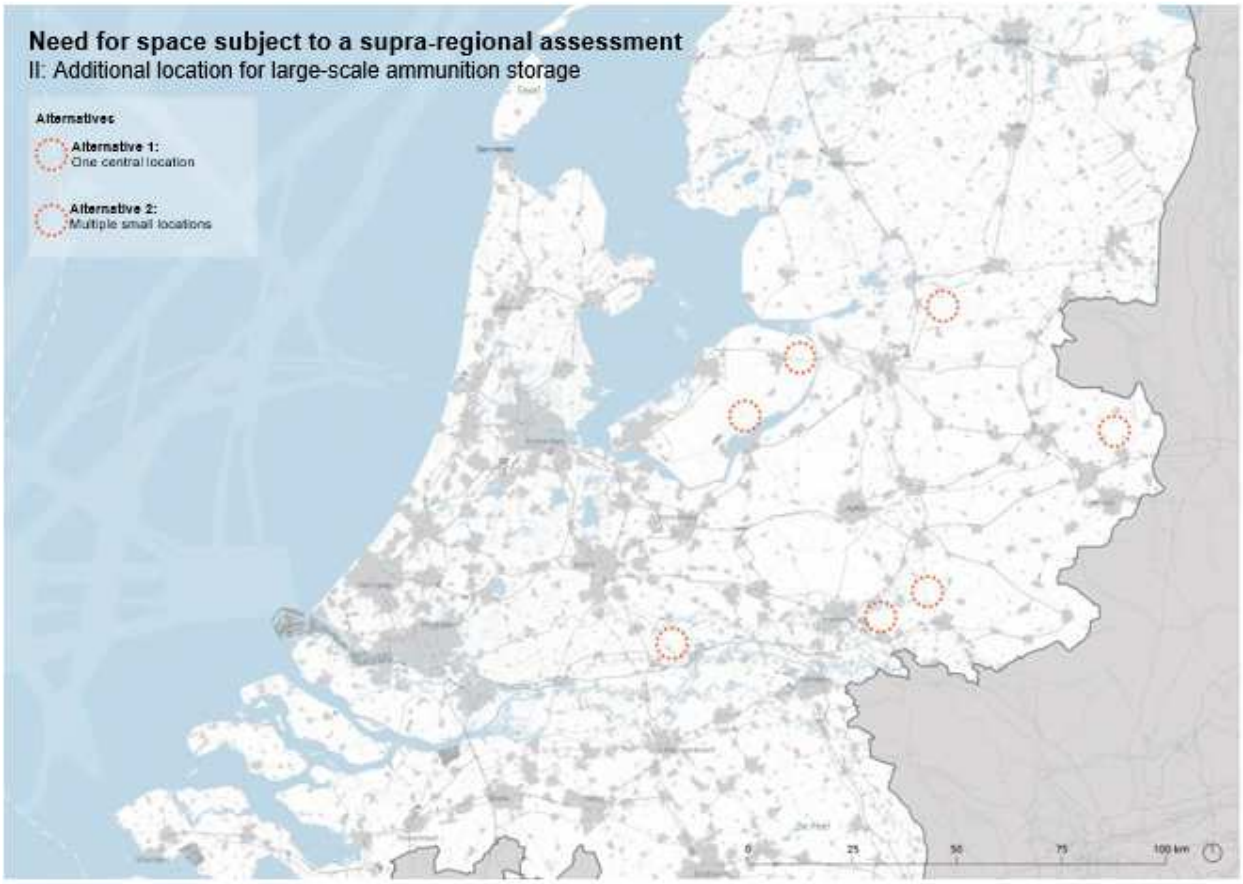
FUNCTIONAL (OPERATIONAL) NEED: **Additional location for large-scale ammunition storage**	
Explanation of the functional (operational) need	The need is to centralise and efficiently handle ammunition storage and the related logistics actions. This will require additional space for future ammunition growth and more elaborate logistics processes.
Supporting information for the functional (operational) need	In the long term, ammunition stocks will be greatly increased on a structural basis in order to comply with assigned NATO and other tasks. This is linked to the capability to store ammunition, which must therefore also grow. Our allies are also greatly expanding their armed forces, including ammunition stocks. Several countries are either at risk of reaching their maximum storage capability, or want to spread out their stocks over multiple locations. As the Netherlands is 'the hinterland' and serves as 'the transit port' across various axes, it can - perhaps temporarily - offer or be asked to offer ammunition storage capability to allies. The existing Dutch ammunition infrastructure is not designed for this type of international military cooperation. The current storage locations have been in place for quite some time, requiring some to be renovated. This would mean temporarily storing that ammunition at other locations, thus increasing the demand for ammunition storage space. It would be appropriate to position the new location(s) in the Central corridor (area between the upper border of North Brabant and the lower border of Drenthe) in order to achieve national coverage. From a military mobility perspective, this connects the location to the transport routes from the ports to the east. In addition, potential areas in the south of the Netherlands were also considered.
Can the need be quantified? Current situation and the requested growth (movements, days, hours, frequencies, etc.)	Growth for the future, the current infrastructure allows the current assignments to be stored. There is little capacity for further growth. There are hardly any fallback options. Defence now has approximately 800 spread over various locations. In the long term, there may be a need for additional warehouses, for example at the Veenhuizen location. A central depot such as the one in Veenhuizen would create a need of approximately 70 hectares (excluding the C-zone for safety reasons).
Why need in the Netherlands and not abroad?	The central ammunition stocks serve as a strategic buffer to last for the first few days until restocking and must therefore be close by and under Dutch management. Logical foreign alternatives such as Germany and Belgium themselves have too little ammunition storage capability. The Netherlands also does not have any large locations abroad that justify the deposit of substantial stocks. If NATO strategy is changed, in the future part of the ammunition stocks may be moved ahead to a fixed location (cf. Seedorf and the Guided Weapons Groups during the Cold War). This has a dampening effect on the need for ammunition storage in the Netherlands, but will never be able to remove the need completely.
Are there international obligations and what is their source and status?	Combat power of the Armed Forces is directly tied to the availability of ammunition. In addition, the Netherlands is a NATO transit country and may have to offer ammunition storage capability to partner countries.

Location requirements	• Dimensions are at least 35 hectares and no more than approximately 70 hectares of space for storage and related logistics activities. • Location in the north, central or south corridors of the country • Good access to main roads / transport corridor • Possible connection to inland navigation network and/or rail network towards Germany (nice to have) • The preferred transport corridor (Central) must be accessible via good connections within 60 minutes and pass through built-up areas (cities, village centres) as little as possible. • As few buildings as possible in the area (within External safety zone) • As little vulnerable infrastructure as possible (no bridges that can break) • Not underneath low flying routes
	• The feasibility of locations in areas where the agricultural transition will play an explicit role is more likely than areas where relatively fewer restrictions apply to agriculture. This is included as a criterion for determining suitable locations.
Alternatives to be considered in the EIA plan	For an additional location of large-scale ammunition storage, seven alternative locations are potentially suitable. These are depicted on the map.
Substantiation of how the alternatives were selected	The potentially suitable areas (alternatives) for additional large-scale ammunition storage were selected using a GIS analysis. Various 'selection criteria' were used to steer towards particular areas. The selection criteria used are: • Outside built-up areas with a 1,900-metre buffer (the maximum contour for the C zone for storage of hazardous substances) • No intersection by roads (motorways, railways, waterways and provincial roads), including a 250-metre buffer • Sparsely populated area (less than 5 objects on the potential site itself) • Outside Natura 2000 areas, but located in agricultural transition areas (given the long-term nature of the need) • Not located in low flying areas(wish from Defence) • Not above or directly next to cultural-historical valuable areas/objects (UNESCO and national monuments) • Not located above or near wind turbines, including a 500-metre buffer zone • Not located in the following landscape types: water, low moor areas and valleys • Not located in or within the protection zones of primary and secondary flood defences and other important water control structures. • Minimum size of 0.7 km_2 • Not located in very wet or low-lying areas, or outside dykes. • Fewer than 40 homes in the zone (C zone) of at least 1,100 metres and fewer than 100 homes of at most 1,900 metres (these zones correspond with existing ammunition storage and have been used to determine minimum and maximum zones) • Illogical shape (e.g. very long and narrow)

Assessment framework for the EIA plan	The assessment of the impact of this need mainly involves the impact of the take-up of space on the present values and impact on the environment. Themes such as vibration, health and circularity are not relevant to the assessment (at this stage) and are therefore not included. Based on the assessment framework for this need, the following themes from Table 5.1 are considered in the EIA plan:

Healthy and Safe Living environment	Noise	Impact of the development on aviation noise, road traffic noise, railway noise, industrial noise and vice versa
	Air quality	Impact of the development on concentrations of nitrogen dioxide, particulate matter and ultra fine particulate matter
	External safety	Impact of location-bound risk, group risk of development and vice versa
	Light	Impact of light nuisance caused by the development
Soil and water	Soil	Impact on the soil type, soil contamination due to the development, impact of subsidence and uncovered soil and sponge effect
	Surface water	Impact on the water system, the quality and quantity of present surface water
	Groundwater	Impact on groundwater (quantitative, qualitative) due to the development and impact on drinking water.
	Water safety	Impact on water safety
Nature species and history	Nature	Nature Network Netherlands, Natura 2000 (including nitrogen), protected
	Heritage	Impact on protected cultural-historical values
	Landscape	Impact on landscape values
	Geomorphology	Impact on geographical values
	Archaeology	Impact on archaeological expectation value, protected areas Floods
		Impact of flood risk on the development
Climate adaptation	Drought	Impact of drought on the development
	Rainproof	Impact of a heavy shower (120 mm in 2 hours) on the development
	Recreation	Impact of the development on recreation areas
	Agriculture	Impact of development on valuable agricultural land and areas
Use of space	Land ownership	The extent of land owned by public authorities and/or the number of owners potentially affected
	Energy networks	Impact on underground and aboveground energy networks (and storage and generation) in the developments and vice versa
Energy and Circularity	Grid capacity	Impact of grid congestion on the developments
	Energy	Opportunities for sustainable energy generation in the development
Social and vital development	Economy	Impact and opportunities on employment, knowledge & innovation in the

Defence-specific	Suitability for military use	Proximity to other ammunition storage
Interfaces	Interference with national interests	Opportunities and threats from current Government programmes


Need for space subject to a supra-regional assessment
II: Additional location for large-scale ammunition storage
Alternatives
Alternative 1:
One central location
Alternative 2:
Multiple small locations
0
25
50
75
100 km

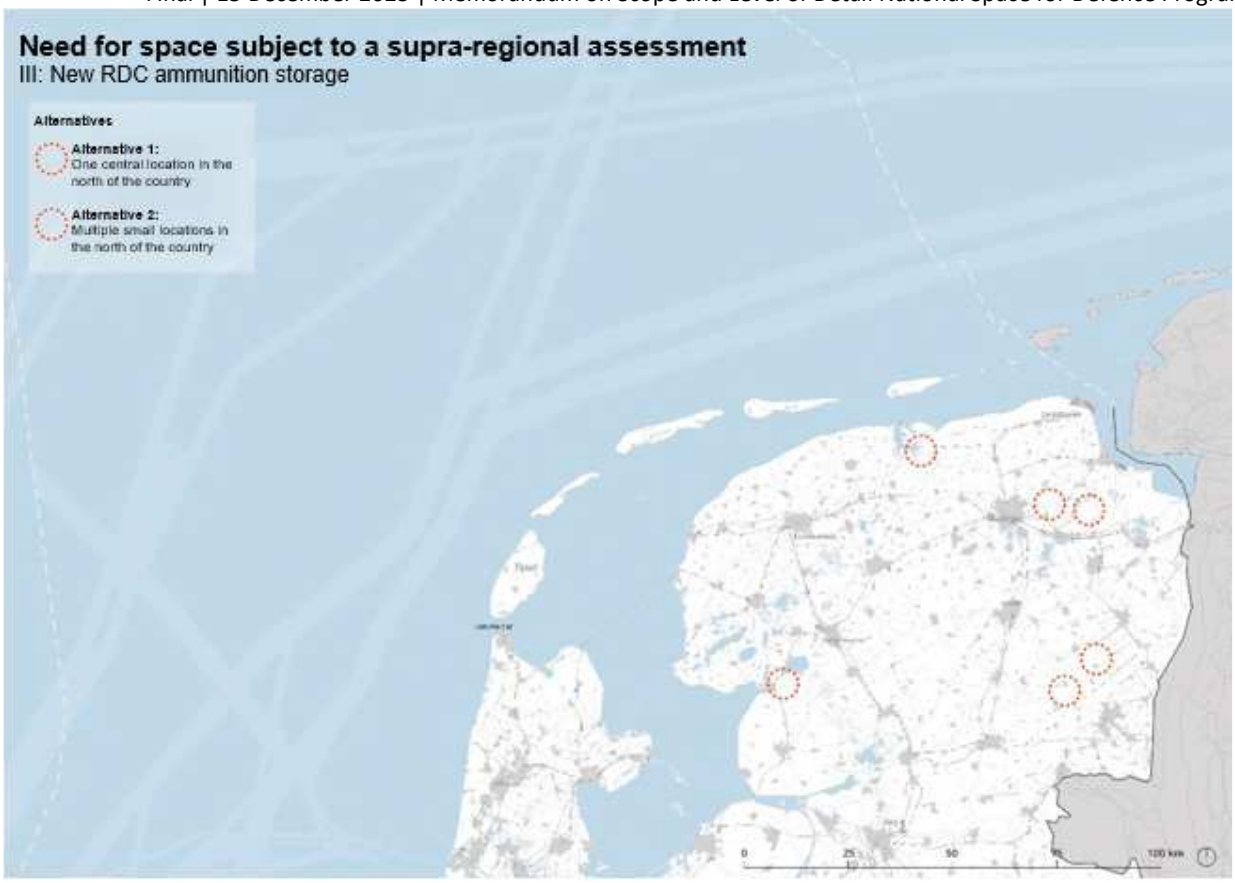
FUNCTIONAL (OPERATIONAL) NEED: **New RDC (Rapid Deployment Capacity) ammunition storage**	
Explanation of the functional (operational) need	Arrangements have been made with NATO regarding RDC. For this purpose, ammunition and supplies belonging to the unit must be prepared for shipping in containers, in order to comply with the notice to move (NTM). These NTMs have become much shorter in recent years, and the amount of ammunition required for deployment has grown significantly. In order to prepare ammunition for shipping quickly and efficiently, a new large-scale ammunition storage is needed to store containers for RDC.
Supporting information for the functional (operational) need	Ammunition belonging to units and supplies of these ammunition containers must be prepared pursuant to agreements with NATO. Laws and regulations related to storing and moving ammunition have made ammunition the key logistical problem. If the containers are placed without protective covering (bunker, warehouse, underground, etc.), a 7.5 km-danger zone must be in place. The containers may then be placed together in clusters of no more than 5. Storing the containers with protective covering is therefore the preferred method, as this limits the safety zoning. In addition, this ensures that the containers are stored at a constant temperature. Some of the containers are now stored in ammunition warehouses. The number of warehouses that can be used for this purpose is limited. For the other containers, it was examined whether they could be stored in the open air. Based on physical space (storage and internal transport), internal and external security and the negative effect arising from the possibility to store ammunition in the warehouses in the vicinity of loaded containers in the open air, the conclusion is that no Defence location offers the possibility to store all RDC containers. To ensure efficient operations, clustering these logistics activities related to ammunition is desirable but not necessary. In addition, it is desirable to transport the ammunition as little as possible due to safety risks. These criteria limit the safety risks for local residents living next to transport axes. The search for such areas is focused on the northeast of the Netherlands. This has to do with the proximity to Eemshaven, from where goods are transhipped on land (or vice versa). As the search area depends on the Eemshaven, it focuses on Friesland, Groningen, Drenthe and Noordelijk Flevoland.
Can the need be quantified? Current situation and the requested growth (movements, days, hours, frequencies, etc.)	Based on the current order, there must be storage capability for 480 containers. On that basis, an estimate was made of the space required in this factsheet. The scope of future RDC orders is unknown. The need from the Materiel and IT Command (COMMIT) depends on the logistics concept used.
Why need in the Netherlands and not abroad?	RDC stocks are stocks for deployment that must always be at the Netherlands' free disposal. The guarantees for free disposal can only be realised on Dutch territory, as this precludes (in particular in times of crisis, like the COVID-19 crisis) any undesired influence by other States/actors.
Are there international obligations and what is their source and	Compliance with NATO's mandate for Rapid Deployment Capacity.
Corresponding need for space	RDC's need for space is estimated as follows: • At least 0.22 km_2: • Covering of containers (warehouse/bunker/underground). • Safety zone (zone C) from at least 1,100 metres to at most 1,900 metres

Location requirements	Based on the need, the following requirements/wishes apply to a new location: • At least 0.22 km2 in size. • As few buildings as possible in the area due to external safety circles • In the northeast of the Netherlands, at a relatively short distance from the Eemshaven. • As few buildings as possible along the route from the location and the Eemshaven.
	• Preferably near large ammunition storage due to efficiency of personnel and facilities. • As little vulnerable infrastructure as possible (no bridges that can break) • Not underneath low-level flight routes • The feasibility locations in areas where the agricultural transition will play an explicit role is more likely than areas where relatively fewer restrictions apply to agriculture. This is included in the EIAR (but not used in advance as a selection criterion).
Alternatives to be considered in the EIA plan	Six alternative locations are potentially suitable for a new large-scale ammunition storage for RDC (Rapid Deployment Capacity). These are depicted on the map.
Supporting information for how the alternatives were selected	The potentially suitable areas (alternatives) for large-scale ammunition storage for RDC were selected using a GIS analysis. Various 'selection criteria' (see also Chapter four of the NRD) were used to steer towards particular areas. The selection criteria used are: • Outside built-up areas with a 1,900-metre buffer (the maximum contour for the C zone for storage of hazardous substances) • No intersection by roads (motorways, railways, waterways and provincial roads), including a 250-metre buffer • Sparsely populated area (less than 5 objects on the potential site itself) • Outside Natura 2000 areas and a 5 km buffer around nitrogen-sensitive habitats (overstretched) due to nitrogen deposition • Not located in low flying areas (wish from Defence) • Not above or directly next to cultural-historical valuable areas/objects (UNESCO and national monuments) • Not located above or near wind turbines, including a 500-metre buffer zone • Not located in the following landscape types: water, low moor areas and valleys • Not located in very wet or low-lying areas, or outside dykes. • Not located in or within the protection zones of primary and secondary flood defences and other important water control structures. • Minimum size of 0.22 km2 • Fewer than 40 homes in the zone (C zone) of at least 1,100 metres and fewer than 100 homes of at most 1,900 metres (these zones correspond with existing ammunition storage and have been used to determine minimum and maximum zones) • Illogical shape (e.g. very long and narrow)

Assessment framework for the EIA plan

The assessment of the impact of this need mainly involves the impact of the take-up of space on the present values and impact on the environment. Themes such as vibration, health and circularity are not relevant to the assessment (at this stage) and are therefore not included. Based on the assessment framework for this need, the following themes from Table 5.1 are considered in the EIA plan:

Main theme	Theme	Aspects considered
Healthy and Safe Living environment	Noise	Impact of the development on aviation noise, road traffic noise, railway noise, industrial noise and vice versa
	Air quality	Impact of the development on concentrations of nitrogen dioxide, particulate matter and ultra fine particulate matter
	External safety	Impact of location-bound risk, group risk of development and vice versa
	Light	Impact of light nuisance caused by the development
Soil and water	Soil	Impact on the soil type, soil contamination due to the development, impact of subsidence and uncovered soil and sponge effect
	Surface water	Impact on the water system, the quality and quantity of present surface water
	Groundwater	Impact on groundwater (quantitative, qualitative) due to the development and impact on drinking water.
	Water safety	Impact on water safety
Nature, landscape and history	Nature	Nature Network Netherlands, Natura 2000 (including nitrogen), protected species Heritage Impact on protected cultural-historical values
	Landscape	Impact on landscape values
	Geomorphology	Impact on geographical values
	Archaeology	Impact on archaeological expectation value, protected areas Floods
		Impact of flood risk on the development
Climate adaptation	Drought	Impact of drought on the development
	Rainproof development	Impact of a heavy shower (120 mm in 2 hours) on the
	Recreation	Impact of the development on recreation areas
Use of space	Agriculture	Impact of development on valuable agricultural land and areas
	Land ownership	The extent of land owned by public authorities and/or the number of owners potentially affected
	Energy networks	Impact on underground and aboveground energy networks (and storage and generation) in the developments and vice versa
Energy and	Grid capacity	Impact of grid congestion on the developments
	Energy	Opportunities for sustainable energy generation in the development
Social and vital	Economy	Impact and opportunities on employment, knowledge & innovation in the
Defence-specific	Suitability for military use	Proximity to other ammunition storage Proximity to Eemshaven
Interfaces	Interference with national interests	Opportunities and threats from current Government programmes


Need for space subject to a supra-regional assessment
III: New RDC ammunition storage
Alternatives
Alternative 1:
One central location in the north of the country
Alternative 2:
Multiple small locations in the north of the country
0
25
50
100 km

SUPRA-REGIONAL NEED FOR SPACE: **New area for exercises and training involving explosives (area for explosives)**	
Explanation of the functional (operational) need	The changing security situation shows that ever heavier explosive devices (including in Ukraine) are being used. At the moment, not all training and greater deployment of Defence units can be sufficiently facilitated by the existing training area for explosives in Reek. As a result, training is increasingly being held abroad, but pressure is also increasing abroad (especially among NATO partners in Europe), resulting in an untenable situation in the long term. As a result, the operational readiness of the units that use the training area (see below) is under pressure.
Supporting information for the functional (operational) need	The training area for explosives in Reek is used by Royal Netherlands Army Engineering units from Oirschot, Wezep and Schaarsbergen. In addition, the Defence Explosive Ordnance Disposal Service (EOD), the Commando Corps, the Royal Navy, the Marine Corps Assault Engineers and the Netherlands Maritime Special Operations Forces use this site for exercises involving explosives in the Netherlands. Police units (such as the Special Security Missions Brigade and the Special Intervention Service) also use the training area for explosives for exercises and training. These will also be the users of the new training capacity. Due to the limited capacity (in numbers and size), a lot of training is done abroad (including Norway and the US). More possibilities for conducting training involving explosives in the Netherlands will have a positive impact on the readiness, growth, cost control and deployability of Defence units. There are currently two problems with the grounds in Reek: • The size and capacity of these grounds is limited in relation to the number of trainings and exercises required (in other words, the grounds are fully booked and there is a waiting list), while the demand is increasing. Due to the nuisance caused, the use of the amount of explosives at these grounds is also limited. • In practice, heavier explosives are being used for which the training area in Reek is insufficiently equipped. The grounds in Reek also offer insufficient space for all the needs of Defence units, for example horizontal impact weapons (weapon that impact the target from the side). The weapon is positioned at ground level). The current area (2 km^2) is too small to accommodate such needs. As a result of these problems, training with explosives on the site in Reek is limited, even though it is necessary to do all the training required to ensure individual Personnel Readiness in the Netherlands.
Can the need be quantified? Current situation and the requested growth (movements, days, hours, frequencies, etc.)	The site is currently fully booked. 41 calendar weeks are needed every year and therefore reserved for training with explosives. During summer and Christmas leave, there is no training with explosives for a total of 5 weeks. Two weeks are needed every year to have the sand sieved on the site by an external contractor. The other days (a total of 5 calendar weeks) are used to remove remnants of wood, steel and concrete, supply new material and build up the structures used for training with explosives. At the moment, many basic training courses are being held abroad because the current area for explosives in Reek does not have the capacity. If the Army were to be fully staffed, even more training facilities would be needed. If these cannot be offered in the Netherlands, it not only limits readiness for both the Army and other branches of the armed forces. With the strengthening of the armed forces and the anticipated growth of personnel, the future additional need is estimated at 75% of the current need.
Why need in the Netherlands and not abroad?	Foreign areas for explosives are scarce. Moreover, as a result of the changed safety situation these sites are being used more often for training, and so are available less often. The proximity for the units, instructors and maintenance staff and the accompanying efficiency and sustainability considerations (no passing on) are also an important reason why there is a need for an increase in the ability to exercise in the Netherlands.

Are there international obligations and what is their source and status?	International obligations arise from the Allied Command Operations Forces Standards Volume II - Land Forces[7] . It describes the tasks that our units must be able to perform. In order to meet the requirements of these tasks, training should be provided for the purpose of detonating explosives. As a result, based on the aforementioned NATO requirements, it is therefore necessary to have sufficient areas for training with explosives. Demolition is a tactical task: Destruction of structures, facilities or materials through use of fire, water, explosives, mechanical or other means. As an obstacle type, demolition refers to any obstacle created by the use of explosives (i.e. destroyed bridge, road crater, etc.) Destruction. Engineers can use explosives as a means of creating obstacles by demolishing man-made structures such as bridges, roads or buildings to channel or obstruct enemy troops. STANAG 2017 Orders to the Demolition Guard Commander and Demolition Firing Party Commander (Non-nuclear) ATP-3.18-1 Allied Tactical Publication for Explosive Ordnance Disposal (STANAG 2282) STANAG 2143 - Explosive Ordnance Disposal and Minimum Standards of Proficiency STANAG 2221 – Explosive Ordnance Disposal Reports and Messages (AEODP-06) STANAG 2282 – Interservice EOD Operations on Multinational Deployments (ATP-72) ALP-16 Explosives Safety and Munitions Risk Management (ESMRM) in NATO Planning, Training, and Operations (STANAG 2617)
Corresponding need for space	The current area in Reek is approximately 2 km^2 in size. Greater safety distances around the detonation point are necessary to enable the use of more and heavier explosives. The engineers unit indicates that a safety distance of approximately 1.5 km is required. This must therefore be a site with a surface area of approximately 7 km^2.
Location requirements	• Safety zone of 1.5 km around detonation point • Total surface area of at least 3 km^2, preferably 7 km^2 • No or only specifically equipped buildings within 7 km^2 • Located in or nearby Reek, the Arnhem, Apeldoorn and Zwolle regions (due to use by units in Schaarsbergen and Wezep) or in the vicinity of Marnehuizen. • The feasibility of locations in areas where the agricultural transition will play an explicit role is more likely than areas where relatively fewer restrictions apply to agriculture. This is included in the EIAR (but not used in advance as a selection criterion).
Alternatives to be considered in the EIA plan	In view of the safety distances of such an area (and the impossibility of combining it with other training areas), there is no possibility of linking it to an existing training area. Alternatives to be reasonably considered include: 1. Expansion of the existing training area for explosives in Reek; 2. The construction of a new, larger area in the vicinity of engineers units in the Arnhem-Apeldoorn-Zwolle region (near or at the artillery shooting range (ASK) and Wezep) or in the

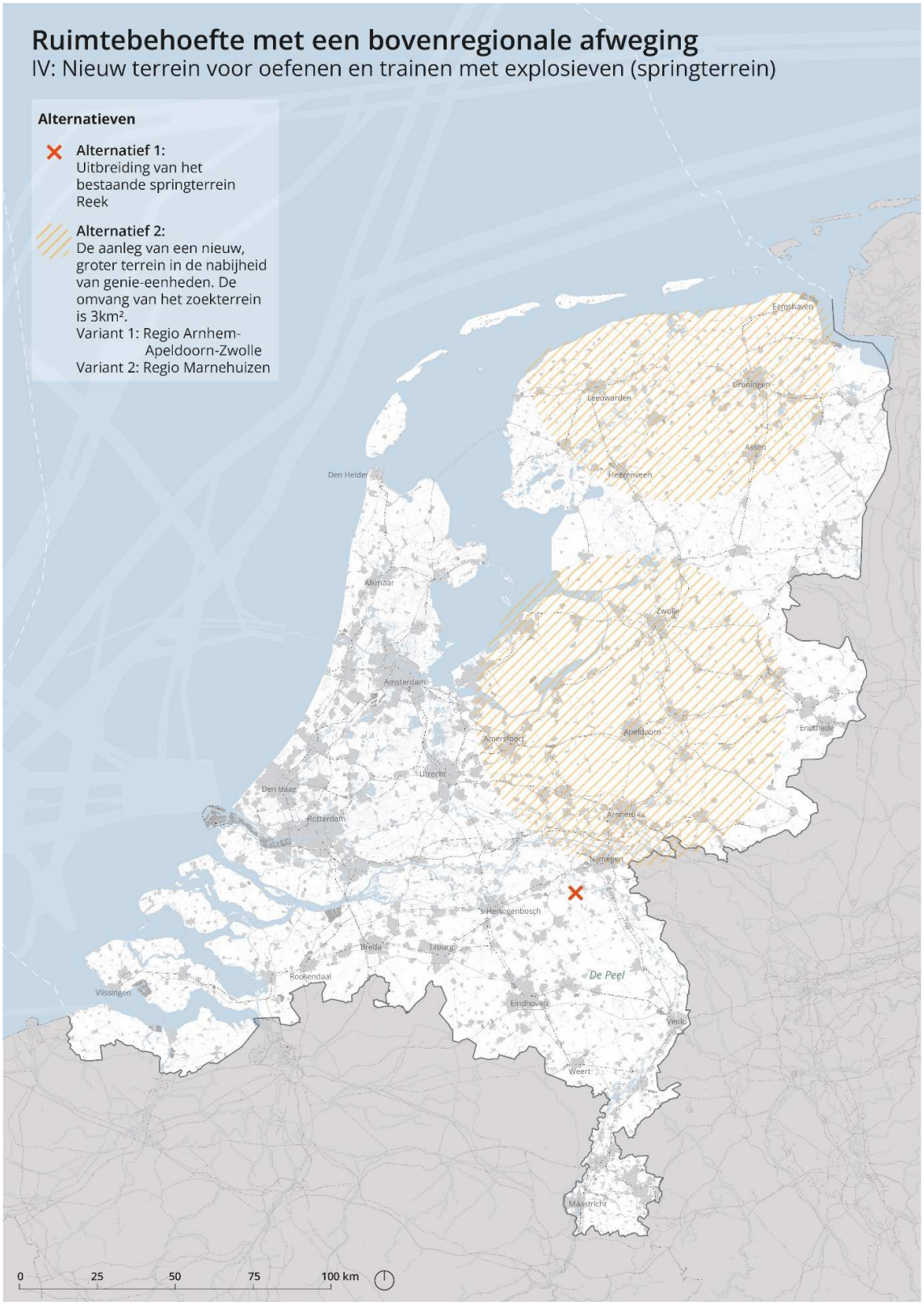
[7] Allied Forces Standards Volume II – Land Forces

Supporting information for how the alternatives were selected	The current training areas are fully utilised for regular exercises and training. Given the safety distances, it is not desirable to combine this need with regular unit exercises. That is why new locations are being considered. An alternative could be an area of almost the same size as Reek. The drawback is that the scope of the exercises remains limited, but the capability for individual exercising and training is increased. Because of the great need, efficiency and operational necessity, the aim is to at least conduct all individual training in the Netherlands. Units must still go abroad in order to train with large loads. The current analysis therefore focuses on sites where "larger" exercises can be conducted. This alternative is a fallback option if larger sites are not promising. No analysis of possible specific locations within the search areas had yet been made when this NRD was drawn up. This will be done at the time of the EIA plan using a GIS analysis. The following criteria are used: • Built-up area with a 500 metre-buffer outside the site (and the safety C zone) • No intersection by roads (motorways, railways, waterways and provincial roads), including a 250-metre buffer • Sparsely populated area (less than 20 objects on the potential site itself)
	• Initially, outside Natura 2000 areas (without buffer), in the case of insufficiently promising areas, also within Natura 2000 areas that have suitable habitats (such as drifting sand and forests). • Not located in low flying areas (wish from Defence) • Not above or directly next to cultural-historical valuable areas/objects (UNESCO and national monuments) • Not located above or near wind turbines, including a 500-metre buffer zone • Not located in the following landscape types: water, low moor areas and valleys • Not located in or within the protection zones of primary and secondary flood defences and other important water control structures. • Approximately 3 km_2 in size (possible optimisation with 5 km_2 and 3 km_2) • Within indicated search areas

Assessment framework for the EIA plan

The assessment of the impact of this need mainly involves the impact of the take-up of space on the present values and impact on the environment. Themes such as vibration, social cohesion, health and circularity are not relevant to the assessment (at this stage) and are therefore not included. Based on the assessment framework for this need, the following themes from Table 5.1 are considered in the EIA plan:

Main theme	Theme	Aspects considered
Healthy and Safe Living Environment	Noise	Impact of the development on aviation noise, road traffic noise, railway noise, industrial noise and vice versa
	Air quality	Impact of the development on concentrations of nitrogen dioxide, particulate matter and ultra fine particulate matter
	External safety	Impact of location-bound risk, group risk of the development and vice versa
	Light	Impact of light nuisance caused by the development
Soil and water	Soil	Impact on the soil type, soil contamination due to the development, impact of subsidence and uncovered soil and sponge effect
	Surface water	Impact on the water system, the quality and quantity of present surface water
	Groundwater	Impact on groundwater (quantitative, qualitative) due to the development and impact on drinking water.
	Water safety	Impact on water safety
Nature, landscape and history	Nature	Nature Network Netherlands, Natura 2000 (including nitrogen), protected
	Heritage	Impact on protected cultural-historical values
	Landscape	Impact on landscape values
	Geomorphology	Impact on geographical values
	Archaeology	Impact on archaeological expectation value, protected areas
Climate adaptation	Floods	Impact of flood risk on the development
	Drought	Impact of drought on the development
	Rainproof	Impact of a heavy shower (120 mm in 2 hours) on the development
Use of space	Recreation	Impact of the development on recreational areas
	Agriculture	Impact of the development on valuable agricultural land and areas
	Land ownership	The extent of land owned by public authorities and/or the number of owners potentially affected
	Energy networks	Impact on underground and aboveground energy networks (and storage and generation) in the developments and vice versa
Energy and Circularity	Grid capacity	Impact of grid congestion on the developments
	Energy	Opportunities for sustainable energy generation in the development
Social and vital	Economy	Impact and opportunities on employment, knowledge & innovation in the
Defence-specific	Suitability for military use	Proximity to engineers units (and other users)
Interfaces	Interference with national interests	Opportunities and threats from current Government programmes


Ruimtebehoefte met een bovenregionale afweging
IV: Nieuw terrein voor oefenen en trainen met explosieven (springterrein)
Alternatieven
Alternatief 1:
Uitbreiding van het bestaande springterrein Reek
Alternatief 2:
De aanleg van een nieuw, groter terrein in de nabijheid van genie-eenheden. De omvang van het zoekterrein is 3km².
Variant 1: Regio Arnhem-Apeldoorn-Zwolle
Variant 2: Regio Marnehuizen
Eemshaven
Leeuwarden
Groningen
Assen
Heerenveen
Den Helder
Alkmaar
Zwolle
Amsterdam
Apeldoorn
Enschede
Amersfoort
Utrecht
Den Haag
Rotterdam
Arnhem
Nijmegen
's-Hertogenbosch
Breda
Tilburg
De Peel
Roosendaal
Vlissingen
Eindhoven
Venlo
Weert
Maastricht
0
25
50
75
100 km

FUNCTIONAL (OPERATIONAL) NEED: **Exercises conducted in urban areas (training village)**	
Explanation of the functional (operational) need	Current combat situations show that urban areas have increasingly become combat zones. As a result, NATO requires that military units must be able to operate in urbanised areas when carrying out activities in Main Task 1 (defending allied territory). Defence needs more training areas to train in urbanised areas. The ratio between training in rural and urban areas is expected to be 50/50; currently this is 90/10. Training in urbanised areas can now only be replicated in Marnehuizen. Structured training for these situations in Marnehuizen is not possible because it is simply "full". Apart from exercising in the strip, structural training in urban areas can only be conducted in Marnehuizen. This training area offers very little space for exercises. The area is already tight, and demand is only expected to increase. The German training village of Schnöggersburg in the Altmark training area costs EUR 5.5 million for 12 days. The costs of this training are high and allocation of the training village is always uncertain. Having your own training villages ultimately limits the costs and allocation is guaranteed.
Supporting information for the functional (operational) need	The training opportunities offered by Marnehuizen are insufficient for all the necessary training exercises in urbanised areas. For that reason, additional capacity, comparable in size, is required to perform the necessary exercises in the Netherlands. The estimate of the required capability is as follows: To train platoons for action in urbanised areas, two training weeks per year are needed. The Army has 84 combat platoons, generating a need for 168 training weeks every year. As Marnehuizen can facilitate three platoons at the same time, 56 training weeks per year are needed, which is of course not enough. To train companies for action in urbanised areas, three training weeks per year are needed. The Army has 28 combat companies, generating a need for 84 training weeks each year. As Marnehuizen can facilitate one company at a time, 84 training weeks per year are needed, which is of course not enough. Having a second training village will enable Defence to train combat platoons and companies in urbanised areas. 168 platoon training weeks spread over two training villages results in a need for 28 training weeks per year. 84 company training weeks spread over two training villages results in a need for 42 training weeks per year.[8] Lastly, there is a desire to practice low-level flight in urbanised areas using helicopters and aircraft. In the current situation, that desire cannot be satisfied, but could be if a second training village becomes available. Practicing with drones in urbanised areas is a firm condition for a second training village.
Can the need be quantified? Current situation and the requested growth (movements, days, hours, frequencies, etc.)	Having a second training village will enable Defence to train combat platoons and companies in urbanised areas. 168 platoon training weeks spread over two training villages results in a need for 28 training weeks per year. 84 company training weeks spread over two training villages results in a need for 42 training weeks per year.[9] Two Marine Task Units (MTU) of the Marine Corps must train twice a year in the Netherlands at level 5. An MTU consists of 5 sub-units that should also train at level 4 at least once a year (at least 10 times a year). Smaller sub-units can train at level 3, but need to train more often if there is no space for a level 4 exercise. During these exercises it must also be possible to train with the Netherlands Maritime Special Operations Forces as part of Direct Special Operations Force (SOF) Support. The Netherlands Maritime Special Operations Forces has the need to train twice a year with a unit at level 5 with Marine Corps. Apart from the Special Security Missions Brigade (BSB) and the new police task, the Royal Marechaussee has also scheduled 30 exercise weeks in the urbanised area.

[8] Source: NATO STANDARD NATO Allied Training Publication-3 Education and Training for Urban Operations
[9] Source: NATO STANDARD NATO Allied Training Publication-3 Education and Training for Urban Operations

	The Army Combat Support Units, Combat Service Support Units and Infantry Monitoring and Security Units of the national reserve at both platoon and company level are excluded for the moment. Nor have SOCOM units been considered, which also have training needs in Marnehuizen. Lastly, training facilities are not available all year round due to maintenance and staffing.
Why need in the Netherlands and not abroad?	Units learn the basis of operating in urbanised areas in training and further develop these skills during training and exercises in the Netherlands. Exercises abroad together with foreign units require a higher level of expertise in order to make effective use of these training areas. Using expensive training areas abroad to teach basic skills for operating in urbanised areas is a waste of time. It also saves costly relocation and longer stays abroad. In addition, training villages are in short supply in all NATO countries. All NATO partners are expanding the number of units that need to train in training villages. In addition to the increase in the number of units, those units are intensifying their training in training villages because urban warfare is becoming an increasingly realistic scenario. As a result, there is no guarantee that the Netherlands will be allocated one of these few training villages.
Are there international obligations and what is their source and status?	All Army units assigned a role in the NATO Force Model will be offered to SACEUR after a successful NATO evaluation (Combat Readiness Evaluation[10]) based on standards imposed from the Allied Command Operations Forces Standards Volume II – Land Forces[11]. For example, units must meet the following and other criteria: • Capable of acting as lead force element for urban penetrations or thrusts, in Brigade offensive operations. • Capable of tactical tasks inherent to stability activities, particularly those in close terrain such as dense urban and wooded/mountain areas. By agreeing to the STANAG 6599[12] (NATO Standard ATP-3.2.1.2 Conduct of Land Tactical Operations in Urban Environments), Defence is bound by this standard.
Corresponding need for space	Physical space with different types of buildings to exercise urban warfare and the possibility to exercise in multiple layers (joint), underground and in high-rise buildings. Marnehuizen does not offer this possibility, which is missed. There is a need to practise using drones, helicopters and aircraft, and the Royal Marechaussee also wants to be able to operate in urban areas. The need for space (based on Marnehuizen's specifications) is approximately 200 by 200 m. This space needs a surrounding area of 1 by 1 km to practise scenarios, including approaching and breaking into the place from the surrounding/adjacent site.

[10] Allied Forces Standards Volume VII – Combat Readiness Evaluation
[11] Allied Forces Standards Volume II – Land Forces
[12] STANAG 6599

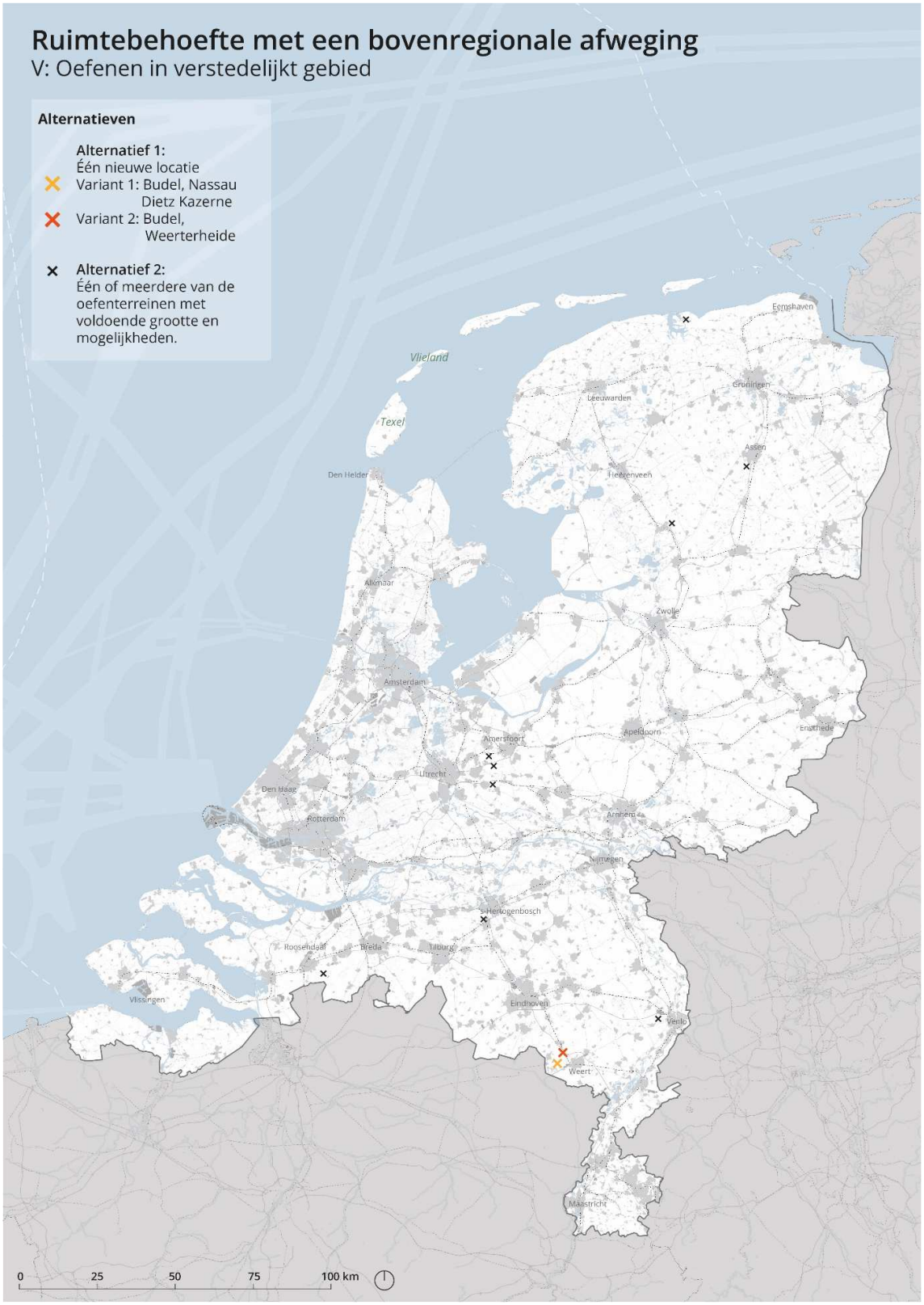
Location requirements	• A physical space with different types of buildings, either existing or newly constructed, with a surface area of approximately 1 by 1 km and sufficient free space around it. • The feasibility of locations in areas where the agricultural transition will play an explicit role is more likely than areas where relatively fewer restrictions apply to agriculture. This is included in the EIAR (but not used in advance as a selection criterion). In view of the activities (low-level flight, helicopter landings), only existing Defence locations qualify. The following requirements apply: • Possibility to practice with drones. • Possibilities for live firing and proximity to a shooting range. • The Royal Netherlands Marechaussee needs a training area where live firing is possible, has requirements for the layout of the site (street circuit, buildings, urban climbing tower, etc.) and must be able to practice shooting and breaching, and do fire drills. This will not lead to additional take-up of space outside the envisaged site. The following wishes apply: • Possibility to exercise with helicopters and aircraft. • Located in a low flying area or in the vicinity of/within sight of the training area • The Royal Netherlands Army, the Marine Corps and special operations forces need guaranteed helicopter landing sites for training.

Plan alternatives to be considered in the EIAR	The following options are possible for exercising in urbanised areas: (1) A new location for conducting exercises in urbanised areas. There are three options: a. Noord-Brabant, Budel, Nassau Dietz Barracks b. Noord-Brabant, Budel, Weerterheide training area, (2) One or more of the existing training areas. The selection criteria are: a. Possibilities for practicing with drones (no no-fly zones) b. Development possibilities (outside Natura 2000 areas); c. Sufficient size (approx. 1x1 km).
Supporting information for how the alternatives were selected	There are two possible alternatives. One is to transform an already developed Defence site into a training village. The location in Budel and the nearby training area are suitable for this. Budel is currently an important reception centre of the Central Agency for the Reception of Asylum Seekers (COA), and talks on the long-term future of this location are still ongoing. The inclusion of Budel as an alternative in the EIA does not mean that a decision with regard to potentially changing its current role or combining both roles, possibly in a phased manner, has been made A second alternative is to use an undeveloped site. In view of the proposed activities (drone use), the only conceivable alternative is to expand the exercise facilities in existing training areas. The most likely candidates are areas that offer development possibilities. These are depicted on the map.

Assessment framework for the EIA plan

The assessment of the impact of this need mainly involves the impact of the activity on existing military (training) sites, including the associated take-up of space. Economic and social aspects are irrelevant. However, aspects such as agricultural land *were* taken into account for the possibility that the size of the site would have to be increased (is not the premise). Based on the assessment framework for this need, the following themes from Table 5.1 are considered in the EIA plan:

Main theme	Theme	Aspects considered
Healthy and Safe Living Environment	Noise	Impact of the development on aviation noise, road traffic noise, railway noise, industrial noise and vice versa
	Air quality	Impact of the development on concentrations of nitrogen dioxide, particulate matter and ultra fine particulate matter
	External safety	Impact of location-bound risk, group risk of the development and vice versa
	Light	Impact of light nuisance caused by the development
Soil and water	Soil	Impact on the soil type, soil contamination due to the development, impact of subsidence and uncovered soil and sponge effect
	Surface water	Impact on the water system, the quality and quantity of present surface water
	Groundwater	Impact on groundwater (quantitative, qualitative) due to the development and impact on drinking water.
	Water safety	Impact on water safety
Nature, landscape and history	Nature	Nature Network Netherlands, Natura 2000 (including nitrogen), protected
	Heritage	Impact on protected cultural-historical values
	Landscape	Impact on landscape values
	Geomorphology	Impact on geographical values
	Archaeology	Impact on archaeological expectation value, protected areas
Climate adaptation	Floods	Impact of flood risk on the development
	Drought	Impact of drought on the development
	Rainproof	Impact of a heavy shower (120 mm in 2 hours) on the development
Use of space	Recreation	Impact of the development on recreational areas
	Agriculture	Impact of the development on valuable agricultural land and areas
	Land ownership	The extent of land owned by public authorities and/or the number of owners potentially affected
	Energy networks	Impact on underground and aboveground energy networks (and storage and generation) in the developments and vice versa
Energy and Circularity	Grid capacity	Impact of grid congestion on the developments
Defence-specific	Suitability for military use	See location requirements
Interfaces	Interference with national interests	Opportunities and threats from current Government programmes


Ruimtebehoefte met een bovenregionale afweging
V: Oefenen in verstedelijkt gebied
Alternatieven
Alternatief 1:
Één nieuwe locatie
Variant 1: Budel, Nassau Dietz Kazerne
Variant 2: Budel, Weerterheide
Alternatief 2:
Één of meerdere van de oefenterreinen met voldoende grootte en mogelijkheden.
Vlieland
Texel
Den Helder
Alkmaar
Amsterdam
Leeuwarden
Groningen
Emshaven
Assen
Heerenveen
Zwolle
Amersfoort
Apeldoorn
Enschede
Utrecht
Den Haag
Rotterdam
Arnhem
Nijmegen
's-Hertogenbosch
Roosendaal
Breda
Tilburg
Vlissingen
Eindhoven
Venlo
Weert
Maastricht
0
25
50
75
100 km

FUNCTIONAL (OPERATIONAL) NEED: **Amphibious training area**	
Explanation of the functional (operational) need	There is much need for multiple possibilities for amphibious training and exercise in the Netherlands. At the current and only amphibious training and exercise location (Texel), Defence is running into the problem of erosion, which is affecting the usability of the site. The possibility of expansion to meet the current desired training is already being examined. With a view to the future and the anticipated increased activity, the possibilities for amphibious training and exercise in the Netherlands need to be expanded. Small tactical landings (group level) are possible on Texel, but Texel is too small to adequately facilitate the basic landings. Larger exercises with a higher degree of difficulty are not yet possible in the Netherlands, such as advancing towards a target (in a training area) after landing. There are two obstacles for amphibious exercises: Texel is too small and offers too little value in terms of training (qualitative) and has insufficient capacity to accommodate all exercises (quantitative). An additional problem is that there are no possibilities in the Netherlands to exercise going deep inland (only landing is possible on Texel). In addition, certain wind directions and currents make it impossible to land at the southern tip of Texel, thereby restricting basic and other training. Having other landing points would increase the possibilities for training and practising landings and reduce the risk of basic and other training being postponed.
Supporting information for the functional (operational) need	In the current situation, there is already too little space to provide basic amphibious training. Considering the level of ambition (which includes the ability to put units on land), a larger area is needed to meet that need. In addition, the increasingly scaled back current area must also be maintained. This area remains key for maintaining the level of training, education, and basic readiness. The current location of the landing vessels in the Noordkop largely determines the required basic readiness training and exercise areas, to be mainly located nearby due to travel time by boat. Higher level training and exercising requires a larger area. This is not so much about having a large uninterrupted area along the coast, but about landing points on the Dutch coast, where a small number of landing vessels may drop off marines and a few vehicles on the beach and advance inland.
Can the need be quantified? Current situation and the requested growth (movements, days, hours, frequencies, etc.)	In the current situation, when the currents and wind do not prevent this, troops land at the southern tip of Texel that was designated and permitted for that purpose. This is done daily for exercise and training purposes with landing vessels and units (marines and vehicles). However, this area is becoming smaller due to the erosion of the terrain and does not offer the training value needed to make safe landings in all conditions. The Royal Navy needs the following to practice amphibious landings properly: • Daily level 1-3 training and exercise at several places along the Dutch coast (landing on the beach; this specific activity is not part of the EIA study. Defence is looking for other generic solutions.) • Level 4 exercise about ten times a year. • Level 5 exercise no more than once a year. This is part of the Defence need for joint exercises in the Netherlands, where landing vessels may land over a larger area in order to drop off marines and vehicles before they move inland to a military or other training area or object. This does not involve one major landing point where all vessels land to drop off marines and vehicles, but different landing points where one or two landing vessels land at each point to drop off marines and vehicles before they move inland. This should also take into account flying materiel (drones, helicopters, RTT (fly suit) during exercises and underwater drones and scooters.

Why need in the Netherlands and not abroad?	Training of the skippers of the landing vessels and working-up the crews for exercises is done in the Netherlands. First, the sailing school is located in Den Helder, and it makes sense to use the boats we have in the Netherlands for training in addition to their operational tasks. Second, the boats are maintained in the Netherlands and after a maintenance period, a crew has to work-up/train with the improved boats in order to operate safely and effectively. Executing landings (with and without personnel/vehicles) and shooting from boats is part of this preparation/training.
Are there international obligations and what is the source and status?	In the context of the *Memorandum of Understanding (MOU) The United Kingdom / Netherlands Amphibious Force* and *Tri Marine Staff Talks* (GBR, USA, NLD), there is international cooperation with the countries involved. The cooperation (MOU was re-signed by MINDEF in July 2023) is based on the fact that each country contributes to the cooperation. The cooperation with the UK Royal Marines is the most far-reaching cooperation in this respect and means that, among other things, mutual use is made of each other's training and training areas. Possibilities for international cooperation are constantly being sought to create new exercise and training possibilities for the countries' own units abroad. The Netherlands is expected, however, to do something in return. The amphibious operations and the related requirements imposed on amphibious units are described in the following NATO and the Netherlands documents: - ATP-08 volume I: Doctrine for amphibious operations; - ATP-08 volume II: Tactics, Technics & Procedures for amphibious operations; - ATP-08 volume III: Riverine operations; - ATP-08.1: Amphibious operations interoperability matrix; - ATP 115: Amphibious reconnaissance reports; - Maritime Doctrine Publication Amphibious Operations (MDP AO).
Corresponding need for space	- More space is needed for the current need (initial landing, technical/tactical landing, level 2-3 basic (landing on the beach; this specific activity is not part of the EIA study. Defence is looking for other generic solutions.) - In addition to expanding landing locations, it is desirable if inland strips are available for exercises in engaging with a target. - There is a need: live firing from boats. This can be done on Vlieland using live ammunition and pyrotechnic means. - There is a need for different landing sites along the Dutch coast to provide for variety in training and education. - The training areas for levels 4 and above should preferably correspond as much as possible to the low flying areas of the maritime helicopters and the SOF helicopters, since amphibious operations mean that marines are transported from the sea by water and air to the coast in order to be able to carry out operations on land.
Location requirements	• A relatively narrow landing point (50 metres wide) is sufficient for one or two vessels. A number of landing points requires an inland zone of approximately 2 kilometres or more up to a exercise location/training object. These inland objects can easily have a dual use, with other Defence service branches also using the location/object (such as Petten and Marnewaard). • Several landing points along the Dutch coast are needed for the basic training and exercises to carry out landings with various wind directions and currents. • The location must be at a reasonable navigable distance from the marines based on Texel. • The landing points connected to an inland object should preferably correspond as much as possible to the low flying areas of maritime and SOF helicopters. • The presence of the training area in Marnehuizen makes alternative 2B the most suitable from an operational perspective. However, the sensitive nature of De Waddenzee in particular necessitates a broader assessment.

Alternatives ("how") & Variants ("where")	(1) New location, including strip inland a. Petten b. Marnewaard, Marnehuizen c. Vliehors d. Maasvlakte (2) Expansion with live firing from water to land a. Vliehors (for firing from sea to land)
Substantiation of the alternatives selected	The alternatives are limited to areas situated at a reasonable navigable distance from the current location of the landing vessels in the Noordkop (Marinecomplex De Nieuwe Haven and Texel). This is due to the high exercise frequency: the area for practising amphibious landing is used every day. This makes sites situated on the southern coast a less obvious choice from this point of view. A narrow strip is sufficient for practising basic skills. Any further exercises (including approaching training objects) are a separate requirement that falls under the need for joint exercises.
Assessment framework for the EIA plan	This need is about exercises and less about taking up space that damages the surface (for example, no buildings are to erected). This makes not only the theme of the surface, but also socio-economic themes, irrelevant. Air quality was also not included due to the lack of (or very minor) impact on the concentrations. Water is included, however, from the perspective of drinking water areas and/or surface water. Based on the assessment framework for this need, the following themes from Table 5.1 are considered in the EIA plan:

Main theme	Theme	Aspects considered
Healthy and Safe Living Environment	Noise	Impact of the development on aviation noise, road traffic noise, railway noise, industrial noise and vice versa
	External safety	Impact of location-bound risk, group risk of the development and vice versa
	Light	Impact of light nuisance caused by the development
Soil and water	Surface water	Impact on the water system, the quality and quantity of present surface water
	Groundwater	Impact on groundwater (quantitative, qualitative) due to the development and impact on drinking water.
	Water safety	Impact on water safety
Nature, landscape and	Nature	Nature Network Netherlands, Natura 2000 (including nitrogen), protected
	Heritage	Impact on protected cultural-historical values
	Landscape	Impact on landscape values
Use of space	Recreation	Impact of the development on recreational areas
	Land ownership	The extent of land owned by public authorities and/or the number of owners potentially affected
	Energy networks	Impact on underground and aboveground energy networks (and storage and generation) in the developments and vice versa
Defence-specific	Suitability for military use	Travel distance to Texel Restriction for shared use
Interfaces	Interference with national interests	Opportunities and threats from current Government programmes


Ruimtebehoefte met een bovenregionale afweging
VI: Nieuw amfibisch oefengebied
Alternatieven
Alternatief 1: Uitbreiden oefenplaatsen landingsvoertuigen, inclusief diepe infiltratie-mogelijkheid
Alternatief 2: Uitbreiden oefenplaatsen landingsvoertuigen, inclusief optie voor Life firing vanaf voertuigen
Marnehuizen
Vlieland
Texel
Petten
Maasvlakte
Eemshaven
Leeuwarden
Groningen
Assen
Heerenveen
Den Helder
Alkmaar
Zwolle
Amsterdam
Amersfoort
Apeldoorn
Enschede
Utrecht
Den Haag
Rotterdam
Arnhem
Nijmegen
's-Hertogenbosch
Breda
Tilburg
Roosendaal
Vlissingen
Eindhoven
Venlo
Weert
Maastricht
0
25
50
75
100 km

FUNCTIONAL (OPERATIONAL) NEED: **Guaranteed port capability for Host Nation Support**	
Explanation of the functional (operational) need	Defence needs sufficient, guaranteed port capabilities (mooring and transhipment capability) for handling multiple ships bearing military cargo at the same time. In this need, "guaranteed" means that Defence must be able to make permanent and ad hoc use of port capacity without having to coordinate. This is particularly necessary as the Netherlands has committed itself within NATO to Host Nation Support (HNS) activities and as a transition country.
Supporting information for the functional (operational) need	*Port capability* *Defence wishes to stand out internationally even more in terms of military mobility. We already have a leading role in that respect and we want to keep that position. The Netherlands is an important transit country for the armed forces of the US, Canada and the UK. Our allies must be able to rely on us to support their troops for longer periods of time* (Defence Vision 235, page 30). Defence currently uses two ports for Military Mobility and HNS, the Eemshaven and Vlissingen. Vlissingen has been designated as a primary port for HNS operations. This involves units up to brigade size arriving in Europe in multiple ships before being transported by road, rail and inland waterway to their final destination. Because of the regular port activities (including the transhipment of containers and bulk goods) and the increased activities in connection with the energy transition, ad hoc free port space with the required size is very scarce. The transhipment of containers in particular, including dangerous goods, requires a location in the port of Rotterdam with guaranteed availability. In addition, a third port is necessary for redundancy and spreading the burden on the facilities and port and traffic infrastructure. *Temporary storage* As shipping military vehicles and stocks usually involves handling hazardous substances (including ammunition and fuel), It is essential that hazardous substances are permitted to be stored temporarily at the port locations used by Defence. If a port is used for HNS operations, it must allow for the large-scale transit of ammunition. Defence wants to have 'guaranteed use' to perform its tasks, meaning that this does not include temporary locations and temporary activities. Preferably, a designated port site will be obtained and arrangements made for another site, for guaranteed use. This preference partly stems from the Security Strategy for the Kingdom of the Netherlands, which indicates that port sites are increasingly controlled by foreign powers (like China).
Can the need be quantified? Current situation and the requested growth (movements, days, hours, frequencies, etc.)	In the current situation, at least twice a year for around three weeks for a U.S. Brigade Combat Team, but this is expected to increase.
Why need in the Netherlands and not abroad?	In fact, the demand for space pertains to the landing of materiel in the Netherlands. Given that the goods arrive in the Netherlands before being transported to other NATO countries (status as a transition country in NATO context).
Are there international obligations and what is their source and status?	Defence needs sufficient, guaranteed port capabilities (mooring and transhipment capability) for handling multiple ships bearing military cargo at the same time. This is particularly necessary as the Netherlands has committed itself within NATO to Host Nation Support activities and as a transition country.

Corresponding need for space	To transport an average unit by sea requires a site is for the loading/unloading of ships where approximately 3,500 metres of vehicles and containers can be lined up. When a VJTF unit the size of a battalion group is moved to the deployment area, four to five vessels in successive order are required. Depending on the country / exercise / mission, the need may be greater. A ship will usually remain in the port for three weeks to unload all the goods, before the goods are loaded back onto the ship at a later point in time. Currently, the US already uses a Dutch port twice a year, meaning that the site must be reserved for at least six weeks. An increase in exercises will increase the number of weeks.
	The EU military requirements[13] on a port site include that a minimum space of 7.5 ha is available for lining up vehicles and that the deposit of ammunition and fuel is permitted and possible. The minimum length of the quay must be 400 metres long and 40 metres wide and approachable for ships with a draught of 15 metres. The provision of a Roll on, Roll off Ramp is also required.
Location requirements	The location requirements that apply to designating a port for Host Nation Support are: • The seaport must have vehicle loading and unloading platforms of at least 7.5 ha • Ammunition and fuel must be permitted to be deposited. • The minimum length of the quay must be 400 metres long and 40 metres wide. • Approachable for ships with a draught of 15 metres. • The provision of a Roll on, Roll off Ramp. • Need for ownership of part of the access and exit roads to the HNS location, as well as access to rail transport. • Facilities for refuelling vehicles, or possibilities thereto. • 3,500 metres of space for lining up vehicles and containers • Capacity for side loading in connection with containers (at least 30 metres) • Track length at least 600 metres (train length 550 metres + locomotive) • Head loading (MLC80) for loading and unloading trains (mobile, if possible)
Alternatives to be considered in the EIA plan	The ports of Amsterdam and IJmuiden are not promising, because they can only be accessed via a lock. This is undesirable for quick transit and the availability of an unobstructed shipping lane at all times. Den Helder is not promising either, because it is too shallow for the heaviest cargo ships and the tide works against it. This means that the remaining major seaports, **Vlissingen**, **Rotterdam** and **Eemshaven,** are the alternatives to be examined (possibly with various interior lots)
Supporting information for how the alternatives were selected	The selection of locations for guaranteed port capability of Host Nation Support has already been described in the previous passages. Developing a new port is out of the question because of additional costs and infrastructure. Of the existing large seaports, only a few meet the specific location requirements, as explained above. This leaves the Vlissingen, Rotterdam and Eemshaven ports as the alternatives to be examined.

[13] Military Requirements for Military Mobility within and beyond the EU, no. 11373/19, dated 19 July 2019.

Assessment framework for the alternatives

The assessment of the impact of this need mainly involves the impact of the take-up of space on the present values and impact within the three port alternatives. This is already a built-up area where the damage to existing values (with the possible exception of ecology) has already been done as a result of the construction of the port itself. This means that various themes that focus on values (such as cultural history and geography) have not been included in the assessment framework. Various other themes, including social and economic issues, are also irrelevant to this need. Based on the assessment framework for this need, the following themes from Table 5.1 are considered in the EIA plan:

Main theme	Theme	Aspects considered
and Safe Living environment	Noise	Impact of the development on aviation noise, Healthy road traffic noise, railway noise, industrial noise and vice versa
	Air quality	Impact of the development on concentrations of nitrogen dioxide, particulate matter and ultra fine particulate matter
	External safety	Impact of location-bound risk, group risk of the development and vice versa
Nature, species landscape and history	Nature	NNN, Natura 2000 (including nitrogen), protected
adaptation	Floods	Impact of flood risk on the development Climate
	Drought	Impact of drought on the development
	Rainproof	Impact of a heavy shower (120 mm in 2 hours) on the development
	Energy networks	Impact on underground and aboveground energy networks (and storage and generation) in the developments and vice versa
Energy and Circularity	Grid capacity	Impact of grid congestion on the developments
	Circularity	Opportunities for raw material reuse in the
	Energy	Opportunities for sustainable energy generation in the development
Defence-specific	Suitability for military use	See specific location requirements
Interfaces	Interference with national	Opportunities threats from current and Government


Need for space subject to a supra-regional assessment
VII: Guaranteed port capability of Host Nation Support
Possible locations for Host Nation Support
Eemshaven
Rotterdam
Vlissingen
0
25
50
75
100 km

<table>
<tr><th colspan="2">FUNCTIONAL (OPERATIONAL) NEED:
Increase in use of fighter aircraft capability</th></tr>
<tr><td>Explanation of the functional (operational) need</td><td>The space available for Defence to conduct its military flying activities in the Netherlands is small because Soesterberg Air Base, Twente Air Base and Valkenburg Naval Air Base were disposed of in the previous decade, and De Peel Air Base was given a new designation.

In order to stay within the existing noise allowance, it was foreseen that continuous optimisation of business operations would be necessary. This means, among other things, intensive use of simulators, training exercises (and missions) conducted abroad, the use of other air bases and route optimisation. The limits of the existing noise allowance have been reached, and there are insufficient opportunities for additional aviation-related activities .
Meanwhile, the international security situation has seriously deteriorated Therefore, intensification of fighter aircraft activity in the Netherlands must be taken into account, both in terms of an increase in flight activities of Dutch fighter aircraft, and in terms of an increase of foreign fighter aircraft in the Netherlands. This increase takes place in the peacetime vigilance phase. This is the phase leading up to a conflict, in which Article 5 has not (yet) been triggered. In this phase, the usual laws and regulations apply. This intensification is not only taking place in the Netherlands, but also among EU and NATO partners.

The Russian threat is urgent and NATO plans, including the NATO concept for the Deterrence & Defence of the Euro Atlantic Area (DDA), have been recalibrated to increase readiness, deployability and preparedness in Europe. This leads to an increase in fighter aircraft activity in the Netherlands with regard to the following activities:
• Large-scale NATO exercises: The Netherlands is expected to contribute to large-scale NATO exercises. The aim of these major international training exercises is to coordinate tactics while at the same time contributing to deterrence. This requires space for temporary accommodation of international aircraft, materiel and personnel at Dutch military airfields. This also requires noise allowance. Examples of major training exercises are Frisian Flag, Air Defender and NATO Flag.
• International beddown: In 2012 and 2016, the Netherlands offered four locations for the beddown of international aircraft to faciltate possible troop build-up in Europe (Leeuwarden, Volkel, Gilze-Rijen and Eindhoven air bases). The increased threat has also increased the chance of practising or even activating this functionality and thus also on additional flight operations from Dutch territory and in Dutch airspace.
• Agile Combat Employment (ACE) concept: The war in Ukraine has shown that airfields are vulnerable to attack. To reduce this vulnerability, NATO has prioritised the ACE concept, a network of various types of airfields that aircraft can alternate between in order to reduce the risk of successful attacks by an opponent. This network and/or the practice of the concept requires additional available space in the Netherlands. This NATO priority resulted in, among other things, American F-35s and F-22s temporarily being stationed at Leeuwarden Air Base in October 2022.</td></tr>
<tr><td>Supporting information for the functional (operational) need</td><td>These activities do not fit within the current (noise) allowance offered by the active air bases, as well as the potential intensification of flight activities of Dutch fighter aircraft in the peacetime vigilance phase, to increase readiness and deployability.</td></tr>
</table>

Can the need be quantified? Current situation and the requested growth (movements, days, hours, frequencies, etc.)	With regard to the quantitative need in the peacetime vigilance phase, the question is which criterion is the most important. In operational terms, this is the ACE concept. The following applies: The more locations, the better. At the same time, the Netherlands offers little space for many locations and obtaining many noise contours is complicated, which is why we need to find a happy medium. To provide that medium, a summary and brief elaboration of the criteria follows: 1. The number of locations must be sufficient for the beddown of 45 Dutch aircraft divided over 3 squadrons (current financing) and reserve airfield function. 2. The number of locations must be sufficient for accommodating international beddown and offering Host Nation Support. The fact that in 2012 and 2016, the Netherlands committed to making a total of 4 locations available to NATO could be a factor here. These locations must provide space for approximately 40 fighter aircraft and 10 air transport/air-to-air refuelling (lutra/AAR) aircraft (Leeuwarden, Volkel, Gilze-Rijen and Eindhoven air bases). 3. The number of locations must be sufficient to implement the ACE concept. The more locations, the better the ACE concept can be implemented. Quantitative substantiation of the current situation and the need. 1. The planning figure for the peacetime vigilance phase is 7500 sorties. This results from a mix of increases in international activities (ACE concept, international beddown and flag exercises) and/or the increase of the number of yearly flight hours per Dutch aircraft. 2. The Netherlands currently has two Main Operating Bases: Volkel Air Base (2.000 sorties) and Leeuwarden Air Base (2.700 sorties). In accordance with international agreements, Eindhoven Air Base and Gilze-Rijen Air Base offer international beddown for fighter aircraft. This comprises around 250 sorties at Eindhoven Air Base and around 250 sorties at Gilze-Rijen Air Base (secondary functions). In total, this means that the Netherlands has guaranteed operational space for 5200 sorties (2.700+2,000+250+250). 3. The Netherlands therefore needs operational space for an additional 2.300 sorties (7.500-5.200=2.300) in order to have enough planning space available in the peacetime vigilance phase. This is including finding a suitable air base for the reserve air base function. For Gilze-Rijen Air Base, it has already been agreed that an alternative air base will have to be found for the reserve air base function (the guaranteed use of 250 sorties at Gilze-Rijen is not affected by this).
Why need in the Netherlands and not abroad?	The operations have already been adapted to fit in the use of fighter aircraft, including training and education abroad. However, as described, the intensification of activities in the Netherlands, such as international beddown, HNS, ACE and flag exercises, must be taken into account. Those activities are an alliance task in which each country ensures that sufficient space is offered on its own territory.
Are there international obligations and what is their source and status?	• NATO AIR BASING SELECTION (MCM-0057-2013): MC approval for Volkel and other locations as a location for fighter aircraft; • OPERATIONAL REQUIREMENTS FOR AIR BASING ADDITIONAL REQUIREMENTS (IMSM-0168-2020): quantification of visiting international units • NATO concept for the Deterrence & Defence of the Euro Atlantic Area (DDA) • NATO regional plans (RP) • AIRCOM news letter 26 July 2023: Agile Combat Employment (ACE) as 5th priority
Corresponding need for space	- Airport regulatory enforcement decisions with appropriate noise contours; - Infrastructural adjustments.

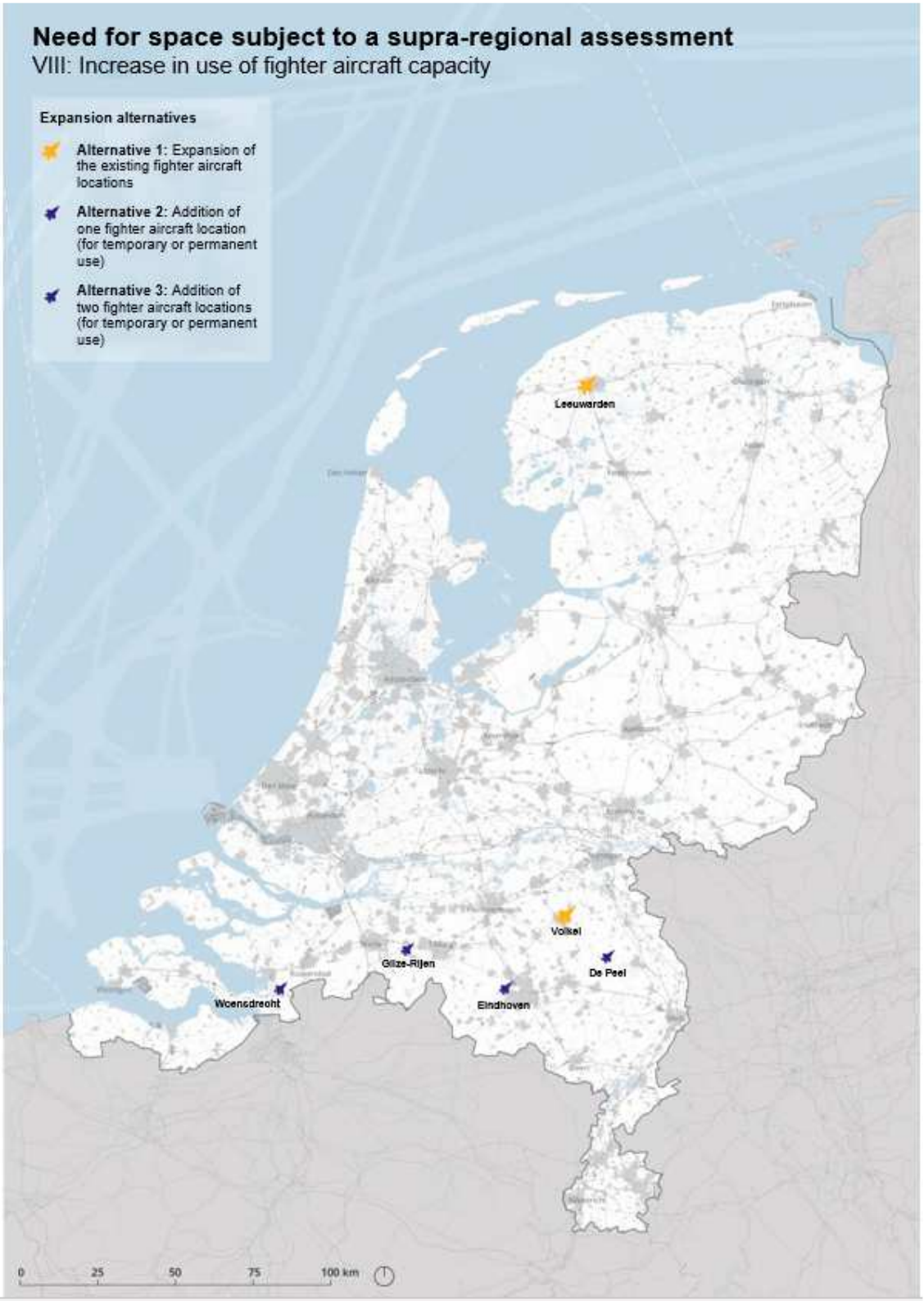
<table>
<tr><td>Location requirements</td><td colspan="2">- The forms and total surface area of the noise contours must be sufficient for the number of annual sorties referred to;
- The total number of locations must continue to provide sufficient physical space and noise allowance for the other flying systems of the Royal Netherlands Air Force (helicopters, Lutra/AAR and MQ9).</td></tr>
<tr><td>Alternatives ("how") & Variants ("where")</td><td>(1) Available locations as a restriction;
(2) Addition of one fighter aircraft location (for temporary or permanent use);
(3) Addition of two more fighter aircraft locations (for temporary or permanent use).</td><td>(1) Increase contours in Leeuwarden and Volkel.
(2) Maintain contours in Leeuwarden and Volkel. Expansion at Eindhoven, Gilze-Rijen, Woensdrecht, reopening De Peel or cooperation with a civil airport.
(3) Only in the event of growth: Maintain contours in Leeuwarden and Volkel. Expansion at two locations, choice: Eindhoven, Gilze-Rijen, Woensdrecht, reopening De Peel and/or cooperation with a civil airport.</td></tr>
<tr><td>Supporting information for how the alternatives were selected</td><td colspan="2">(1) The existing contours of the fully operational Volkel and Leeuwarden MOBs will be adjusted in this option in order to accommodate the additional activities.

(2) In this option, the existing contours of Volkel and Leeuwarden remain unchanged. The 2.300 extra sorties are carried out at one of the other five locations.

(3) In this option, the existing contours of Volkel and Leeuwarden remain unchanged. The 2.300 extra sorties are carried out at two of the other five locations.

(4) At this stage, Deelen and De Kooy are not considered suitable for fighter aircraft due to the specifications of the infrastructure/runways and runways and the location with regard to buildings and/or nature.</td></tr>
<tr><td></td><td colspan="2">The alternatives are based on the stationing of (additional) fighter aircraft at the alternative locations. The physical space taken up by these alternatives will not increase. That is why this relates to the impact of the fighter aircraft themselves (such as noise, safety, nitrogen, etc.). In addition, the extent to which climate-adaptive aspects are distinctive between the various alternatives will be considered. However, this is unrelated to the activity of the fighter aircraft themselves. Based on the assessment framework for this need, the following themes from Table 5.1 are considered in the EIA plan:
<table>
<tr><th>Main theme</th><th>Theme</th><th>Aspects considered</th></tr>
</table></td></tr>
</table>

Assessment framework for the EIA plan	Healthy and Safe Living Environment	Noise	Impact of the development on aviation noise, road traffic noise, railway noise, industrial noise and vice versa
		Air quality	Impact of the development on concentrations of nitrogen dioxide, particulate matter and ultra fine
		External safety	Impact of location-bound risk, group risk of the development and vice versa
		Light	Impact of light nuisance caused by the development
		Vibrations	Impact of vibrations on the development and vice versa
	Nature, landscape and history	Nature	NNN, Natura 2000 (including nitrogen), protected species
	Climate adaptation	Floods	Impact of flood risk on the development
		Drought	Impact of drought on the development
		Rainproof	Impact of a heavy shower (120 mm in 2 hours) on the development
	Use of space	Energy networks	Impact on underground and aboveground energy networks (and storage and generation) in the developments and vice versa
	Social and vital	Economy	Impact and opportunities on employment, knowledge & innovation in the development
	Defence-specific	Suitability for military use	See location requirements, including assessment based on the ACE concept
	Interfaces	Interference with national	Opportunities and threats from Government programmes


Need for space subject to a supra-regional assessment
VIII: Increase in use of fighter aircraft capacity
Expansion alternatives
Alternative 1: Expansion of the existing fighter aircraft locations
Alternative 2: Addition of one fighter aircraft location (for temporary or permanent use)
Alternative 3: Addition of two fighter aircraft locations (for temporary or permanent use)
Leeuwarden
Volkel
Gilze-Rijen
De Peel
Woensdrecht
Eindhoven
0
25
50
75
100 km

FUNCTIONAL (OPERATIONAL) NEED: **Unmanned maritime helicopters**	
Explanation of the functional (operational) need	Unmanned systems/drones are a high Defence priority. Partly due to the war in Ukraine, it has become clear that drone use has a strong effect on combat situations. To support the use of maritime drones, Defence has a need for deployment of unmanned helicopters/drones. These are unmanned helicopters for mine countermeasures and maritime exploration: intelligence, surveillance and reconnaissance (ISR). Exercises with these systems are possible within the existing training areas EHD41, EHD42 and EHR8. Its maritime nature designates De Kooy as the only logical place for stationing these drones. From here, corridors to the aforementioned training areas are needed.
Supporting information for the functional (operational) need	The proposed unmanned helicopters and the Skeldars already purchased are primarily intended for operations in the maritime domain in combination with the NH-90 and ships. For that reason, it makes sense to station the unmanned helicopters on MVK De Kooy. Training areas are used for training exercises. The existing training areas at sea (EHD41, EHD42 and the EHR8) can be used for this. Leaving De Kooy and flying back and forth to these training areas requires space. These corridors are not only used for training exercises, but are also necessary to protect vital infrastructure. In the current situation, the airspace would be shared with other air traffic. The drones are heavier than 150 kg (Skeldar weighs around 250 kg). This means that they must comply with aviation requirements, but that is not yet the case, and that they must be separated from other air traffic. The current airspace with the accompanying regulations does not provide sufficient possibilities to separate unmanned and manned air traffic. This is lower airspace and therefore not subject to airspace review. This is why corridors are needed between MVK De Kooy and the aforementioned areas.
Can the need be quantified? Current situation and the requested growth (movements, days, hours, frequencies, etc.)	This is not yet known. It is expected that this will involve half a squadron and the associated flight hours. Many of the flight hours (at least half) will be used for deployment from ships at sea. The remaining hours will be used for training exercises in the areas mentioned. The corridors are only activated for the transition to those training areas by means of NOTAMS. This will be done a few times a week for limited time slots.
Why need in the Netherlands and not abroad?	The Skeldars will be used in cooperation with Belgium. However, due to certification requirements in accordance with | European Union Aviation Safety Agency (EASA) regulations, it is expected that the Skeldar must deploy from MVK De Kooy. This also makes sense because the Skeldar has a strong link with the NH-90 in joint action on board the ships. The unmanned helicopters for the purpose of ISR are also used in joint action with the ships. The ships are located in Den Helder, making MVK De Kooy the most logical location.
Are there international obligations and what is their source and	Skeldars used together with Belgium.
Corresponding need for space	The use of the drones stipulates the ability for take off and landing from MVK De Kooy. After take-off, there must be sufficient space (within the airspace of MVK De Kooy) to climb to the appropriate altitude and to descend upon return. This may impose limitations on future wind farms. Lastly, the drones fly back and forth to training areas EHD41, EHD42 and EHR8 in narrow corridors.

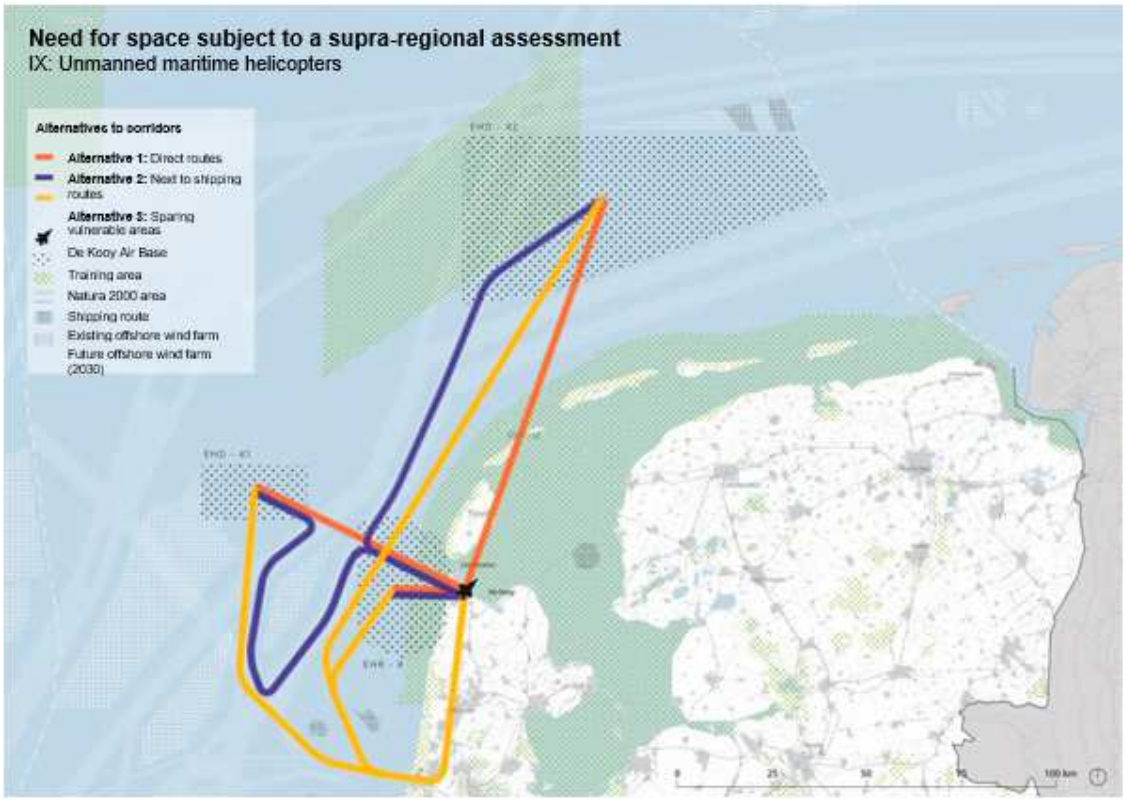
Location requirements	• Take-off and landing location is MVK De Kooy. • The training areas to be reached are EHD41, EHD42 and EHR8. • No physical interventions are anticipated (except for possible modifications to the site of De Kooy itself). • Corridors are up to 3 km wide. • Flight altitude is approximately 3,000 feet (914 metres) with an altitude range of 1,000 feet (305 metres).

Alternatives to be considered in the EIA plan	One take-off and landing location (MVK De Kooy) and various corridor alternatives to the training areas.	In accordance with shipping routes of naval vessels to training areas
		Straight line to training areas
		Avoid sensitive areas on the way to training areas on land and at sea.
Supporting information for how the alternatives were selected	There are no alternatives to MVK De Kooy, due to the presence of the navy in Den Helder. Approaching the training areas at sea from another air base is not efficient, because of the large distance from the maritime units to those air bases. Wind farms, shipping routes and nature reserves are of particular interest at sea. The alternatives were designed along these three interests. The alternatives each relate to these areas in a different way. The first alternative follows the shipping routes of naval vessels to training areas, not taking into account sensitive areas. The second alternative is the most efficient alternative: a straight line to the training areas. The third alternative takes into account the most explicitly present obstacles to air traffic: quiet areas, Natura 2000 and wind farms (at sea).	

Assessment framework for the EIA plan

The alternatives are based on maritime drones being stationed on MVK De Kooy. The space taken up by this base will not increase. That is why this relates to the impact of the drones themselves (such as noise, safety, nitrogen, etc.). In addition, the impact of climate adaptive aspects on MVK De Kooy is examined. However, this is unrelated to the activity of the drones themselves. For the corridors, particular attention is paid to noise, impact on energy transition, nature and shipping routes. Based on the assessment framework for this need, the following themes from Table 5.1 are considered in the EIA plan:

Main theme	Theme	Aspects considered
Healthy and Safe Living Environment	Noise	Impact of the development on aviation noise, road traffic noise, railway noise, industrial noise and vice versa
	Air quality	Impact of the development on concentrations of nitrogen dioxide, particulate matter and ultra fine
	External safety	Impact of location-bound risk, group risk of the development and vice versa
	Light	Impact of light nuisance caused by the development
	Vibrations	Impact of vibrations on the development and vice versa
Nature, landscape and history	Nature	NNN, Natura 2000 (including nitrogen), protected species
Climate adaptation	Floods	Impact of flood risk on the development
	Drought	Impact of drought on the development
	Rainproof	Impact of a heavy shower (120 mm in 2 hours) on the development
Social and vital	Economy	Impact and opportunities on employment, knowledge & innovation in the development
Use of space	Energy networks	Impact on underground and aboveground energy networks (and storage and generation) in the developments and vice versa
Defence-specific	Suitability for military use	Impact on shipping routes
Interfaces	Interference with national	Opportunities and threats from Government programmes


Need for space subject to a supra-regional assessment
IX: Unmanned maritime helicopters
Alternatives to corridors
Alternative 1: Direct routes
Alternative 2: Next to shipping routes
Alternative 3: Sparing vulnerable areas
De Kooy Air Base
Training area
Natura 2000 area
Shipping route
Existing offshore wind farm
Future offshore wind farm (2030)

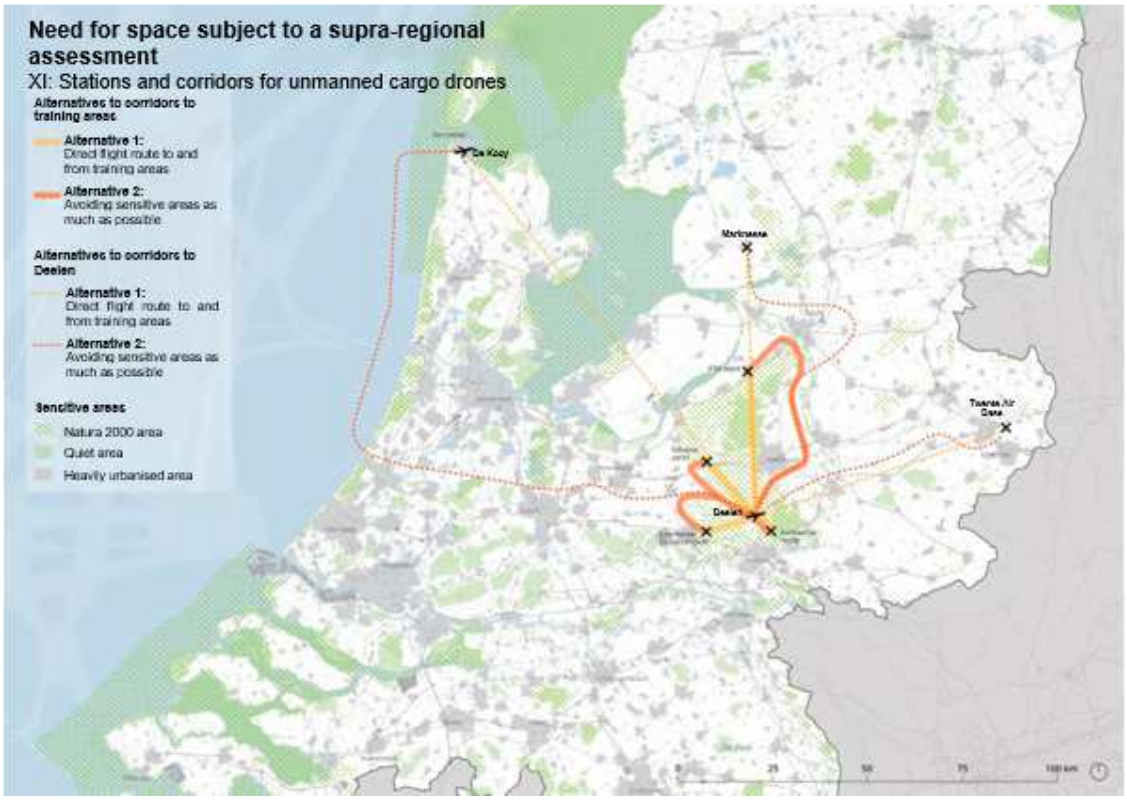
FUNCTIONAL (OPERATIONAL) NEED: **Stationing and corridors for cargo drones**	
Explanation of the functional (operational) need	Drones are a high Defence priority. Partly due to the war in Ukraine, it has become clear that drone use has a strong effect on combat situations. Drone training above land requires locations where the cargo drones can be stationed. Corridors to the existing training areas in the Netherlands are also needed. The rate of drone development is rapid. Cargo drones can help Defence supply troops in the last tactical mile quicker, more safely and with less personnel.
Supporting information for the functional (operational) need	Unmanned systems (drones) are already being used for transport and are expected to also be used for larger transport of materiel and other supplies: the cargo drones. The need for these systems is considerable because they secure supplies under dangerous combat conditions and during bad weather. These systems will be put on the market in the near future and Defence will meet this need. Imports of such unmanned systems contribute to a more labour-extensive armed forces, as also formulated in Defence Vision 2035. This will have more effect with the same numbers of people, but with less risk for personnel. In order to also be able to train and exercise together with the Army, space is needed on the one hand at existing air bases and on the other hand corridors for the cargo drones to one or more training areas. It must be possible to conduct these operations with other units in an integrated manner, as part of multi-domain operations. Deelen Air Base is the proposed location for these operations. This location has already been proposed for cooperation between Air Force helicopters and the Army 11th Airmobile Brigade (particularly if the tactical air transport is also expanded by a dirt strip and short runway at Deelen Air Base). Adding operations with unmanned helicopters makes sense, particularly given the future cargo drones. To facilitate this, a corridor is also needed between MVK De Kooy (Den Helder) and Deelen Air Base.
Can the need be quantified? Current situation and the requested growth (movements, days, hours, frequencies, etc.)	There are various current drone needs that play a role in this need. The need cannot yet be quantified precisely: this is related to the number of systems to be purchased by both the Royal Navy and the Royal Army. It is currently expected that, in any event, the desired flying corridors will not be used every day at the time the systems are purchased.
Why need in the Netherlands and not abroad?	In addition to the technical possibilities of flying cargo drones, tactics and procedures will also have to be developed and practiced with the units that will eventually be using the drones. These units are located at or near the aforementioned landing points. If no space is made available for cargo drones in the Netherlands, all tests and experiments would have to take place abroad, making it far more expensive due to the additional costs of having units train abroad. Giving Deelen Air Base "experimental" status, as is now the case with 't Harde, would be ideal.
Are there international obligations and what is their source and	No, there are currently no international obligations.

Corresponding need for space	The cargo drones must be stationed. The integrated operations and training exercises make Deelen Air Base the most logical location. This requires creating space at the airbase, which must be in line with the existing land use. However, it may have an impact on the required environmental space. As the corridor also extends to and includes MVK De Kooy, it is important that physical space and environmental space are also available for this. This would mean adding flight movements and corridors at other locations, which is undesirable in view of the existing flight programmes at these airfields. The drones are heavier than 150 kg. This means that they must comply with aviation requirements and that they must be separated from other air traffic. It is therefore desirable to designate corridors. The purpose of these corridors is to connect areas.

	Various parameters will have to be formulated for the cargo drones in the coming years. This concerns the exact flight altitude of the aircraft and the take-up of space. For now, the required corridors are based on an altitude of approximately 1,500 feet (457 metres) up to 4,000 feet (1,219 metres) and a width of approximately 4,000 feet (1,219 metres).	
Location requirements	The proposed take-off and landing location is Deelen Air Base. The training areas to be reached are Arnhemse Heide, Stroese Zand, Ederheide-Ginkelseheide and ASK West. No physical interventions are anticipated (except for possible modifications to the site of the base itself). The corridors are 4,000 ft wide and around 1,500 to 4,000 ft high.	
Alternatives to be examined in the EIA plan	Corridors between Deelen Air Base and training areas Arnhemse heide, Stroese Zand, Ederheide-Ginkelseheide and ASK West, including connections to MVK De Kooy (Den Helder), Marknesse and Twenthe. Several corridors are possible from these areas:	Alternative 1: Shortest route to training areas Alternative 2: Route avoiding sensitive areas
Supporting information for how the alternatives were selected	The criterion for cargo drones is that the aforementioned training areas must be reached. There are various variants for each training area (one with the shortest route and one with a route that involves flying over sensitive areas (Natura 2000, strongly urban, quiet areas). The analysis in the EIAR is aimed at comparing the locations and routes. The choice was made to delineate the alternatives because the aforementioned areas are the only areas that can be reached from Deelen Air Base with the drones and where drone use can be practiced. There are no alternatives to Deelen and the aforementioned training areas. The lack of an alternative to Deelen has to do with the: - presence of the units working with drones at that location - presence of the infrastructure at Deelen - proximity of training areas - possibility of reaching MVK De Kooy, Marknesse and Twenthe Air Base (the latter two from knowledge hubs) from Deelen Air Base.	
	The alternatives are based on the stationing of cargo drones at Deelen. The space taken up by this base will not increase. That is why this relates to the impact of the drones themselves (such as noise, safety, nitrogen, etc.). In addition, the impact of climate adaptive aspects on Deelen and MVK De Kooy is examined. However, this is unrelated to the activity of the drones themselves. For the corridors, particular attention is paid to noise, impact on energy transition, nature and built-up areas. Based on the assessment framework for this need, the following themes from Table 5.1 are considered in the EIA plan:	

Main theme	Theme	Aspects considered

Assessment framework for the EIA plan	Healthy and Safe Living Environment	Noise	Impact of the development on aviation noise, road traffic noise, railway noise, industrial noise and vice versa
		Air quality	Impact of the development on concentrations of nitrogen dioxide, particulate matter and ultra fine
		External safety	Impact of location-bound risk, group risk of the development and vice versa
		Light	Impact of light nuisance caused by the development
		Vibrations	Impact of vibrations on the development and vice versa
	Nature, landscape and history	Nature	NNN, Natura 2000 (including nitrogen), protected species
	Climate adaptation	Floods	Impact of flood risk on the development
		Drought	Impact of drought on the development
		Rainproof	Impact of a heavy shower (120 mm in 2 hours) on the development
	Social and vital	Economy	Impact and opportunities on employment, knowledge & innovation in the development
	Use of space	Energy networks	Impact on underground and aboveground energy networks (and storage and generation) in the developments and vice versa
	Defence-specific	Suitability for military use	Direct routes (not over built-up areas)
	Interfaces	Interference with national	Opportunities and threats from current Government programmes


Need for space subject to a supra-regional assessment
XI: Stations and corridors for unmanned cargo drones
Alternatives to corridors to training areas
Alternative 1:
Direct flight route to and from training areas
Alternative 2:
Avoiding sensitive areas as much as possible
Alternatives to corridors to Deelen
Alternative 1:
Direct flight route to and from training areas
Alternative 2:
Avoiding sensitive areas as much as possible
Sensitive areas
Natura 2000 area
Quiet area
Heavily urbanised area
De Kooy
Marknesse
Deelen
Twenthe Air Base

FUNCTIONAL (OPERATIONAL) NEED: **Low flying areas for helicopters**	
Explanation of the functional (operational) need	The risk of a large-scale conflict on the European continent was considered limited for years. For years, this had put Defence's focus more on the second main task, with the expectation that any enemy could not have advanced weapon systems and that the benefits of the third dimension could be exploited to its full potential. The Russian invasion of Ukraine and the widespread use of anti-aircraft missiles in this conflict confirm that the need for flying at low altitude has always existed. It is vitally important for Defence to enable its flight personnel to adequately practise this way of flying. In circumstances involving an increased threat, flying at high altitude is not an option. Helicopters must fly low to remain undetected by enemy units for as long as possible. They stay low to seek cover behind obstacles, such as rows of trees, hills or buildings. By flying low, helicopters can also stay off the opponent's radar. Weather conditions can also sometimes force helicopters to fly low. Low-level flight requires specific training and experience. Low flying areas have been allocated for this training in the Netherlands, where helicopters may fly as low as is necessary to carry out the mission. Defence expects a structural increase in the number of helicopter movements in low flying areas in the Netherlands. Reasons for this include the changing safety situation and the resulting changing task of helicopters and the other Defence units actively involved, both during both the mission and training. Part of this is an increase in low-level flight training, because low-level flight is necessary during missions involving a higher spectrum of force.

Supporting information for the functional (operational) need	The low flying areas need to be more diverse to provide for variety during training, thereby improving the quality of the training. Anticipating a wide range of variables and unknown situations are important elements that contribute to effective training for helicopter crews. This will ensure that the crews are always exposed to new situations and that they do not become complacent because they already know the area. The current limited number of low flying areas means that the crews already know all the routes, villages, forest complexes, etc. by heart. This makes situational awareness too high and not representative for deployment. During deployment, troops must manoeuvre into the unknown in every sense of the word. This must therefore also be addressed that way during preparation. In most cases, the low flying areas in the Netherlands are not training areas and are located across the Netherlands, sometimes around large cities (for example GLV X located just south of Rotterdam, but also GLV IX located just north of 's-Hertogenbosch), making large parts of these low flying areas unsuitable for their purpose – low-level flight. The low flying areas often have villages, farms, horse meadows, nature reserves and duck decoys – obstacles that prohibit low-level flight or at least must be avoided as much as possible. Helicopter pilots also take into account the distraction they can cause when flying low along busy roads and avoid them at lower altitudes. All this limits the quality of the low flying areas. This also increasingly limits the available space within the areas. The situation in these areas is deteriorating because there is no planning regime serving the low-level flight interest. The lack of this regime has made the low-level flight zone in the Wieringermeer and other areas unusable for the Air Force. It is therefore important that the status of low flying areas is legally safeguarded with regard to whether obstacles are to be placed in these areas. It is desirable to link practising low-level flight to exercising in urbanised areas (need 5) and the provision of a new amphibious training area (need 6). This will ensure efficient use of the space made available for multiple purposes. Lastly, an expansion of the number of areas allows flight movements to be spread out. This could alleviate the burden on the current low flying areas, including the Meuse and Waal areas.
Can the need be quantified? Current situation and the requested growth (movements, days, hours, frequencies, etc.).	Currently, 1378 hours per year are permitted for low-level flight, spread over the various low flying areas (Permit 12-09-2012 DGNR-RRE / 12315612). This maximum does not meet the quantitative need. The quantitative need has been set at approximately 2,000 hours. In Defence White Paper 2022, that need was expanded because of the amphibious task with the NH-90 and Special Operations Forces (SOF)-air with the Cougar (the Cougar to be replaced by the Caracal in 2028). In addition, more training (in low-level flight) is needed due to the shift in focus to Main Task 1. This brings the quantitative need to approximately **2,500 hours per year**, 1,122 hours more than currently permitted. Ideally, it would be permitted to fly low everywhere in the Netherlands. However, the limited space makes this a difficult proposition. Making an exact calculation of the minimum low-level flight space required is not an easy task. After all, quality (sufficient space, few buildings, integration with Army and Navy and viable distance) is a signficant factor in determining the usability of a low-level flight zone. The required additional surface area is aligned with the additional need for 1,122 low-level flight hours (+81%). In order to provide the necessary variation in training and to compensate for the increased number of obstacles in the current areas, 81% of the total current surface area is needed. 81% of 297,712 ha = 241,147 additional ha. The more surface area is allocated, the more variation there is in training, thus ensuring a higher level of training.

Why need in the Netherlands and not abroad?	As many activities as possible are already performed abroad. Helicopters are permanently stationed in the United States for training purposes. In addition, it is standard practice to hold technical flight training exercises such as High, Hot, Cold and Tac Blaze abroad. Lastly, other large training exercises are regularly held abroad, provided that they are authorised by international partners. All these training exercises require considerable logistical effort with financial and personnel consequences. International partners also use Dutch locations in connection with international cooperation and the *quid pro quo principle*. Noise nuisance is not a uniquely Dutch phenomenon, as pilots must also avoid creating nuisance as much as possible in the various areas abroad where Defence uses low-level flight opportunities.
Are there international obligations and what is their source and	Not applicable. This is part of the operational readiness of helicopters, including the expansion of the task in the Defence White Paper resulting from the deteriorated security situation.
Corresponding need for space	Additional low flying areas with sufficient space to train situational awareness, procedures and missions. This involves space for manoeuvring between and around obstacles and a number of different variables.

Location requirements	Criteria for the suitability of an area are:
	- Sufficient space. This is subject to the following references:
	  o The Maas-Waal (51,307 ha) and Voorne-Putten (41,098 ha) low flying areas are good in terms of size, provided that the space can actually be used and that much of the space is not out of bounds due to built-up areas and wind turbines.
	  o The Oirschot (1,770 ha) and Eder Heide-Ginkelse Heide (1,315 ha) low flying areas are quite small. Areas of that size are not preferred, as the space is basically too small to conduct proper training.
	- Primarily, the distance to the airfields available for helicopters, namely Gilze-Rijen and De Kooy, and, secondary, Deelen. The area must be accessible by helicopter within a reasonable period of time, preferably no more than 30 minutes (60 km).
	- No material presence of wind turbines (either existing or planned);
	- Crops and livestock farms (no selection criterion).
	- Combination with an urban area training area (need 5) and amphibious training area (need 6).

Alternatives ("how") & Variants ("where")	(1) The current areas subject to a strict legal planning regime (2) Designate additional areas and introduced a light planning regime for current and additional areas.
Supporting information for how the alternatives were selected	(1) Expansion of flight hours in and legal protection of current areas is an alternative. However, this alternative does not meet the need for variation in areas and flight efficiency time. The possibilities for variation have only become less over time because the available space per area has decreased. (2) New, potentially suitable areas were selected at an earlier stage (2020). These potentially suitable areas (variants) are shown on the map with this factsheet. These areas were selected on suitability: initially in view of the distance to Gilze-Rijen Air Base, MVK De Kooy and Deelen Air Base, sensitive nature reserves and urbanisation. Secondly, a qualitative assessment of the areas was performed by means of fieldwork, and the areas were optimised. Despite the optimisation, it is already known that a limited part of these areas is less or not entirely

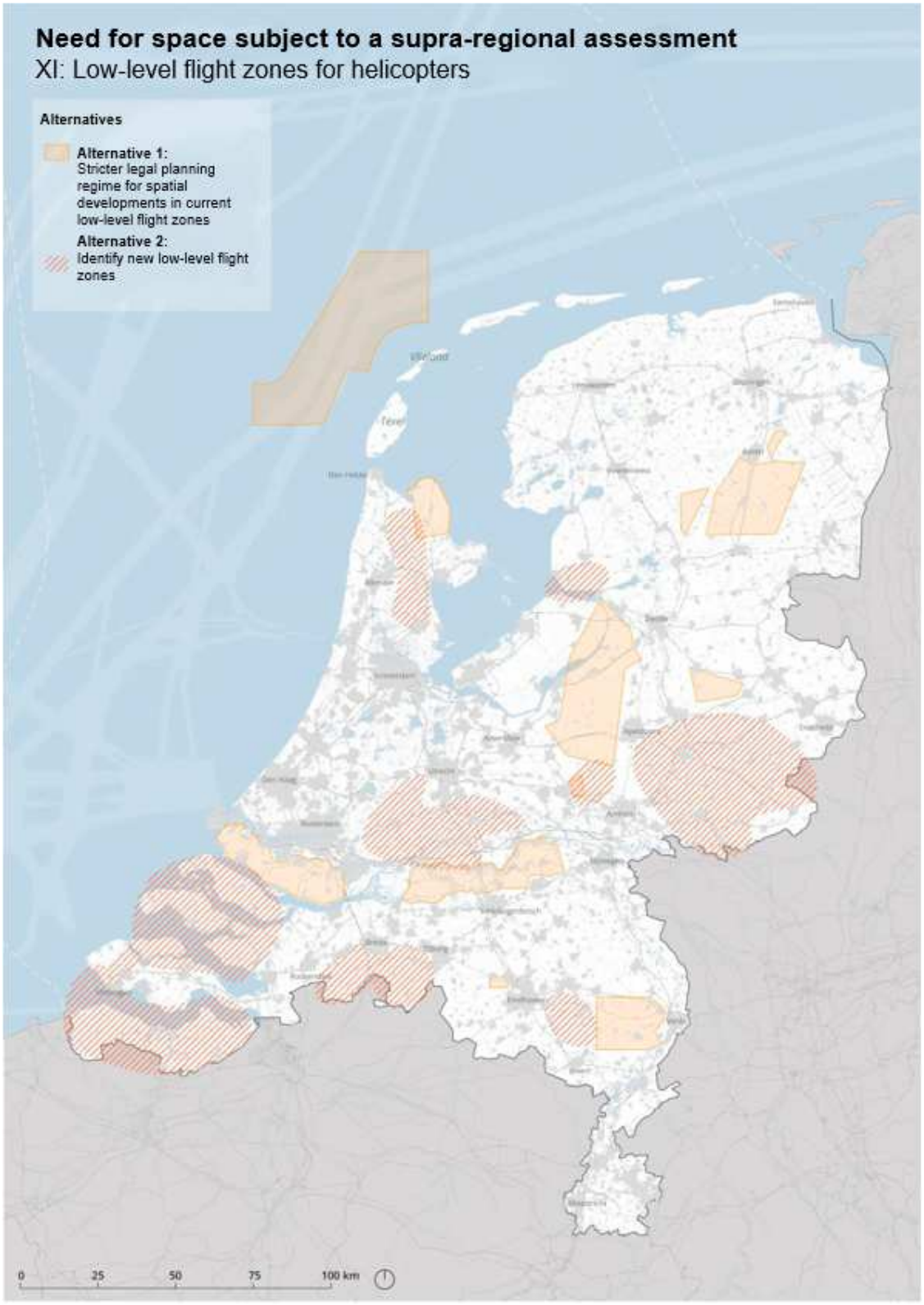
suitable. Therefore, the final form of the potential low-level flight zone within the search areas should be further defined.

Areas further away from bases, such as in Drenthe cannot be used daily, given the helicopter flight range. By transferring flight activities from Gilze-Rijen Air Base to Deelen Air Base, more use can be made of areas in the north. In addition, the permitted flight hours for these areas are insufficient. If designating additional areas proves to be a viable option, Defence can also have a critical look at whether designated areas can be scrapped, for example because of a decline in their actual usability (for example due to the development or construction of wind farms or the distance from the bases).

Assessment framework for the EIA plan

In low flying areaslow flying areas, the focus is on noise, impact on energy transition, nature and agriculture. Based on the assessment framework for this need, the following themes from Table 5.1 are considered in the EIA plan:

Main theme	Theme	Aspects considered
Healthy and Safe Living Environment	Noise	Impact of the development on aviation noise, road traffic noise, railway noise, industrial noise and vice versa
	Air quality	Impact of the development on concentrations of nitrogen dioxide, particulate matter and ultra fine
	External safety	Impact of location-bound risk, group risk of the development and vice versa
	Light	Impact of light nuisance caused by the development
	Vibrations	Impact of vibrations on the development and vice versa
Nature, landscape and history	Nature	NNN, Natura 2000 (including nitrogen)
Use of space	Energy networks	Impact on underground and aboveground energy networks (and storage and generation) in the developments and vice versa
Defence-specific	Suitability for military use	A variety of exercise options (learning effect)
Interfaces	Interference with national	Opportunities threats from current and Government


Need for space subject to a supra-regional assessment
XI: Low-level flight zones for helicopters
Alternatives
Alternative 1:
Stricter legal planning regime for spatial developments in current low-level flight zones
Alternative 2:
Identify new low-level flight zones
0
25
50
75
100 km

FUNCTIONAL (OPERATIONAL) NEED: **Helicopter landing sites**	
Explanation of the functional (operational) need	Defence transport helicopters are used to transport personnel and materiel. This is often done under extreme conditions, such as under enemy threat, in hazardous terrain or adverse weather conditions. This requires an intensive education, training and exercise programme. Not only for the helicopter crews, but also for and with ground units with which they work closely. Tactical landing and take-off under simulated combat conditions is the core activity in this programme. Many factors converge here, such as a variety of weather conditions, enemy situations and types of terrain. The need for a good education, training and exercise programme along with space for tactical landing and take-off has only increased in recent times. This has to do with the guidelines in the Defence Vision and Action Memorandum to strengthen operational readiness, shift the focus from Main Task 2 to 1, the establishment of Special Operations Forces (SOF) Air and the new amphibious task involving the NH-90. In addition to space for the Air Force's own tactical activities, the Army, the Navy and the Marechaussee also need extra space for their tactical helicopter operations. Landing and taking-off is restricted to certain areas. For military helicopters, a legal framework for the use of helicopter landing sites (HLSs) at barracks and military training areas is in force. This is a collection of ministerial airport regulations (Dutch: LHR) to place any nuisance to the surrounding area in a framework. With this collection of LHR, 15 locations in the Netherlands have the status of HLS. These are ASK Oldebroek, Vliehors, Assen, Rijen, Waalsdorpervlakte, Beekhuizerzand, Eder Heide, Ginkelse Heide, Stroese Zand, Oirschot, Arnhemse Heide, Marnewaard, Garderense Veld, Vlasakkers, Leusderheide and Ermelose Heide. Each location has a few coordinates with a 50-metre radius, a maximum number of permitted aircraft movements (Dutch: VTB) and fixed approach and take-off routes.

Supporting information for the functional (operational) need	(a) In addition to transporting goods and persons, helicopter units are tasked with carrying out air assaults and raids together with ground troops. These are types of mission in which various units of varying size (platoon, company, battalion) are dropped in the field, supported during combat and then extracted again. Such missions have to meet various requirements, such as precision, and swift and covert action. Units must also be able to deal with various weather conditions, enemy situations, types of terrain (including brownout/dust cloud conditions) and various internal/external loads. This was already the case for the support of 11 Airmobile Brigade, but is being expanded with SOF Air and amphibious operations. Higher requirements are also set as units are deployed in the higher spectrum of force with regard to Main Task 1. Due to this changed position of helicopters in combat, the number of VTB allocated is insufficient. Specifically for brownout training, only Oirschot and Leusderheide have adequate stretches of sand. The total number of VTB allocated for these locations is insufficient to be trained for landing and taking off in brownout conditions. (b) Anticipating a wide range of variables and unknown situations are important elements that contribute to effective training for helicopter crews and ground units. It is therefore important that different types of HLS are available to achieve the desired variety. This will ensure that the trained units are always exposed to new situations and that they do not become complacent because they already know the location. Tactical landings at only a few locations condition crews and ground units, thereby limiting the added value of the training. Military action means adequately responding to unknown situations, making a variety of activities related to readiness a necessity. (c) Freedom of choice is essential, both in the interests of the trained units and in the interests of the environment. Freedom of choice is needed to include such variables as the ground tactical plan, weather, enemy and terrain in the tactical planning processes. Freedom of choice is also needed for flight safety reasons. This is because landing locations are often temporarily unsuitable due to conditions such as wind, soggy soil caused by abundant rainfall, and vegetation. Freedom of choice and variation applies not only to the helicopter crews themselves, but also to the ground units with which they work. For example, freedom of choice is required in landing locations with varying formations (groups of helicopters) and approach and take-off routes. To achieve this freedom of choice, to expand the space in the existing areas. The need is to be able to use the entire military training area to carry out helicopter flight movements. In principle, every delimitation means a restriction of flexibility and a loss of exercise or training value. This also offers opportunities to link up with the need to exercise in urbanised areas (5) and to create a new amphibious training area (6). Combining these functions makes it possible to exercise landing on new terrain and to work together with ground units.
Can the need be quantified? Current situation and the requested growth (movements, days, hours, frequencies, etc.)	The future-proof deployment of helicopters requires flexible use of terrain (no fixed coordinates or approach and take-off routes) and an expansion to 24,000 flight movements.

Why need in the Netherlands and not abroad?	As many activities as possible are already performed abroad. Helicopters are permanently stationed in the United States for training purposes. In addition, it is standard practice to hold technical flight training exercises such as High, Hot, Cold and Tac Blaze abroad. Lastly, other large training exercises are regularly held abroad, provided that they are authorised by international partners. All these training exercises require considerable logistical effort with financial and personnel consequences. International partners also use Dutch locations in connection with international cooperation and the *quid pro quo principle*.
Are there international obligations and what is their source and status?	The international obligation follows from NDPP and is shown in the Capability Code AVN- HTM (aviation helicopter transport medium) 1.01: *Capable of conducting Air Movement, Air Mobile, Aeromedical Evacuation, Airborne, Reconnaissance,* *Surveillance, C3 Support, Personnel Recovery and Aerial Delivery missions.* The obligation also follows from the capability code SOF-SOATU-RW-TR (Special Operations Air Task Unit-Rotary Wing/Tilt Rotor) 2.06: *Capable of air transport to prepared / unprepared landing zones and marked / unmarked drop zones* and 3.10: *Capable of landing or hovering safely and effectively over land and water, day and night, in degraded* *visual environments (snow, desert or other areas with minimum references).* *(including personnel and equipment air drops).*
Corresponding need for space	This concerns the allocation of helicopter operations at additional military sites and the amendment of the legal framework.
Location requirements	*Area type* The criterion for the size of the area is not a black and white one. Education, training and exercise takes different forms. Sometimes an activity takes place using one plane without ground troops, sometimes using multiple planes with or without ground troops. Another time, the activity has a ground tactical plan. Because the units can reach battalion size, some areas must be big enough to accommodate battalion fighting and landings with multiple helicopters at the same time. For the criterion 'area type', three elements are worth mentioning, namely stretch of sand, urbanised area and coastal area. • Stretch of sand: Helicopter crews must be able to land on stretches of sand. Landing on sand is the most challenging. Brownout is a phenomenon occurring just above ground level that obscures the crew's vision of the terrain. Performing these types of landings safely requires extensive training. • Urbanised area: Conflicts are not exclusive to non-urban environments. It must also be possible to deploy helicopters in urbanised areas together with ground units. This is expected of SOF units in particular. This is the motivation for enabling the landing of helicopters in/near Marnehuizen or in a possible new training area (need 5). • Coastal area: Due to the amphibious task of the NH-90, this type of helicopter must be able to land in coastal areas. *Proximity* HLSs must be located at a cost-effective distance from the helicopters' airfields. In addition, the HLSs must be located at a cost-effective distance from the low flying areas,

<table>
<tr><td></td><td>preferably within the low flying areas (the possible expansion of the number of low flying areas will create more possibilities for this.) HLSs must also be available at a cost-effective distance from the ground units involved in the training. Previously, training mainly involved Airmobile. SOF Air and the amphibious task will expand this with SOF units and marines. A distance is cost-effective if helicopters are able to pick up ground troops in a two-hour flight, after departing from the Gilze-Rijen base (for the NH-90, this is MVK De Kooy), train together for at least 1 hour, drop off ground troops and return to base, possibly landing along the way to take in additional fuel. This equates to 30 minutes of flight time from the airfield to the HLSs (around 60 km).</td></tr>
<tr><td>Alternatives to be examined in the EIA plan</td><td>The need for more helicopter landing sites has different solutions. Alternatives for parts of the need are examined in the EIAR:

- Alternative 1 – Intensifying existing helicopter landing sites
- Alternative 2 – Intensification, including expansion of helicopter landing sites on land within a 60-km radius from Gilze-Rijen, Deelen and MVK De Kooy and 60 km from:
o Schaarsbergen
o Assen
o Roosendaal
o Nieuw Milligen</td></tr>
<tr><td></td><td>The alternatives will intensify and create helicopter landing sites. This has an impact on the take-up of space at training areas and values present there (above ground and the surface top layer). That is why this relates to the impact of the helicopters themselves (such as noise). Based on the assessment framework for this need, the following themes from Table 5.1 are considered in the EIA plan:

<table>
<tr><th>Main theme</th><th>Theme</th><th>Aspects considered</th></tr>
<tr><td>Healthy and Living environment</td><td>Noise</td><td>Impact of the development on aviation noise, Safe road traffic noise, railway noise, industrial noise and vice versa</td></tr>
<tr><td></td><td>Light</td><td>Impact of light nuisance caused by the development</td></tr>
<tr><td></td><td>Vibrations</td><td>Impact of vibrations on the development and vice versa</td></tr>
<tr><td>Nature, species landscape and history</td><td>Nature</td><td>NNN, Natura 2000 (including nitrogen), protected</td></tr>
<tr><td></td><td>Landscape</td><td>Impact on landscape values</td></tr>
<tr><td>Use of space</td><td>Energy networks</td><td>Impact on underground and aboveground energy networks (and storage and generation) in the developments and vice versa</td></tr>
<tr><td>Defence-specific</td><td>Suitability options</td><td>Impact on military exercise</td></tr>
<tr><td>Interfaces</td><td>Interference current programmes</td><td>Opportunities and threats from with national interests Government</td></tr>
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Ruimtebehoefte met een bovenregionale afweging
VI: Nieuw amfibisch oefengebied
Alternatieven
Alternatief 1: Uitbreiden oefenplaatsen landingsvoertuigen, inclusief diepe infiltratie-mogelijkheid
Alternatief 2: Uitbreiden oefenplaatsen landingsvoertuigen, inclusief optie voor Life firing vanaf voertuigen
Marnehuizen
Vlieland
Texel
Petten
Maasvlakte
Eemshaven
Leeuwarden
Groningen
Assen
Heerenveen
Den Helder
Alkmaar
Zwolle
Amsterdam
Amersfoort
Apeldoorn
Enschede
Utrecht
Den Haag
Rotterdam
Arnhem
Nijmegen
's-Hertogenbosch
Breda
Tilburg
Roosendaal
Vlissingen
Eindhoven
Venlo
Weert
Maastricht
0
25
50
75
100 km

FUNCTIONAL (OPERATIONAL) NEED: **Short/narrow unpaved runway for tactical air transport**	
Explanation of the functional (operational) need	There is a need for a short/narrow unpaved runway (dirt strip) for practising tactical landings with tactical transport aircraft. The ability to make a dirt strip 'suitable' for take-offs and landings with transport aircraft is also part of the need. This involves training in the rapid preparation and repair of dirt strips.
Supporting information for the functional (operational) need	The Netherlands does not have any dirt strips. Aircraft crews therefore have to exercise abroad for this type of training. However, this does not offer sufficient opportunities for the right level of training (this will be further elaborated below). Recent history shows us that the Notice to Move (NTM) for tactical air transport is regularly given at very short notice (within 24 hours). This makes it necessary to maintain a high level of training. A large transport aircraft is not always the best option to fly in personnel, materiel and supplies for missions or humanitarian aid, for example due to enemy threat or the conditions at the landing site. That is why Defence has tactical transport aircraft at its disposal. At the moment this is the C-130, to be replaced by the C-390 in 2027. These aircraft must be able to land on dirt strips. Landing and taking off on dirt strips obviously requires training of aircraft crews and operational units to be deployed, such as the 11 Airmobile Brigade (11LMB) and the Korps Commandotroepen (Commando Corps). These units should be deployable by air by helicopter and transport aircraft. 11LMB also has pathfinders and rapid runway repair capability. This capability provides a suitable landing location in advance, marks it for landing and take-off and can quickly repair the runway. Pilots are already training on simulators, thus saving 1,800 hours of tactical air transport annually. However, simulators do not perfectly mimic reality. This includes complex landings on dirt strips. The simulators are also not suitable for training together with the RNLA. For these reasons, there is also a need for additional training with the transport aircraft itself.
Can the need be quantified? Current situation and the requested growth (movements, days, hours, frequencies, etc.)	The quantitative need is a minimum of 240 flight movements per year (5 divided by 13, times 625). This requires space in an airfield noise contour for 24 flight movements divided by 12 landings per month on average over a period of 10 months. This number is limited to training immediately preceding deployment. This number is based on the total requirement of 625 flight movements. The majority of the training requirement is carried out abroad.
Why need in the Netherlands and not abroad?	Only a few dirt strips are available abroad. Rømø beach in Denmark is used, or strips in Spain and the USA. Rømø beach is located at the shortest flying distance, 2.5 to 3 hours. However, it should be taken into account for all locations that other units also use the dirt strip. Training must therefore be scheduled well in advance and availability is limited. In addition, training is organised as an on-site exercise because of the distance to where the Dutch fleet is based. Training exercises require a great deal of logistical effort, with staffing and financial consequences. During deployment, which also occurs regularly with a short response time, this training is cancelled and cannot be made up at all or only with great difficulty. In the past, this limited training opportunity has led to unsafe situations during deployment, for example planes 'burying' themselves during landing and damage to planes.

Are there international obligations and what is their source and status?	For tactical air transport, deployment and therefore training on a dirt strip is a firm requirement, as described in the NATO capability code TCC-M (Fixed Wing Transport Cargo/Passenger Medium) 2.02, *Capable of operating from a short runway (1,200 m) and semi-prepared/dirt runways*. This also applies to limited SOF deployment in accordance with capability code SOF-SOATU-FW (Special Operations Air Task Unit-Fixed Wing) 2.06, *Capable of specialized air transport to prepared / semi-prepared / unpaved surfaces and marked / unmarked drop zones, to deliver personnel and material, along with air drops.* -

Corresponding need for space	- Amendment of the Airport Regulatory Enforcement Decision (Dutch: LHB), - Amendment of integrated environmental permits - Changes to infrastructure
Location requirements	A dirt strip consists of unpaved surfaces such as grass, gravel split or sand, and measures 1,600 m by 25 m . Matters to consider when determining a suitable location for a dirt strip are: - Dust and FOD. Operations on a dirt strip carry the risk that loose rocks could damage other aircraft. - Guaranteed availability: occasional use of a beach, for example, or a larger civilian airport provides insufficient guarantee to meet training objectives. - Safety on and around the runway. • If the runway is located at a designated aviation site, the requirements applicable there must be met. • Certain requirements must also be met outside an airport. The exact requirements could not yet be provided at this time, but examples include a suitable surface, barrier-free areas, possibly fire services and a Tactical Aeronautical Station Operator. Because aviation is involved, airport regulations or even an airport regulatory enforcement decision of some kind will have to be issued. - No regular civil aviation may be impeded. - Platform space for temporary parking of the aircraft, e.g. in the event of a technical defect.
Alternatives to be examined in the EIA plan	The alternatives to be examined are the construction of a dirt strip at or near: • Deelen Air Base • Gilze-Rijen Air Base • De Peel • Link to existing training areas
Supporting information for how the alternatives were selected	A tactical transport aircraft can land and take off in all sorts of places, including outside an airport, as that is what this type of aircraft is designed to do. However, training in the Netherlands is subject to requirements ensuring the safe execution of flights, for both the crew and the environment. This means that feasibility is highly uncertain. There is currently no Defence location in the Netherlands that has a dirt strip. A dirt strip cannot simply be built at other airfields, because of the risk of loose rocks damaging other aircraft. This applies to all airfields with operations other than by helicopter. Locating 11LMB in Schaarsbergen makes Deelen Air Base a logical, important and highly desired (joint) exercise location with tactical air transport. This is because of 11LMB's task and the synergy with the helicopter tasks. And the possibilities for building the dirt strip at a central location at the airport. Woensdrecht poses major problems for the criterion of Nitrogen. Aircraft other than helicopters also operate there, causing the dirt strip to have to be installed at some distance from the main runway. MVK De Kooy is a small airfield and therefore has too little physical space to install an additional dirt strip.

The assessment framework for the short, narrow unpaved runway is based on two activities: the effect of transport aircraft practising this type of landing (noise in particular) and the impact of the construction of a dirt strip. It is assumed that the take-up of space of the bases to be considered will not increase (or that the training area must be expanded), which is why there is no impact on existing values (after all, already on the Defence site). If, however, this *is* the case, these aspects will of course be considered. Based on the assessment framework for this need, the following themes from Table 5.1 are considered in the EIA plan:

Main theme	**Theme**	**Aspects considered**
Healthy and	Noise	Impact of the development on aviation noise, road traffic noise, railway noise, industrial noise and vice versa
	Air quality	Impact of the development on concentrations of nitrogen dioxide, particulate matter and ultra fine
Safe Living Environment	External safety	Impact of location-bound risk, group risk of the development and vice versa
	Light	Impact of light nuisance caused by the development
	Vibrations	Impact of vibrations on the development and vice versa
Nature, landscape and history	Nature	NNN, Natura 2000 (including nitrogen), protected species
Climate adaptation	Floods	Impact of flood risk on the development
	Drought	Impact of drought on the development
	Rainproof	Impact of a heavy shower (120 mm in 2 hours) on the development
Social and vital	Economy	Impact and opportunities on employment, knowledge & innovation in the development
Use of space	Energy networks	Impact on underground and aboveground energy networks (and storage and generation) in the developments and vice versa
Defence-specific	Suitability for military use	Proximity of stationing of transport aircraft
Interfaces	Interference with national	Opportunities threats from current and Government


Need for space subject to a supra-regional assessment
XIII: Short/narrow unpaved runway for tactical air transport
Alternatives
Dirt strip
(unpaved landing site)
Alternative 1: Deelen
Alternative 2: De Peel
Alternative 3: Gilze-Rijen
Alternative 4: Combination with training areas
Deelen
Gilze-Rijen
De Peel
0
25
50
75
100 km

Annex 2: Overview of needs by location

Location no.	Need no.	Need and description
1	1	**Expansion of training area for larger/more versatile exercises on, in and above water EHD-42.** ***Explanation:*** *There will be larger longer-range ships, drones and new weapons systems. In addition to new assets, the operations and deployment of the various platforms is also changing.* ***Necessity:*** *It is necessary for the training areas to accommodate this, as a precondition for being able to ensure readiness (ready for deployment).* ***Space/environmental impact:*** *The current areas are not sufficient to train the doctrines jointly and specifically. This requires more permit allowance in the zone and more physical space. It must be possible to train operating under, on and above water. It must also be possible to shoot from the training area to the Vliehors shooting range.* ***Quantification:*** *The planned changes are largely transparent, the impact on existing permits and physical take-up of space have not yet been established.*
2	2	**Expansion of training area for larger/more versatile exercises including drones with corridors on water and in and above water EHD-41.** ***Explanation:*** *There will be larger ships, new longer-range weapons systems. In addition to new assets, the operations and deployment of the various platforms is also changing.* ***Necessity:*** *It is necessary for the training areas to accommodate this, as a precondition for being able to ensure readiness.* ***Space/environmental impact:*** *The current areas are not sufficient to train the doctrines jointly and specifically. This requires more physical space and permit allowance in the zone. It must be possible to train operating under, on and above water. It must also be possible to shoot from the training area to the Vliehors shooting range.* ***Quantification:*** *The planned changes are largely transparent, the impact on existing permits and physical take-up of space have not yet been established.*
3	3 4	**Shooting practice with Apache and MQ-9 at Vliehors Range, municipality of Vlieland.** ***Explanation:*** *The unmanned aircraft MQ-9 and the Apache helicopter cannot currently use their entire range of live and/or training ammunition on the range. This capital ammunition has since been purchased by Defence for both weapons systems.* ***Necessity:*** *For both the MQ-9 and the Apache, the standard for live training of precision ammunition is set at biennial per crew. The standard for the APKWS is set at 2 shots per year per crew. The existing shooting range is not designed for this. Locations abroad are not fully suited to train with these types of ammunition. As a result, training value is limited.* ***Space/environmental impact:*** *The ammunition of both the MQ9 and the Apache combat helicopter requires modifications to permits and safety zones. Partly because of the relatively large safety zone required for the weapons fired from the Apache and the MQ-9, the Vliehors is the only location in the Netherlands where it can realistically be expected that use can be facilitated. The unique quality of Vliehors is that the safety zone is largely located over sea, while at the same time it is possible to target various targets on land.* **Review/adjustments of unsafe zone; now partly based at former cavalry shooting range Vliehors (Cornfield Range), municipality of Vlieland.** ***Explanation:*** *The existing unsafe zone is not sufficient to meet the requirements for the new use of the training area.* ***Necessity:*** *To train responsibly, this unsafe zone must be made suitable for current and future use.* ***Space/environmental impact:*** *To this end, the zone included in the current zoning plan and future environmental plan will be different from the current one.* ***Quantification:*** *The planned needs are largely transparent, the impact on existing permits and physical take-up of space have not yet been established. The necessary adjustment of the zone based on current use is known.*

4	5	**Expansion of environmental space for activities at Leeuwarden Air Base, municipality of Leeuwarden.** ***Explanation:*** *Expansion of the environmental space is needed in order to extend and commission the secondary runway and in order to facilitate international visitors for beddown NATO/USA, ACE and Flag training exercises* ***Necessity: The aim of the extension and use of the second runway is to better spread noise pollution, which contributes to an improvement of the quality of the living environment. Furthermore, expansion of environmental space is necessary in order to facilitate international visitors for NATO/USA beddown and Flag exercises. This is not yet included in the current permit. /environmental impact:*** *Expansion of the environmental space relates to the extension and use of a secondary runway, which requires land purchase. In addition, the environmental space is required for the ground-bound activities of international visitors.* ***Quantification:*** *At present it is not entirely clear how much physical space is needed and where the necessary spatial zones will be located.*
	6	**Restricted area around Leeuwarden Air Base (specifically the outer horizontal surface) - Legal securing.** ***Explanation:*** *Defence wants to have more control over what is being built in the vicinity of the military airfields. It is important that the interests of Defence around the various air bases can be secured. Defence currently has few possibilities to block developments in terms of space in the immediate vicinity. An example of this is the installation of wind turbines that have a negative effect on flying possibilities.* ***Necessity:*** *The external pressure in these areas is increasing and this is at the expense of the possibilities and flight safety.* ***Space/environmental impact:*** *Defence needs to legally secure the outer horizontal surface with a radius of 15 km around a military airport. This policy is based on the restricted areas prescribed by the UN Civil Aviation Organisation ICAO. Defence is now adjusting its activities to the existing zoning. This fits for now, but only just (not flexible and no expansion space).* ***Quantification:*** *This legal securing is necessary to retain the current available space.*
5	7	**Expansion of Marnewaard Shooting Range for dynamic shooting using vehicles.** ***Explanation:*** *It is important for Defence that there are training opportunities for dynamic firing. To facilitate this training, the focus is on expanding zoning and permits.* ***Necessity:*** *Because dynamic firing cannot currently take place at the Infantry Firing Range, it must be carried out abroad to ensure readiness.* ***Space/environmental impact:*** *Dynamic firing training fits in with the broader need at Marnewaard. The physical and environmental space required for this will increase compared to current use.* ***Quantification:*** *This amounts to an additional need for space of 300 to 700 hectares.*
6	8	***Expand and prepare EHR 8 for training using unmanned vessels on and in water, including corridors.*** ***Explanation:*** *The EHR8 zone is planned for training and testing unmanned vessels on and in the water. Guaranteeing this space enables training with these vessels.* ***Necessity:*** *An available training area is needed to ensure readiness on these systems. This will require the modification of the permit allowance. This is because Defence already has the physical space needed for this training in its possession.* ***Space/environmental impact:*** *This requires the corridor from De Kooy to the EHR 8 training area, where the space can be used on, under and above water.* ***Quantification:*** *Daily accessibility is necessary, further quantification is to follow.*

7	9	**Alternative Fuels Learning Centre, Den Helder, municipality of Den Helder.** ***Explanation:*** *This is the "Medemblik" building of the Royal Naval Institute (KIM) in Den Helder. This building contains facilities for education and research for the training of technical officers of all branches of the armed forces. The facilities are also regularly used to train Royal Navy officers.* ***Necessity:*** it is essential to have new learning facilities for knowledge development and building. ***Space/environmental impact:*** The space concerns environmental space. ***Quantification:*** It is still unclear whether and what impact will be noticeable outside the Defence site.

8	10	**Restricted area around MVK De Kooy (specifically the outer horizontal surface) and corridors - Legal securing.** ***Explanation:*** *Defence wants to have more control over what is being built in the vicinity of the military airfields. It is important that the interests of Defence around the various air bases can be secured. Defence currently has few possibilities to block developments in terms of space in the immediate vicinity. An example of this is the installation of wind turbines that have a negative effect on flying possibilities.* ***Necessity:*** *The external pressure in these areas is increasing and this is at the expense of the possibilities and flight safety.* ***Space/environmental impact:*** *Defence needs to legally secure the outer horizontal surface with a radius of 15 km around a military airport. This policy is based on the restricted areas prescribed by the UN Civil Aviation Organisation ICAO.Defence is now adjusting its activities to the existing zoning. This fits for now, but only just (not flexible and no expansion space).* ***Quantification:*** *This legal securing is necessary to retain the current available space.*
9	11	**Breezanddijk growth tests IJsselmeer, Barrier Dam (Afsluitdijk), municipality of Súdwest Fryslân.** ***Explanation:*** *The space requirement is about an increase in weapons and ammunition tests. Defence will also have longer-range ammunition at its disposal. These must also be tested.* ***Necessity:*** *In order to guarantee the anticipated growth in the number of tests and new types of ammunition, expansion at the existing test locations is necessary.* ***Space/environmental impact:*** *Due to the longer range, the total physical space required for safe training will have to increase. With the anticipated increase of the number of tests, more permit allowance is also needed in both the existing and possible future area.* ***Quantification:****. Increase of number of tests by more than 10%. The required increase in area size is still unknown.*
10	12	**Expansion of the Heerenveen Barracks, municipality of Heerenveen.** ***Explanation:*** *Defence needs more storage space for medical products. The Military Medical Logistics Centre (MGLC) is responsible for supporting the readiness activities of the operational commands by providing medical supplies necessary for training and education. The number of medicinal products will expand in preparation for Main Task 1 (HT1).* ***Necessity:*** *The storage location in Heerenveen is necessary to reduce the risk for the organisation of the loss of critical goods. In the event of serious calamities at the MGLC, the deployability and/or sustainability of the Armed Forces may be seriously impaired. This risk can largely be mitigated by setting up logistics support centres.* ***Space/environmental impact:*** *It is not yet entirely clear whether the growth of MGLC can be realised at the current Heerenveen site or whether physical expansion of the site is required. The expansion requires an enlargement of the external safety zone.* ***Quantification:*** *To facilitate the expansion of activities in this context, the GFA of MGLC must expand from 17,563 m2 (IST) to 26,345 m2 (SOLL). Further details and impact on the environment are still subject to assessment.*

11	13	**Expansion of the Zuidwest Assen training area, municipality of Assen.** ***Explanation:*** *The size of training areas is too small to work up to the task in conformity with the current land operations. Several training areas are no longer suitable for level IV training (company, 100 to 150 military personnel), even though they were suitable in the past. The necessary physical space for level IV has grown due to new assets and methods of operation.* ***Necessity****: A larger training area is necessary in order to facilitate the training of land operations and thus guarantee readiness.* ***Space/environmental impact:*** *To increase the training area, new land is needed. The current De Haar Training Ground in Assen is about 400 hectares. It is estimated that an expansion by 200 to no more than 400 hectares is sufficient to meet the need.* ***Quantification:*** *With this increase, the new training ground can grow to no more than 800 hectares.*
12	14	**Petten growth tests North Sea, municipality of Schagen.** ***Explanation:*** *The space requirement is about an increase in weapons and ammunition tests. Defence will also have longer-range ammunition at its disposal. These must also be tested.* ***Necessity:*** *In order to guarantee the anticipated growth in the number of tests and new types of ammunition, expansion at the existing test locations is necessary.* ***Space/environmental impact:*** *Due to the longer range, the total physical space required for safe training will have to increase. With the anticipated increase of the number of tests, more permit allowance is also needed in both the existing and possible future area.* ***Quantification:****. It is not yet entirely clear to what size the area should grow.*
13	15	**Relocation (in consultation with the region) of the private siding for vehicles 43. Mechanised Brigade Search Area 'Groot Havelte', municipalities of Westerveld/Steenwijkerland.** ***Explanation:*** *The existing location will disappear, leaving a need for a private siding in the vicinity of the user vehicles of the 43th Mechanised Brigade.* ***Necessity:*** *When relocating, the 43th Mechanised Brigade often uses this track. It is therefore necessary for the private siding to be replaced by a rail connection in the immediate vicinity.* ***Space/environmental impact: T****here is no growth here; it is a relocation of existing activities.* ***Quantification*** *Size remains unchanged.*
14	16	**Expansion of shooting facilities (Royal Netherlands Marechaussee) at Schiphol Airport, municipality of Haarlemmermeer.** ***Explanation:*** *Defence needs a shooting range for use by the* **Royal Marechaussee** *near Schiphol.* ***Necessity:*** *This need arises from the* **Royal Marechaussee's** *task at international airports in the Netherlands.* ***Space/environmental impact:*** *In this region, there is a high complexity in terms of (possible) impact on the environment combined with limited space. By realising a modular shooting range on an existing Defence complex in the Hague region, this need can be met reasonably quickly.* ***Quantification:*** *This involves setting up a 50-metre modular shooting range.*
15	17	**Expansion of the 't Harde private siding, municipality of Elburg.** ***Explanation:*** *For the purpose of Host Nation Support and military mobility, Defence has a growing need to transport materiel by rail through the Netherlands. In view of the increasing need for transport movements, the current capacity of private sidings (stand location and connection to railway) is no longer sufficient.* ***Necessity:*** *This need is firstly due to the increase in training exercises and training of units relocating by rail. Secondly because of the changing threat level, which means more transport movements through Europe. EU regulations dictate that transport over 500 km must take place by rail or waterway.* ***Space/environmental impact:*** This mainly concerns physical expansion of the existing private sidings. **Quantification:** The necessary growth in hectares for each private siding is not yet clear.

16	18	**Expansion of Artillery Shooting Range (Artillerie Schietkamp, or ASK) (broad strip, Wezeperberg and Z-side), municipality of Elburg.** ***Explanation:*** *It is necessary for Defence to make the ASK suitable for the new weapons systems and to offer manoeuvring space for units so that they can train more effectively in accordance with current doctrines. It must also be possible to perform more tests.* ***Necessity:*** *Safeguarding the above enables training in real world conditions. This contributes to strengthening and revamping the armed forces, thus guaranteeing readiness.* ***Space/environmental impact:*** *The ASK will be modified in two parts: firstly, an adjustment of the permitted space in the "wide strip" of approximately 5 km by 500 metres. The second is an expansion on the south side of 500 hectares (where the firing locations are).* ***Quantification:*** *The exact location where the expansion can be realised has yet to be determined.*
	19	**Expand ASK with 120 mm mortar shooting, municipality of Elburg.** ***Explanation****: The ASK must be made suitable for the new Defence need. This involves being able to shoot and train using 120 mm mortars fixed to vehicles.* ***Necessity:*** *This permission would make real world training possible. This contributes to strengthening and revamping the armed forces, thus guaranteeing readiness.* ***Space/environmental impact:*** *The 120 mm mortars will increase the existing noise levels, resulting in higher noise production, in turn requiring an adjustment to the permitted space.* ***Quantification:*** *The exact impact on the space to be permitted still needs to be set out.*
17	20	**Expand planned scaling up of Royal Netherlands Marechaussee Randstad The Hague, Maaldrift, municipality of Wassenaar.** ***Explanation:*** *The strengthening of the security chain in the Netherlands has caused the* **Royal Marechaussee** *to expand considerably in recent years. The growth of the* **Royal Marechaussee** *units in the Hague region has also expanded the Integrated Professional Skills Training (IBT) centre. Since the two needs, Campus B&B and an IBT centre have major similarities in terms of housing, the wish is to combine these into a single need/complex in order to arrive at an efficient training and education centre.* ***Necessity:*** *The growth of the* ***Royal Marechaussee****, in particular the personal security task, has exceeded the existing facilities for quite some time. Growth is needed in every respect.* *Growth in the region is important, because that is where the work takes place. The pressure on the task makes long-distance relocation undesirable.* ***Space/environmental impact:*** *In order to realise an IBT centre together with a Surveillance and Protection Campus, an estimated surface area of 30 hectares is needed. The preferred location for this complex is the LC Maaldrift.* ***Quantification:*** *This will mean expanding Maaldrift with shooting ranges, sport and training accommodations. Reality-Based Training facilities, office space, teaching and examination rooms, stationing, company catering and parking space. Logistics, ammunition storage, LBMO accommodation.*
18	21	**Expansion of the Vlasakkers private siding, municipality of Amersfoort.** ***Explanation:*** *For the purpose of Host Nation Support and military mobility, Defence has a growing need to transport materiel by rail through the Netherlands. In view of the increasing need for transport movements, the current capacity of private sidings is no longer sufficient.* ***Necessity:*** *This need is due to first the increase in training exercises and training of units relocating by rail. Second because of the changing threat level, which means more transport movements through Europe. EU regulations dictate that transport over 500 km must take place by rail or waterway.* ***Space/environmental impact:*** *This mainly concerns physical expansion of the existing private sidings.* ***Quantification:*** *The necessary growth in hectares for each private siding is not yet clear.*

19	22	**Housing including facilities for the Royal Netherlands Marechaussee Military Police, municipality of Apeldoorn.** ***Explanation:*** *A new unit of the Military Police* **Royal Marechaussee** *squadron must be housed. This is a new unit and task. Existing areas are being considered to house this new unit. The Air Operations Control Station Nieuw Milligen will be considered as the preferred location for permanent accommodation. This concerns work locations, vehicles and stationing.* ***Necessity:*** *The unit has already been established but needs to be housed. As the unit grows, the pressure on existing locations is growing.* ***Space/environmental impact*** *The unit will be stationed at an existing Defence site where space has become available. This may have the effect of attracting more traffic to this site.* ***Quantification:*** *This concerns the daily deployment and accommodation of the Military Police squadron.*
20	23	**Expand live fire helicopter facilities at the Infantry Shooting Range (ISK) for level 3 and 4 Royal Netherlands Army exercises, municipality of Ede.** ***Explanation:*** *There is a need for integrated firing by ground and air forces. The ISK is an airfield for flying and shooting with loaded on-board weapons. This activity is currently also permitted at the ISK, but the helicopters have too little room for manoeuvre in the permitted airspace to be able to practise.* ***Necessity:*** *Training ground-air cooperation linked to live firing is necessary to ensure readiness.* ***Space/environmental impact:*** *More permit allowance is needed and the flight area needs to be expanded to facilitate landing.* ***Quantification:*** *The exact impact on the space to be permitted still needs to be set out, as well as the development of a new flight area.*
	24	**Expansion of the environment and noise allowance by intensifying ISK and growth of Armed Forces, municipality of Ede.** ***Explanation****: The introduction of new weapons systems in various Defence service branches and the growth of units have led to an increase in the use of the ISK.* ***Necessity:*** *The ability to continue to practice with these new and modern weapons systems by the various Defence service branches is necessary to ensure readiness.* ***Space/environmental impact:*** *More permit allowance is needed to enable the increase in use at the ISK.* ***Quantification:*** *The exact effect on existing permits have not yet been determined.*
21	25	**Expansion of the site for the purpose of meeting NATO standards, Defence Pipeline Organisation depot and truck loading station in Markelo, municipality of Hof van Twente.** ***Explanation:*** *The distances between the fencing and the depots must be increased for safety reasons. This larger gap is required as a security measure.* ***Necessity:*** *This additional physical space is needed to move site boundaries so as to meet NATO requirements.* ***Space/environmental impact****: This may result in the greater use of land around a number of depots.* ***Quantification:*** *It is not yet known what the exact new site boundaries should be.*
22	26	**Expansion of the site for the purpose of meeting NATO standards, Defence Pipeline Organisation depot in Klaphek, municipality of Lopik.** ***Explanation:*** *The distances between the fencing and the depots must be increased for safety reasons. This larger gap is required as a security measure.* ***Necessity:*** *This additional physical space is needed to move site boundaries so as to meet NATO requirements.* ***Space/environmental impact****: This may result in the greater use of land around a number of depots.* ***Quantification:*** *It is not yet known what the exact new site boundaries should be.*

23	27	**Additional environmental space for helicopter activities at Deelen Air Base, municipality of Arnhem.** ***Explanation:*** *Additional environmental space at Deelen for the relocation of helicopter activities from Gilze-Rijen to Deelen Air Base.* ***Necessity:*** *The relocation and related additional environmental space is required as an alternative to accommodate the strengthening of helicopter activities for readiness and deployment. Deelen Air Base provides the opportunity for training independently and with ground troops on location. The location also serves as a base for the use of training areas in the northern part of the Netherlands. It also unburdens the environment of Gilze-Rijen.* ***Space/environmental impact:*** *This concerns the more intensive use of Deelen Air Base by helicopter activities. Activity at the air base will increase, both at the site and in the air.* ***Quantification:*** *The amount of additional environmental space needed for the helicopter activities at Deelen will be examined in the EIA.*
	28	**Restricted area around MTL Deelen (specifically the outer horizontal surface)- Legal securing.** ***Explanation:*** *Defence wants to have more control over what is being built in the vicinity of the military airfields. It is important that the interests of Defence around the various air bases can be secured. Defence currently has few possibilities to block developments in terms of space in the immediate vicinity. An example of this is the installation of wind turbines that have a negative effect on flying possibilities.* ***Necessity:*** *The external pressure in these areas is increasing and this is at the expense of the possibilities and flight safety.* ***Space/environmental impact:*** *Defence needs to legally secure the outer horizontal surface with a radius of 15 km around a military airport. This policy is based on the restricted areas prescribed by the UN Civil Aviation Organisation ICAO. Defence is now adjusting its activities to the existing zoning. This fits for now, but only just (not flexible and no expansion space).* ***Quantification:*** *This legal securing is necessary to retain the current available space.*
24	29	**Expansion of the site for the purpose of meeting NATO standards, Defence Pipeline Organisation depot in Poortugaal, municipality of Albrandswaard.** ***Explanation:*** *The distances between the fencing and the depots must be increased for safety reasons. This larger gap is required as a security measure.* ***Necessity:*** *This additional physical space is needed to move site boundaries so as to meet NATO requirements.* ***Space/environmental impact:*** *This may result in the greater use of land around a number of depots.* ***Quantification:*** *It is not yet known what the exact new site boundaries should be*
	30	**Expansion of environmental space for activities at Volkel Air Base, municipality of Maashorst.** ***Explanation:*** *Expansion of the environmental space is necessary to carry out the current and new training and other activities. For example, foreign visits for beddown NATO/USA, ACE and international training exercises are currently not included in the permit.* ***Necessity:*** *This expansion is necessary not only to continue to meet international expectations and agreements, it also contributes to the integration and readiness of the Air Force.* ***Space/environmental impact:*** *To permit this increase in use, more environmental space is needed.* ***Quantification:*** *At present it is not entirely clear how much environmental space is needed and where the necessary spatial zones will be located.*

25	31	**Restricted area around Volkel Air Base (specifically the outer horizontal surface)- Legal securing.** ***Explanation:*** *Defence wants to have more control over what is being built in the vicinity of the military airfields. It is important that the interests of Defence around the various air bases can be secured. Defence currently has few possibilities to block developments in terms of space in the immediate vicinity. An example of this is the installation of wind turbines that have a negative effect on flying possibilities.* ***Necessity:*** *The external pressure in these areas is increasing and this is at the expense of the possibilities and flight safety.* ***Space/environmental impact:*** *Defence needs to legally secure the outer horizontal surface with a radius of 15 km around a military airport. This policy is based on the restricted areas prescribed by the UN Civil Aviation Organisation ICAO. Defence is now adjusting its activities to the existing zoning. This fits for now, but only just (not flexible and no expansion space).* ***Quantification:*** *This legal securing is necessary to retain the current available space.*
26	32	**Shooting range for Koninklijke Militaire School Luchtmacht (KMSL) Woensdrecht Air Base, municipality of Woensdrecht.** ***Explanation****: The Royal Military Air Force School (KSML) at Woensdrecht Air Base is the training institute of the Air Force. The Air Base does not currently have its own shooting facilities and is dependent on local shooting clubs and other armed forces Services.* ***Necessity:*** *An increase in new students has also increased the total number of shooting series. Geographically there are few alternatives in the vicinity or these are usually fully booked. The travel time is the problem, as it is at the expense of training time. This makes finding a solution at the airbase necessary.* ***Space/environmental impact:*** *A new outdoor shooting range must be realised at Woensdrecht Air Base. This is a new activity, its construction requires nitrogen allowance. Its use will lead to an increase in shooting noise.* ***Quantification:*** *The number of trainees is expected to increase from 260 to 800 per year for 2024 (General Military Training and Air Force). The shooting range will be in use on a daily basis, given current usage and the increase in the number of trainees. The exact effect this will have on noise production has yet to be determined.*
	33	**Expansion of environmental space for activities at Woensdrecht Air Base, municipality of Woensdrecht.** ***Explanation:*** *Several infrastructure projects where there is a need for additional space to guarantee and increase activities such as engine maintenance, training and rehearsal facilities for fire services, activities of fellow users and expansion of platform and storage space. There is also a need for a larger number of test runs with F135 engines.* ***Necessity:****. In order to continue to meet international agreements on F35 maintenance. Furthermore, growth is needed to perform the task.* ***Space/environmental impact:*** *The planned expansions require an increase in the permit allowance.* ***Quantification:****. The exact permit allowance required is not yet clear. The use of the F135 test run facility is clear. This will increase from 30 runs to 80 runs per year.*
	34	**Restricted area around Woensdrecht Air Base (specifically the outer horizontal surface) and corridors - Legal securing.**
		Explanation: *Defence wants to have more control over what is being built in the vicinity of the military airfields. It is important that the interests of Defence around the various air bases can be secured. Defence currently has few possibilities to block developments in terms of space in the immediate vicinity. An example of this is the installation of wind turbines that have a negative effect on flying possibilities.* ***Necessity:*** *The external pressure in these areas is increasing and this is at the expense of the possibilities and flight safety* ***Space/environmental impact:*** *Defence needs to legally secure the outer horizontal surface with a radius of 15 km around a military airport. This policy is based on the restricted areas prescribed by the UN Civil Aviation Organisation ICAO. Defence is now adjusting its activities to the existing zoning. This fits for now, but only just (not flexible and no expansion space).* *.* ***Quantification:*** *This legal securing is necessary to retain the current available space.*

27	35	**Expansion of environmental space for activities at Gilze-Rijen Air Base, municipality of Gilze en Rijen.** ***Explanation:*** *There is a need to expand the environmental space at Gilze-Rijen Air Base. The reason for this is the lack of space for the current activities, such as testing and maintaining maximum storage of (Class 1.1) ammunition.* ***Necessity:*** *We are now adapting the activities at the airbase to the existing zoning. The space for this is tight and inflexible, and there is no room for expansion. To ensure that these activities are executed, the environmental space must be expanded.* ***Space/environmental impact:*** *The planned expansions require an increase in the permit allowance.* ***Quantification:*** *The exact permit allowance required is yet to be quantified. This depends on the specifications and final future use.*
	36	**Restricted area around Gilze-Rijen Air Base (specifically the outer horizontal surface) and corridors - Legal securing.** ***Explanation:*** *Defence wants to have more control over what is being built in the vicinity of the military airfields. It is important that the interests of Defence around the various air bases can be secured. Defence currently has few possibilities to block developments in terms of space in the immediate vicinity. An example of this is the installation of wind turbines that have a negative effect on flying possibilities.* ***Necessity:*** *The external pressure in these areas is increasing and this is at the expense of the possibilities and flight safety.* ***Space/environmental impact:*** *Defence needs to legally secure the outer horizontal surface with a radius of 15 km around a military airport. This policy is based on the restricted areas prescribed by the UN Civil Aviation Organisation ICAO. Defence is now adjusting its activities to the existing zoning. This fits for now, but only just (not flexible and no expansion space).* *There is also a need for 4 corridors (2 of which split in 2 directions) in CTR Gilze-Rijen.* ***Quantification:*** *This legal securing is necessary to retain the current available space.*
28	37	**Physical and noise allowance at training area Oirschotse Heide: physically expand (200 ha) also in terms of noise allowance, municipality of Oirschot.** ***Explanation:*** *The size of training areas is too small to work up to the task in conformity with the current land operations. Several training areas are no longer suitable for level IV training (company, 100 to 150 military personnel), even though they were suitable in the past. The necessary physical space for level IV has grown due to new assets and methods of operation.* ***Necessity****: A larger training area is necessary in order to facilitate the training of land operations and thus guarantee readiness.* ***Space/environmental impact:*** *To increase the training area, new land is needed: The Oirschotse Heide OT must be extended by 200 hectares.*
	38	**Expansion of environmental space for activities at RVS barracks in Oirschot, municipality of Oirschot.** ***Explanation:*** *Activities at the barracks are increasing, which is the result of the anticipated growth of the barracks.* ***Necessity****: The strengthening and continued growth of the Army.* ***Space/environmental impact:*** *The planned activities require an increase in the permit allowance.* ***Quantification:****. The exact permit allowance required is not yet clear.*

29	39	**Expansion of the Acht private siding for vehicles 13. Light Brigade, municipality of Oirschot.** ***Explanation:*** *For the purpose of Host Nation Support and military mobility, Defence has a growing need to transport materiel by rail through the Netherlands. In view of the increasing need for transport movements, the current capacity of private sidings is no longer sufficient.* ***Necessity:*** *This need is firstly due to the increase in training exercises and training of units relocating by rail. Secondly because of the changing threat level, which means more transport movements through Europe. EU regulations dictate that transport over 500 km must take place by rail or waterway.* ***Space/environmental impact:*** This mainly concerns physical expansion of the existing private sidings. **Quantification:** The necessary growth in hectares for each private siding is not yet clear.
30	40	**IBT centre Eindhoven region for the Royal Netherlands Marechaussee and Defence Monitoring and Security Organisation on existing Defence Site, municipality of Eindhoven.** ***Explanation:*** *An Integrated Professional Skills Training (IBT) centre is necessary to keep armed and other personnel of the Royal Marechaussee, and the Defence Monitoring and Security Organisation,* *certified for deployment. A search is being conducted in the Eindhoven region on existing Defence land.* ***Necessity:*** *An IBT centre is necessary to keep armed and other personnel certified for deployment. No alternatives are available in this region. Units are now housed in buildings set to be demolished. The current Defence Monitoring and Security Organisation building must make way for the simulation building of the Royal Netherlands Air Force.* ***Space/environmental impact:*** *The need is limited to possibly expanding the permit situations of one or more existing Defence sites in the region.* ***Quantification:*** *The plan still needs to be worked out. The exploratory work is ongoing.*
	41	**Change of layout of Eindhoven Air Base, relocating Hot cargo platform.** ***Explanation:*** *The layout of Eindhoven Air Base is changing in order to better connect it to the operations. The runway renovation in 2027 will lead to the relocation of hot cargo, and will have an effect on safety circles.* ***Necessity:*** *This is necessary to better accommodate the growth of military flights.* ***Spatial/environmental impact:*** *The relocation has an effect on the location of the safety zones of the hot cargo platform.* ***Quantification:*** *The immediate impact is not yet clear. As there is regular transport of ammunition by air, a facility at Eindhoven Air Base for this purpose remains necessary.*
	42	**Restricted area around Eindhoven Air Base (specifically the outer horizontal surface)- Legal securing.** ***Explanation:*** *Defence wants to have more control over what is being built in the vicinity of the military airfields. It is important that the interests of Defence around the various air bases can be secured. Defence currently has few possibilities to block developments in terms of space in the immediate vicinity. An example of this is the installation of wind turbines that have a negative effect on flying possibilities.* ***Necessity:*** *The external pressure in these areas is increasing and this is at the expense of the possibilities and flight safety.* ***Space/environmental impact:*** *Defence needs to legally secure the outer horizontal surface with a radius of 15 km around a military airport. This policy is based on the restricted areas prescribed by the UN Civil Aviation Organisation ICAO. Defence is now adjusting its activities to the existing zoning. This fits for now, but only just (not flexible and no expansion space).* ***Quantification:*** *This legal securing is necessary to retain the current available space.*
31	43	**Commissioning of Budel Barracks and expansion of Weerterheide, municipality of Cranendonck/Weert.** ***Explanation:*** *Use of the barracks in combination with training exercises on Weerterheide is desirable. Use of the training area requires facilities at or near the barracks, such as tank facilities, cleaning area and (infra) facilities.*

		Budel is currently an important reception centre of the Central Agency for the Reception of Asylum Seekers (COA), and talks on the long-term future of this location are still ongoing. The inclusion of Budel as an alternative in the EIA does not mean that a decision has been made with regard to potentially changing its current role or combining both roles, possibly in a phased manner. *The size of the training area is too small to work up to the task in conformity with the current land operations. Several training areas are no longer suitable for level IV training (company, 100 to 150 military personnel), even though they were suitable in the past. The necessary physical space for level IV has grown due to new assets and methods of operation.* ***Necessity**: These grounds are necessary to facilitate the training of land operations and thus guarantee readiness. There are currently no essential facilities in the vicinity of the training area that increase the practice value of Weerterheide. A larger training area is necessary in order to facilitate the training of land operations and thus guarantee readiness. **Space/environmental impact:** The necessary barracks facilities can be located on the barracks' own site in Budel. To increase the training area, new land is needed. **Quantification:** Not quantified; for the use of the barracks, Defence is also partly dependent on the future use by the COA. The inclusion of Budel as an alternative location in the EIA does not mean that a decision has been made with regard to potentially changing its current role or combining both roles, possibly in a phased manner.*
XX	44	**Training areas that allow excavation.** ***Explanation:** Due to many restrictions, excavating on training areas is virtually impossible. However, the current threat level and the conflicts occurring necessitate such excavation activities. That is why more attention must be paid to this in training courses and during exercises in Dutch training areas. At present, only the digging of foxholes is permitted to a limited extent. **Necessity:** There is a disparity between what Defence is allowed to do on training areas in the Netherlands and what Defence should be able to do. The expansion of permits to also be allowed to dig trenches or dig for defences for site protection is truly necessary. **Space/environmental impact:** The digging of trenches or defences is mainly limited by nature legislation. **Quantification:** There must be sufficient opportunities for carrying out such excavation work in several training areas.*