

Ministry of Defence



Defence Environmental Policy Plan 2004

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Coordinator for Spatial Planning and Environment
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List of Contents

Objectives of the Defence Environmental Policy Plan 2004 (DMB 2004)

Chapter 1 Introduction 7

- 1.1 Context 7
- 1.2 Bird's-eye view of the DMB 2004 7

Chapter 2 Retrospective 9

- 2.1 Defence Environmental Policy Plan 2000 (DMB 2000) 9
- 2.2 Realisation of objectives 9
- 2.3 Evaluation of the DMB 2000 10
- 2.4 Recommendations 12

Chapter 3 Context 13

- 3.1 General 13
- 3.2 National developments 13
- 3.3 The European Union 14
- 3.4 The North Atlantic Treaty Organisation 15
- 3.5 International treaties and conventions 15
- 3.6 Sustainable development 16

Chapter 4 Environmental themes 17

- 4.1 General 17
- 4.2 Climate and energy 18
- 4.3 Health and the living environment 20
 - 4.3.1 Noise nuisance 20
 - 4.3.2 Hazardous substances 22
 - 4.3.3 Soil management 25
 - 4.3.4 Integral water management 27
 - 4.3.5 Waste 29
 - 4.3.6 External safety 30
- 4.4 Biodiversity and nature conservation 31

Chapter 5 Tools and instruments 34

- 5.1 Environmental management 34
- 5.2 Environmental management during exercises and operations 35
- 5.3 Policy, Planning and Budgeting Process 36
- 5.4 Defence Materiel Selection Process 38
- 5.5 Infrastructure process 39
- 5.6 Relationship between working conditions and the environment 40
- 5.7 Finance 41
- 5.8 Communication 41

Annexes 42

- A. List of Abbreviations 42
- B. Overview of planned budgets 44

Objectives of the Defence Environmental Policy Plan 2004

Energy objectives

1. By the end of 2006, all heated Defence objects with a floor area upwards of 1,000 m² will have been analysed in terms of their energy performance. This is to result in an energy efficiency improvement of 15% for the heating component of all heated objects by the end of 2008 in comparison to 1999.
2. By the end of 2008, 75% of Defence electricity consumption will be generated in a sustainable way.
3. The Defence organisation will facilitate the placement of wind turbines with an overall output of 20 MW on Defence sites before 2010.

Noise nuisance objectives

4. The Defence organisation contributes to gaining more insight into noise levels from military activities for which no assessment standards currently exist and to the further completion of legal instruments in this field.
5. The Defence organisation will determine the indirect land use for all installations licensed under the Environmental Management Act (EMA) by 2008 at the latest. In the context of updating the required EMA data, the Defence organisation will determine whether noise zones or noise contours need to be adjusted for each individual object. The indirect land use around training areas will have been quantified not later than five years after the relevant legal instruments have become available.
6. Given unchanged national noise abatement policy, the Defence organisation will not allow an increase in the total surface area of indirect land use due to noise in the Netherlands once this surface area has been specified.

Hazardous substances objectives

7. By 2004, the Defence organisation will have drawn up lists of substances, which are used in the procurement process across the Defence organisation. These lists will be updated annually.
8. By 2008 at the latest, the Defence organisation will have mapped potential exposure to and emission levels of persistent bioaccumulation and toxic substances.
9. By 2005 at the latest, an inventory will have been made of the main sources of particulate matter emitters in the Defence organisation.
10. By the end of 2006 at the latest, a study will have been completed into the technical possibilities of achieving emission reductions in equipment with high particulate matter emission levels.

Soil management objectives

11. By 2023 at the latest, the Defence organisation will have cleaned up or controlled all severe soil contaminations on Defence sites.
12. By 2008, the Defence organisation will have completed soil management plans for the 50 most relevant Defence objects.





Integral water management objective

13. By 2008 at the latest, the Defence organisation will have drawn up integral water management plans for 20 major Defence objects and will have implemented the resulting cost-effective measures. During the policy period the Defence organisation will determine what standard control measures can be specified.

Waste objectives

14. With effect from 2004, the Defence organisation will lay down the volume and waste separation percentages of the Defence waste streams. By 2006 at the latest, reduction targets will be formulated for each individual waste stream. From then on, the armed forces Services are obliged to achieve these percentages.
15. From 2004, the Defence organisation will monitor the waste separation process, register the waste disposal costs and chart the most cost-effective reduction possibilities.

External safety objective

16. In 2005 the Defence organisation will complete the Defence Ammunition Storage Risk Analysis programme. On the basis of the results, the policy laid down in the Van Houwelingen circular letter will be reviewed and adjusted, if necessary.

Biodiversity and nature conservation objectives

17. In 2004 the existing monitoring system will be expanded to include species listed in the EU Habitats and Birds Directives and the Fauna and Flora Act.
18. In 2006, conservation management plans for all relevant Defence sites will have been completed, subject to lengthy legal procedures.

Environmental Management objectives

19. From the start of the policy period, all parts of the Defence organisation will have well-functioning environmental management systems for all their operating processes. The Royal Netherlands Army and the Central Organisation (the Ministry itself) will have reached this situation by the end of 2004.
20. Before 31 December 2005, the Defence Audit Board will have assessed all non-certified environmental management systems on the basis of the ISO 14000 standard and the SCCM guidelines. After this, three-yearly follow-up audits will be conducted.

Environmental management objective during exercises and operations

21. NATO procedure STANAG 7141 EP will be used in the planning of all major exercises and operations. To this end, environmental aspects will be integrated into the relevant operational planning procedures and documents at all levels of the organisation.

BPB objective

22. The Defence Audit Board conducts annual reviews to establish the extent to which the DMB objectives have been met and validates the quality of the environmental data with a view to the environmental annual report and the VBTB ("From policy budgeting to policy accountability") reports.

Materiel Selection Process objectives

23. In 2004, the Defence organisation will develop a decision evaluation framework for environmental aspects to be used defence-wide in the context of the Defence Materiel Selection Process.
24. When acquiring widely available commercial (off-the-shelf) goods and services, the Defence organisation, in the course of the policy period, will use energy labels, recognised eco-labels and environmental management certificates as criteria for awarding contracts.

Infrastructure objective

25. From 2004, the Defence organisation will comply with the basic level of the Sustainable Building (Dubo) National Package for Non-Residential Engineering for all new building and major maintenance projects.

Communication objective

26. The Defence organisation issues an annual environmental report before 1 June of each year.



I Introduction

1.1 Context

The Defence organisation possesses much movable and immovable property and is owner and user of some 34,000 hectares of land. These assets are necessary for carrying out the task which is laid down in the constitution, namely protecting the interests of the State and promoting the international rule of law. As with every large organisation, the operating processes of Defence have an effect on the environment. These processes involve the use of raw materials, the production of exhaust gases, noise nuisance and the like. It is moreover a constitutional duty of the public authorities to ensure the habitability of the country and to protect and enhance the living environment. As a government organisation, Defence contributes to this. It is important here to find the right balance between the two interests. Defence must be able to carry out the tasks it is charged with. The burden on the environment will, however, be limited as much as possible in this.

Environmentally responsible operating processes are the starting point for Defence. The burden on the environment which is caused by Defence will in principle be tackled at the source. If it proves impossible to take sufficient measures against the source, measures against the effect must keep the environmental consequences of Defence activities within socially acceptable limits. Effect-oriented measures are also necessary to tackle inherited problems, such as soil contamination. By taking account of the environment in all stages (design, construction, use and disposal) of the lifecycle of the movable and immovable assets used by the Defence organisation, a contribution is made to enhancing the quality of the environment.

1.2 Bird's-eye view of the DMB 2004

Chapter two evaluates the extent to which the objectives set out in the Defence Environmental Policy Plan 2000 (DMB 2000) have been met and looks at the internal evaluation of the DMB 2000. These two aspects, as well as changes taking place outside the Defence organisation, have been guidelines in drawing up the Defence Environmental Policy Plan 2004 (DMB 2004).

Chapter three offers a synopsis of the developments that have taken place in the field of the environment over the past four years at national and international level. Of particular interest to the Defence organisation in this context are EU environmental legislation and regulations and NATO environmental guidelines in regard to exercises and operations.

Chapter four outlines the environmental measures to be taken in the coming policy period. These are measures aimed at further phasing out environmental impacts from the Defence organisation, setting up a number of management systems designed to minimise financial and environmental risks and continuing a number of ongoing inventories and monitoring programmes.

Chapter five focuses on the instruments to be used with a view to implementing the environmental policy. Important items in this context are the ongoing introduction of environmental management systems – including in the context of exercises and operations – the ongoing integration of environmental aspects into the everyday operating processes of the Defence organisation, sustainable procurement and building, the relationship with working conditions and the improvement of communication concerning environmental subjects. Naturally, the financial consequences of the environmental policy also play an important role in this context.

2 Retrospective

2.1 Defence Environmental Policy Plan 2000

The Defence Environmental Policy Plan 2000 (DMB 2000) was signed and presented to Parliament by the State Secretary for Defence on 17 December 1999. The planning period of the DMB2000 is five years, running to the end of 2004.

The DMB 2000 policy rests on three main pillars:

- The introduction of environmental management systems;
- The setting up of a measurement and registration system;
- A further reduction of pressure on the environment based on six themes: energy and air pollution, noise, environmentally hazardous substances, soil contamination, waste and nature.

The objectives formulated in this plan have been 'SMART'-formulated; the acronym stands for Specific, Measurable, Acceptable, Realistic and Time-related. The main focus in the reduction targets is on immovable property. This choice was motivated by the desire not to impair the proficiency or the operational readiness of the armed forces.

At the end of 2002, as a result of the far-reaching spending cuts imposed under the Strategic Accord by the first Balkenende administration, a decision was made to bring back the DMB 2000 planning period by one year. The drafting of a new environmental policy plan offers the possibility of checking the Defence environmental policy against its financial consequences.

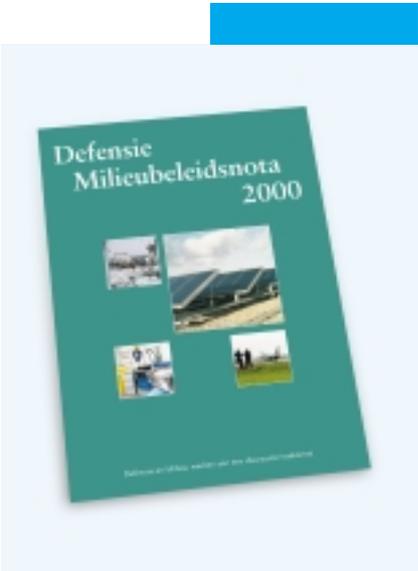
The realisation of a number of objectives from the DMB 2000 will continue into 2004 and beyond. These objectives have been incorporated in the present environmental policy plan.

2.2 Realisation of objectives

Over the past few years all parts of the Defence organisation have made an immense effort to further introduce environmental management systems. A great deal of progress has been made in this respect. At the end of 2002, five environmental management systems, introduced by different parts of the Defence organisation, had been granted the ISO14001 certificate. By the end of 2002, the Royal Netherlands Navy, the Royal Netherlands Air Force and the Defence Interservice Support Service were completing the other systems, while the first integral improvement cycle takes place in 2003. The introduction of the systems by the Royal Netherlands Army and the Central Organisation has suffered a delay. The required administrative procedures for these systems will have been completed in 2003, followed by the first improvement cycle in 2004.

All parts of the Defence organisation have introduced measurement and registration systems. The overall picture of the environmental impacts from the Defence organisation, however, is not completely reliable as yet, as there is still uncertainty concerning the correctness of certain data. The uncertainty is diminishing, however.





Since 1999, considerable progress has been made in a number of relevant environmental themes: thus, total energy consumption has decreased by over 10%. The sustainable energy target (4% sustainable energy for immovable property) has been achieved, thanks to procuring sustainable electricity and by generating sustainable energy within the Defence organisation itself. The emission of greenhouse gases (CFCs, etc) has decreased by between 15 and 25%. The noise abatement objective (no increase in the level of noise nuisance) has been met every year. The realisation of the two objectives in the field of soil contamination (all instances of severe soil contamination on Defence sites to be cleaned up or controlled by 2010 and implementing an active soil management system by 2004) is well on schedule. Seventy per cent of all potentially contaminated Defence sites have been examined and cleaned up, where relevant. The use of chemical herbicides has decreased strongly. The monitoring system for natural values has become operational.

However, there are still some environmental themes that require further attention. The reported emission of volatile organic compounds (VOCs, such as solvents), for instance, has increased by 25% since 1999. This is probably due in part to the fact that in the first years of the monitoring period reports were incomplete. Over the past few years, a steady decrease has been reported. The inventory of environmentally hazardous substances turned out to be a much more complex affair than expected. Despite tremendous efforts, the inventory had not been completed by the end of 2002. It is being continued in the next planning period. The waste objective was to gain quantitative and qualitative insight into the Defence waste streams. The qualitative target has been achieved. There is no certainty concerning the amounts of waste produced by Defence, as the relevant information supply was not provided for in contracts with waste disposal companies. This problem is to be solved in the coming period.



2.3 Evaluation of the Defence Environmental Policy Plan 2000

The new policy plan started with an evaluation of the DMB 2000. This evaluation showed that a number of factors in the Defence environment have changed in comparison to the situation that existed when the DMB 2000 was drawn up. These factors are described in chapter 3.

Positive factors from the DMB 2000, which can be maintained in the new policy plan, are the following:

- Owing to the DMB 2000, significant progress has been made with the integration of environmental aspects into the operating processes of the Defence organisation;
- The structure of the DMB 2000 with pillars and themes greatly enhances insight;
- The objectives have in principle been formulated using the SMART system, which allows them to be monitored effectively;
- Over the planning period of the DMB 2000, the pressure on the environment from the Defence organisation has decreased.



In implementing the DMB 2000, the following shortcomings have emerged:

Contests of the DMB 2000

- Defence environmental policy should link up more directly with the organisation's primary processes and form an integral part of the overall defence policy, more than has been the case so far.
- Some environmental objectives have not been sufficiently formulated in accordance with the SMART system, which has given rise to ambiguity. The two main examples of this are the term "certifiable environmental management system" and the scope of the inventory of environmentally dangerous substances.
- The undertakings given in addition to the objectives in the DMB 2000 have been given insufficient attention in the context of implementation and monitoring.
- At the time of drafting the DMB 2000, there was insufficient insight into the financial and personnel-related consequences of the formulated policy.
- There was no communication strategy. Such a strategy is essential to creating sufficient support within the organisation for the introduction of a new environmental policy. The actions taken by the Defence organisation to deal with the environment in a responsible way are insufficiently known outside the Defence organisation.

Management

- The integration of environmental aspects into Defence operating processes needs to be improved in certain domains. The extent of integration differs per Service.
- For the DMB policy to be properly implemented, concrete plans of action and monitoring of implementation progress are required.
- As soon as implementation is found to be falling behind schedule, the line managers should take the necessary measures to remedy the situation. This is not done sufficiently at present. The Defence Spatial Planning and Environment Coordinator (CROMD) assesses the periodic reports submitted by the Services and reports backlogs to the Secretary-General and to the Minister of Defence and the State Secretary for Defence.
- The decrease in environmental pressure from the Defence organisation was largely the result of the downsizing of the Defence organisation, which has led to reductions in the movable property sector in particular. In the immovable property sector, lengthy procedures, such as the realisation of wind energy and the disposal of barracks complexes, as well as cutbacks in new buildings and maintenance (the implementation of sustainable building measures) have caused a slow start in effectuating the intended policy.
- While the defence-wide overview of environmental pressure has been realised in accordance with the objective, the reliability of certain data is yet to be improved.

2.4 Recommendations

Analysis of the above positive elements and shortcomings leads to the following recommendations:

- The objectives included in the DMB 2004 will all be given extra attention in terms of SMART formulation;
- In drafting the DMB 2004, the financial and personnel-related consequences will be mapped;





- A communication plan will be drawn up parallel to drafting the DMB 2004;
- Further integration of the implementation of environmental policy into the regular Defence planning and control cycle (the Integral Defence Planning Process) is to be effected in the course of the next policy period. This will aid the translation of policy into implementation, result in better alignment with the primary process and improve steering by the line management.

3 Context

3.1 General

Since 1999, the year in which the DMB 2000 was drafted, there have been many new developments in the context in which the Defence environmental policy is set. They are outlined in this chapter. The new developments will be taken into account in the context of working out the Defence environmental policy.

3.2 National developments

The Defence organisation is to achieve a major cost reduction and transform itself into a smaller and more proactive military organisation tailored to expeditionary missions, even more so than it was before (see the letter from the Minister of Defence to the Senate and the House of Representatives of the States-General, dated 16 September 2003). The Defence measures must strike a new balance between the size and resources of the armed forces and the available budget. The environmental policy forms part of this package of measures, which means that the margins for new policy are narrow and that the existing policy will need to be implemented at a slower pace.

As part of the Central Government, the Defence organisation bases its environmental policy on the government's environmental policy. The current governmental environmental policy has been laid down in the National Environmental Policy Plan 3 (NMP3, 1998) and the National Environmental Policy Plan 4 (NMP4, 2001). The NMP3 focuses on 'decoupling', a term which denotes improving living standards (economic growth), while at the same time reducing environmental pressure. Another important starting point is that the government is to be a model for good environmental practice. The NMP3 emphasises the importance of environmental management systems.

The NMP4 is mainly concerned with long-term policy (up till 2030) and introduces transitional processes. These are processes designed to facilitate the transition from the current society to a society characterised by sustainable energy management, sustainable agriculture and a sustainable use of natural resources and biodiversity. The objectives from the NMP3 are still in force, unless the NMP4 explicitly states otherwise.

In 2002, the Ministry of Housing, Spatial Planning and the Environment (VROM) issued a policy paper entitled "Vaste Waarden, Nieuwe Vormen: Milieubeleid 2002-2006" (Permanent Values, New Forms: Environmental Policy 2002-2006). This paper works out the consequences of the Strategic Accord for environmental policy and outlines the main objectives: the dissociation of economic growth from environmental pressure ('decoupling'), the cost-effective implementation of the Kyoto obligations and an active international environmental policy. Decoupling cannot be achieved as yet for carbon dioxide, noise nuisance and external safety.

Under the coordination of VROM, it took until the beginning of 2002 to complete the fifth Policy Document on Town and Country Planning 2000/2020. This policy plan focused on the use of military (training) grounds and complexes, with particular emphasis on the relationship with natural values and opportunities for building (also



referred to as red contours). The fifth policy document was not discussed by the States-General as a result of the government crisis in the spring of 2002. It is currently being reviewed and discussed.

The Second Military Sites Structure Plan (SMT2) specifies the implications of this fifth policy document for the Defence organisation where spatial planning is concerned. The SMT2 follows the procedures of a Key Spatial Planning Decision, or PKB in Dutch. While the final draft of Part 3 of the SMT2 (the government decision) had been completed at the end of 2002, finalisation was delayed until such time as the consequences of the Strategic Accord and the Coalition Agreement 2003 in terms of spatial planning would be known more precisely.

This means that neither the fifth Policy Document on Town and Country Planning 2000/2020 nor the SMT2 were taken into account in drawing up the Defence Environmental Policy Plan 2004.

Other government memorandums setting out conditions for the Defence environmental policy include:

- Climate Policy Implementation Memorandum (TK 1998-1999, 26603 no.1)
- Energy Efficiency Memorandum (7 April 1998)
- Strategic Memorandum on Handling Substances (TK 2000-2001, 27646 nos. 1 and 2)
- Fourth Policy Memorandum on Water Management (TK 1998-1999, 26401 no. 1)
- Policy Memorandum on “Changing the way we live with water: water policy in the 21st Century” (TK 2000-2001, 27625 no. 1)
- Second Green Space Structure Plan (Tweede Structuurschema “Groene Ruimte 2”) (TK 2001-2002, 28182 no. 1)
- Policy Memorandum on “Nature for People, People for Nature” (Nota “Natuur voor mensen, mensen voor natuur”) (TK 1999-2000, 27235 no. 1)
- Programme of Action on Sustainable Development: “Sustainable Proaction” (Actieprogramma duurzame ontwikkeling “Duurzame daadkracht” (July 2003)



In recent years, the Netherlands was confronted with a number of disasters which led to additional measures being taken, the effect of which was intensification of the relevant policy.

The first disaster to be mentioned in this context is the fireworks disaster in Enschede, which had a strong impact on external safety measures. For the Defence organisation, this mainly concerns external safety in the vicinity of ammunition complexes. The café fire in Volendam led to more stringent demands being made in the Defence organisation on supervision of fire safety and the validity of user permits. In addition, there is growing attention for the health aspects of building materials, such as asbestos, PCBs, solvents, radioactivity, etc.

3.3 The European Union

Increasingly, European environmental regulations are determining the content of environmental policy in the Netherlands. An estimated 75% of Dutch environmental regulations is currently based on European regulations. In 2001, the Defence organisation made a decision to monitor developments in the field of the

environment more closely, as this would enable it to influence the decision-making process at an early stage and/or to take timely measures. This was done to guard against being confronted with limitations that would compromise the carrying out of Defence tasks. Such limitations could include a ban on substances or products with a specific Defence use, for which no alternatives exist or unacceptable limitations being imposed on the use of training areas or firing ranges. For this reason, the Defence organisation sits on the Coordination Committee for International Environmental Issues for the EU (CIM-EU) of the Ministry of Foreign Affairs. The Dutch position in the European Council and the Council working groups is determined here at an interdepartmental level.

The representation of Defence interests in the EU environmental bodies, however, is rather indirect and therefore not as efficient as desired. From 2001, the Defence organisation therefore has regular consultations with the Defence organisations of the other EU member states on issues of European environmental legislation in relation to defence organisations. The consultations are aimed at exchanging information on forthcoming EU regulations and also at coordinating interventions by the various individual member states in Brussels.

3.4 The North Atlantic Treaty Organisation

NATO has developed guidelines and procedures in the field of the environment for some considerable time now, including on how to deal with oil products and on environmentally-friendly procedures on board navy vessels. A more recent development is the generation of environmental policy. This policy starts from the principle that, in as far as operational considerations allow, environmental aspects are taken into consideration as much as possible during exercises and operations. The attention is mainly focused on military compounds, with particular emphasis on energy management, waste and wastewater processing and soil protection. The policy has recently been anchored in a standard procedure, the so-called Standard NATO Agreement (STANAG) 7141. This STANAG, in turn, serves as the basis for the environmental annex to the operation orders for peace operations such as those in Bosnia, Kosovo, Afghanistan and Iraq. In addition, so-called “NATO Guidelines on the Acquisition of Environmentally Sound Products” have been drawn up. These guidelines state that, in the context of procuring materiel and services, environmental aspects are to be an equally important factor as effectiveness, quality and life-cycle costs.

3.5 International treaties and conventions

EU and NATO treaties are important parameters of environmental policy. In addition, there are a number of other important international treaties and protocols to which the Netherlands is a signatory and which it has ratified. Examples in the field of the environment include the Climate Treaty and the Kyoto Protocol, the Vienna Treaty and the Montreal Protocol on substances depleting the ozone layer, the Biodiversity Treaty, the Sustainable Development Treaty, the Gothenburg Treaty on transboundary pollution and the MARPOL Treaty on the prevention of vessel discharges. The agreements in these treaties and protocols, to which the Netherlands has committed itself, are incorporated in Dutch legislation or government policy by the relevant ministries, thus constituting preconditions for the Ministry of Defence.





3.6 Sustainable development

In the past few years, the environmental policy of the United Nations (UN), the European Union (EU) and the Netherlands has become increasingly interwoven with sustainable development. This means that, in addition to environmental factors, social-cultural aspects and economic aspects also need to be considered in terms of how they interrelate. This is usually done with a long-term perspective. This policy, starting with Agenda 21 of the United Nations (Rio de Janeiro, 1992; Johannesburg, 2002), is implemented at all levels, from the global to the local level.

In Johannesburg, a number of spearheads in the field of sustainable development were identified for the coming years. In the National Strategy for Sustainable Development, these themes were supplemented with specifically Dutch problem areas. The relevant themes for Defence purposes are the following: proper water management and access to high-quality drinking water, sustainable energy management, health and safety, biodiversity, sustainable mobility and sustainable production and consumption.

The European and national sustainable development strategies are still being developed. The National Environmental Policy Plan 4 has made considerable headway in terms of sustainable development by integrating transitional measures towards sustainable energy management, sustainable use of non-renewable natural resources and the protection of biodiversity. This policy has ramifications for Defence environmental policy.

The national part of the Action Programme for Sustainable Development (July 2003) specifies that the government is to fulfil a model role. This will eventually lead to sustainable development becoming a 'natural' starting point for all the government's actions. Of crucial importance to achieving sustainable development is the external integration of environmental policy, which is to say that environmental consequences are to be considered in all management facets. This Defence target is further elaborated in this policy plan.

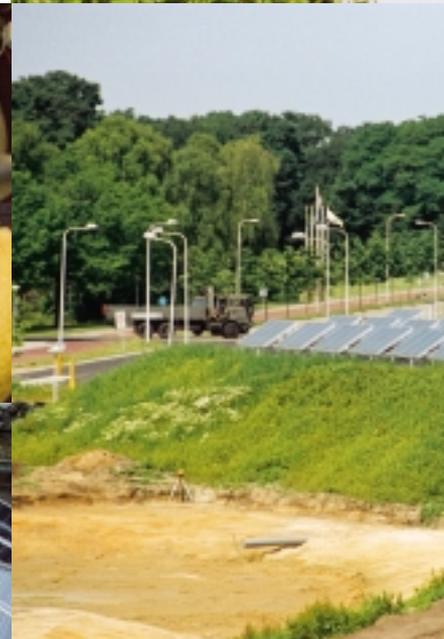
4 Environmental themes

4.1 General

This chapter sets out environmental policies per theme. The valid government policy is given, followed by the state of affairs at Defence and finally the Defence environmental policy. The themes follow the structure used in the NMP⁴.

The following main items typify the changes in the Defence environmental policy.

- The Defence organisation complies with the environmental legislation and regulations and implements government policy as approved by the council of ministers.
- The environmental policy carried out so far mainly concerned the situation at barracks complexes, the situation on board navy vessels and on air bases. Where during exercises and operations in the past account was already taken of environmental aspects, this will be done on a more intensive scale in the coming planning period. In parallel with the increased attention for exercises and operations, a shift to more emphasis on movable property is also noticeable.
- The Defence organisation links up with general trends in environmental policy in the Netherlands. Now that the main causes of environmental damage from the past are being tackled it is important to see to it that this does not happen again in the future. The emphasis in the environmental policy therefore shifts from curative programmes to prevention of environmental damage through management plans (soil, water, nature). This is necessary with a view to reducing operational and financial risks, as well as to minimising the risk of serious disruptions to operating processes.
- Brussels (the European Union) is currently the main initiator of environmental policies and regulations. This means that, more than before, the Defence organisation must take this into account in the context of its own environmental policy.



- In addition, NATO has also formulated environmental policy which has a bearing on the Defence organisation.
- The further integration of environmental issues into the Defence operating processes is an ongoing process following from the implementation of environmental management systems.
- The Defence organisation is involved in a major process of change. It is essential for environmental policy to continue to link up with this process.
- Under the Strategic Accord (Balkenende I administration) and the Coalition Agreement 2003 (Balkenende II administration), the Ministry of Defence was given a far-reaching financial reduction task. In consequence, the Defence environmental policy was also reviewed in the light of its financial ramifications. Annex B specifies the costs of the Defence environmental policy projected for the period of 2004 to 2008 and the cumulative amounts for the entire planning period (up to and including 2008).

This plan covers a period of five years (from 2004 up to and including 2008).

4.2 Climate and energy

Government policy

The Energy Efficiency Memorandum by the Ministry of Economic Affairs indicates that the 1.8 % annual energy efficiency improvement target for the utility sector and the 0.6 % energy efficiency improvement target for the traffic and transport sector will be maintained until 2010.

In the NMP4, in addition, it was indicated that the immovable property sector under government authority will be completely climate neutral by 2012. As a first step, the government departments are to step up the percentage of electricity generated on a renewable energy basis (the so-called green power) by a minimum of 50%. This percentage will further increase to 100 % by 2012. This is only possible, however, on condition that a sufficient supply of electricity generated from renewable energy resources can be bought in the energy market, and assuming that the market for 'green power' is not destabilised by this government initiative. For the Defence organisation an additional condition applies: "in view of the nature and scope of the parcels of land and buildings that are part of the Defence ministry, the total expenses made in procuring electricity by purchasing green power must not increase by more than 10% on an annual basis."

The European directive on energy performance of buildings, dated 16 December 2002, formulates further demands for buildings upwards of 1000 m² with effect from 2006. A performance certificate needs to be introduced for buildings and energy efficiency measures which allow their cost to be recouped within eight years are to be implemented.

State of affairs at Defence

Total Defence energy consumption has decreased by 10% compared to the base year 1999. This decrease is mainly accounted for by the reduced energy consumption of the armed forces' movable property sector. Energy consumption by the immovable property sector has remained approximately the same since 1999, while electricity use has risen by 3% as a result of increasing automation. Thanks to the implementation of sustainable



building measures, the energy performance of the immovable property sector is constantly improving.

In 2002, 20% of the total Defence energy consumption was generated on a sustainable basis both by procuring green power and by generating energy using solar panels and wind turbines. The Defence organisation currently (2003) has a number of wind turbine projects in preparation. The placing of turbines is complicated by lengthy procedures and by restrictions in the field of spatial planning.

Defence policy

Immovable property

For the utility sector, the 1.8% energy efficiency improvement target for the heating component will be continued. This means that by the end of 2008, an energy efficiency improvement of 15% compared to 1999 will have been achieved for the heating installations in Defence objects. This objective is to be realised mainly by, in accordance with the Defence Sustainable Building Measures, replacing heating installations, which in the course of major maintenance are found to have reached the end of their economic life, by High Efficiency heating systems. At the same time, the possibilities for replacing the old systems by total energy systems and heat pumps will also be looked into. In places where roof and/or outer insulation are found to be absent, these will be fitted.

In order to gain better insight into the energetic state of the Defence immovable property, all heated buildings with a floor surface of upwards of 1,000 m² where the energy performance coefficient has yet to be determined, will be analysed in terms of energy performance.

The methods used must be in line with European regulations and lead to an energy certificate as laid down in European legislation. Based on the analysis, an advisory report is to be compiled stating the measures to be taken to improve the building's energy performance.

A decision will subsequently be made as to the usefulness of examining the energy performance of the other heated buildings managed by the Defence organisation.

With a view to reducing energy consumption of the Defence immovable property sector and in view of upcoming European legislation in this field, the Defence organisation, from 2006, sets the return on investment period for energy-saving measures at 8 years. In addition, in deciding between the various technical alternatives, the cost-saving factor of every avoided ton of CO₂ emission will explicitly be taken into account.



Through these measures the consumption of non-renewable energy sources is limited to a minimum. At the same time, the Defence organisation will continue to follow closely the developments in the field of CO₂ emission trading, with a view to determining methods of implementing the government objective of achieving a fully climate-neutral immovable property sector for government departments.

Movable property

When different alternatives are weighed in the context of the Defence materiel procurement and selection process, environmental aspects, including the energy efficiency performance of equipment, are taken into consideration more clearly. This subject is discussed in more detail in section 5.5 Materiel Selection Process.

Sustainable energy

The government objective of achieving 100% sustainable energy by 2012 is realised by the Defence organisation mainly by procuring electricity generated from renewable energy sources ('green power'). In accordance with the guidelines laid down in the NMP4, the costs involved in this are not to increase by more than 10 per cent yearly.

In addition, sustainable energy is also generated to a limited extent by wind turbines, geothermal energy, heat pumps and solar panels.

By the end of 2008, 75% of Defence electricity consumption will be generated in a sustainable way.

BLOW-convenant

The Bestuursvereenkomst Landelijke Ontwikkeling Windenergie (BLOW), or Administrative Agreement on the National Development of Wind Energy, which was approved in 2001, aims to promote the use of wind energy in the Netherlands. The State Secretary for Defence has co-signed this administrative agreement. The specific objective for the Defence organisation is to help realise the wind power objective by placing wind turbines with an overall output of 20 megawatt on defence sites by 2010.

Objectives

1. By the end of 2006, all heated Defence objects with a floor area upwards of 1,000 m² will have been analysed in terms of their energy performance. This is to result in an energy efficiency improvement of 15% for the heating component of all heated objects by the end of 2008 in comparison to 1999.
2. By the end of 2008, 75% of Defence electricity consumption will be generated in a sustainable way.
3. The Defence organisation will facilitate the placement of wind turbines with an overall output of 20 MW on Defence sites before 2010.

4.3 Health and the living environment

4.3.1 Noise nuisance

Noise is inextricably linked with Defence activities, such as the use of airfields, firing ranges and training grounds.



Government policy

The NMP4 formulates the following objectives: “By 2010, a considerable improvement in acoustic terms must have been achieved in built-up areas; in dwellings the threshold limit value of 70 dB(A) is not to be exceeded any more, while the acoustic status in the national ecological network should not have worsened compared to 2000”.

The NMP4 objectives will be evaluated in 2006.

State of affairs at Defence

The Defence organisation aims to control and limit noise nuisance as much as possible. To be able to do so, assessment criteria are to be drawn up enabling noise nuisance to be translated into concrete terms. Noise criteria exist for the noise nuisance from airfields and installations coming under the Environmental Management Act, and noise zones have consequently been laid down and permits have been issued where relevant. Assessment criteria have likewise been developed for noise nuisance levels from firing ranges and vehicles.

The Defence organisation aims to use its objects in such a way as to cause minimum noise nuisance for its surroundings in compliance with the levels specified in the relevant permits or the levels agreed for specific noise zones.

In compliance with the Aviation Act, the Defence organisation has laid down noise zones for all its airfields. The Ministry of Housing, Spatial Planning and the Environment has laid down noise zones under the Noise Abatement Act for all relevant installations. There are 50 dB(A) contours, finally, around a number of the installations requiring a permit under the Environmental Management Act. The indirect land use due to noise has thus been determined for these objects.

Noise contours for airfields, determined on the basis of the actual air movements carried out, are made public on an annual basis. These noise contours are checked against the existing noise zones.

When determining noise zones, account is taken of the number of dwellings and other noise-sensitive buildings in the relevant zone. Within the zones around airfields, the Defence organisation has carried out soundproofing programmes.

Noise is one of the assessment criteria in the Defence Materiel Selection Process, to which all major procurement programmes are subjected.

Defence policy

To control noise nuisance, assessment criteria are to be drawn up enabling noise nuisance to be translated into concrete terms. The Defence organisation wants to help develop criteria for specific military types of noise nuisance where these criteria are not yet available.

Where the development of know-how is concerned in the field of noise assessment from aircraft related to training grounds, developments within a NATO and EU framework will be followed closely. The Defence organisation will work with the Ministry of Housing, Spatial Planning and the Environment and the Ministry of Transport, Public Works and Waterways with a view to legal implementation.



By 2008 at the latest, the Defence organisation will map the indirect land use due to noise for all Defence installations holding an Environmental Management Act permit. The indirect land use in the vicinity of training areas will have been quantified not later than five years after the relevant legal instruments have become available.

Starting from the premise that the national noise policy and related regulations remain unchanged, the Defence organisation will not allow the total surface area of indirect land use to increase. The frame of reference, once the total surface area has been determined, is formed by the sum total of the surface area of all the noise zones and the surface area delineated by the contours imposed on the other installations under the Environmental Management Act. As soon as the indirect land use for training areas has been mapped, this surface area will be added to the frame of reference.



In the context of updating the Environmental Management Act permit, the Defence organisation will determine per object whether noise zones or noise contours need to be adjusted. For airfields, this is done on the basis of research aimed at establishing whether noise levels have stayed below the valid noise zone levels for three consecutive years, coupled with the expectation that installation use will not increase over the following years. For the other installations this will be done on the basis of use prognoses.

Objectives

4. The Defence organisation contributes to gaining more insight into noise levels from military activities for which no assessment standards currently exist and to the further completion of legal instruments in this field.
5. The Defence organisation will determine the indirect land use for all installations licensed under the Environmental Management Act (EMA) by 2008 at the latest. In the context of updating the required EMA data, the Defence organisation will determine whether noise zones or noise contours need to be adjusted for each individual object. The indirect land use around training areas will have been quantified not later than five years after the relevant legal instruments have become available.
6. Given unchanged national noise abatement policy, the Defence organisation will not allow an increase in the total surface area of indirect land use due to noise in the Netherlands once this surface area has been specified.

noise

4.3.2 Hazardous substances

Government policy

In Europe some 70,000 types of substances are used in a generally non-sustainable way, whereas little is known about the potentially hazardous properties of these substances. In addition, a large number of substances are characterised by diffuse emission, which makes it extremely difficult to predict possible effects. This has led to the formulation of new hazardous substances policy by both the European Commission and the Dutch government in the year 2000. The Strategic Memorandum on Handling Substances (the Strategienota omgaan met stoffen, SOMS), which outlines the Dutch starting points, targets and instruments for the new policy, specifies that the aim is to collect all the required information on the properties of substances by 2015 (for substances giving rise to concern this is to be effected by 2010) and to take effective measures before 2020. Suppliers are obliged to provide the required information. The emphasis is on carcinogenic, mutagenic or reprotoxic (CMR) substances, persistent, bioaccumulation and toxic chemicals (PBTs) and persistent organic pollutants (POPs).

State of affairs at Defence

The objective of the DMB 2000, based on an integral inventory and registration, was to have a complete overview of all relevant hazardous substances used across the Defence organisation by the end of 2002. The purpose of the overview is to limit the use of hazardous substances. In conducting the inventory, a distinction was made between industrial substances¹, system components² and property (real estate).

The inventory for the industrial substances has been completed. For the real estate substances, some substances have been fully mapped (non-destructive inspection), namely asbestos, CFCs and PCBs. Where the remaining types of hazardous substances are concerned, Defence complies with the statutory obligations, also instituting a follow-up inventory in the event of demolition and/or disposal of objects.

Although a great deal of information has been gathered in the domain of (weapon) system components, it is not always possible to be complete. Sometimes, suppliers are unable to provide the required detailed information, because they do not have access to this information themselves. Patents and the termination of businesses, furthermore, sometimes preclude the provision of information. Still, a fairly accurate picture of the hazardous substances used by the Defence organisation now exists. On the basis of the inventory of industrial substances, products with hazardous components are subsequently phased out, provided that alternatives prove to be available.

Defence policy

The collection of data by Defence on environmentally hazardous substances neared completion well ahead of the time frame laid down at national policy level in the SOMS memorandum. Although the Defence organisation intended to complete the information stage by the end of 2002, as indicated before, they did not fully succeed in this. With a view to the coming policy period, Defence has therefore decided to synchronise the time frame within which the missing information is to be obtained with the national time

¹ Industrial substances are hazardous substances used in Defence operating process.

² System components are components of ships, aircraft and vehicle systems.





frame specified in the SOMS memorandum. The completion of the inventory and registration phase will be coordinated across the Defence organisation.

In addition to the greater emphasis on inventory and registration, hazardous substances policy will be more source-oriented. The aim for the near future is to ban hazardous substances from the organisation as much as possible. This will prevent unwanted exposure to and/or emission of these substances. It will also lead to a reduction in hazardous waste, which benefits the environment and cuts waste disposal expenses at the same time. The source-oriented policy means that future procurement of new equipment always needs to be accompanied by profiles of the relevant substances as specified by national policy regulations.

In 2004, on the basis of current legislation and regulations, national policy and the sub-lists currently in use by the various Services, Defence will draw up lists of substances to be used Defence-wide in procuring new materiel. These lists distinguish between two levels based on the structure used in the SOMS memorandum:

- Substances the occurrence of which, based on legislation and regulations, is excluded in principle from new equipment. Only motivated exceptions can be made for situations where no equal alternatives exist;
- Substances concerning which further information and explanations are to be obtained from the supplier or the producer. Provision of insufficient information may cause the products to be refused.

The starting point of the policy is formed by the legislation and regulations in force in the field of health and safety and the environment. Subsequently and in line with the time frame specified in the SOMS memorandum (full information on “cause for concern” substances by 2010 and full information on all substances by 2015), the required information will be gathered in full, Defence-wide. On the basis of this information, substances and substance groups will be defined for which it is viable both in operational and financial terms to take further measures, such as phasing out.

In view of the national aim for zero emission of PBT substances in 2020 and the longer use life of Defence equipment, the potential exposure to and emission of these substances will be mapped Defence-wide not later than 2008, using the list of PBT substances laid down in national policy documents.

Objectives

7. By 2004, the Defence organisation will have drawn up lists of substances, which are used in the procurement process across the Defence organisation. These lists will be annually updated.
8. By 2008 at the latest, the Defence organisation will have mapped potential exposure to and emission levels of persistent bioaccumulation and toxic substances.

Particulate matter

This is a relatively new item on the policy agenda, which will increasingly be the focus of policy in the coming years. For this reason, the subject has been included in Defence environmental policy as a separate theme.

Government policy

The NMP4 comes to the conclusion that particulate matter is one of the main causes of bronchial complaints and infections, deterioration of the lung function and cardiovascular diseases. The elderly and young children are particularly susceptible to the consequences of particulate matter. Although this had been suspected to be the case for a longer time, there is increasing scientific evidence to support this claim. Particulate matter is released by the combustion of fossil fuels, particularly ship fuel, diesel fuel, domestic heating oil and kerosine. The major emitters of particulate matter are road traffic, large industrial combustion plants and power stations. The national emission objective is yet to be determined. The limit value for particulate matter was evaluated in EU framework in 2003. Pursuant to European regulations, the Netherlands is obliged to formulate a mitigation plan by mid-2004. Further national policy is to be formulated with a view to the realisation of the mitigation plan required by the EU.

Although no national emission target has been laid down, an air quality target of 20 µg/m³ has been formulated for particulate matter (PM₁₀). This target complies with the European indicative limit value for 2010. To achieve this, the Netherlands' particulate matter concentration would have to be more than halved compared to 1997. The indicative limit value for particulate matter mentioned above is, however, under discussion and will be reviewed in 2003.

Defence policy

Seeing that national policy is poised to lay down a limit value for particulate matter, the Defence organisation is likely to take measures as well. Defence therefore aims to map the current situation and to make an inventory of possible measures. Defence will make an inventory of the main emitters of particulate matter across the Defence organisation, both in the movable and immovable property sector. To this end, indicators for the emission of particulate matter will be determined. This will be followed by a study into the technical possibilities of realising emission reductions for equipment with high emission levels. This study is to be completed by 2006. Once the emission standards are known, measures can be taken on the basis of the information gathered.





Objectives

9. By 2005 at the latest, an inventory will have been made of the main sources of particulate matter emitters in the Defence organisation;
10. By the end of 2006 at the latest, a study will have been completed into the technical possibilities of achieving emission reductions in equipment with high particulate matter emission levels.

substances

4.3.3 Soil management

Government policy

The third National Environmental Policy Plan (NMP3), which spans the period from 1999 to 2003, specifies the following soil management objectives:

- As part of an active soil management policy, the scale of soil contamination throughout the Netherlands will be charted by 2005 at the latest, using soil quality maps among others.
- Soil management is a permanent and ongoing activity. One of the consequences of this is the aim to control the soil contamination issue in approximately 25 years, which would mean 2023 as an end date.
- The new soil remediation policy, with particular emphasis on active soil management, has led the government to review current policy on handling contaminated soil to bring it into line with active soil management policy principles.

The NMP4 (2001-2030) states that “cases where soil contamination originated in the past (before 1987) are governed by the national soil remediation policy. In cases of severe contamination of the topsoil, clean-up is effected to the point where the required quality specified under the relevant ‘soil-use specific clean-up targets’ (abbreviated to BMG in Dutch) has been achieved. The BMGs were introduced as part of the new soil remediation policy, which emphasises function-oriented remediation. For cases of lightly contaminated soil which originated before 1987, the aim is to achieve a gradual improvement of the soil quality through active soil management. BWGs or the relevant local target values are the guidelines for local situations. For cases of subsoil contamination, cost-effectiveness is the main factor in determining whether to remove the contaminated soil. As a minimum requirement, a stable end situation should be achieved.”

State of affairs at Defence

Soil clean-up operation

The Defence organisation began its soil clean-up programme in 1991. The aim is to “clean up or control all severely contaminated sites”³. When drawing up the DMB2000, the end date of the defence programme was set at 2010.

³ The financial constraints of the soil clean-up programme do not extend to the soil survey and potentially *non-severe* clean-up operations in the context of new building projects or disposal of barracks premises. These costs are funded from the project costs or from sales revenue.

The state of affairs regarding the soil clean-up operation is as follows (as of 1 January 2003):

- 91% of all sites has been subjected to an exploratory survey as a minimum requirement;
- 70% of all sites has been completed, that is surveyed and found to be clean or lightly contaminated, or cleaned up or controlled.

Active soil management

In accordance with the starting points formulated in the NMP₃ and NMP₄, the Defence organisation has developed an active soil management system. A system of active soil management including soil management plans and soil quality maps pursuant to the national interim guideline used in this context has since been introduced, resulting in 19 major Defence objects being provided with soil quality maps approved by the competent authority.

Defence policy

Under pressure of the financial cutbacks from the Strategic Accord, a decision has been made to align the deadline set for the clean-up or control of soil contamination with the national policy. The deadline shifts from 2010 to 2023 to help alleviate the financial burden for the period from 2004 to 2010.

Seeing that soil management plans, which lay down the soil quality of an object in relation to the activities that pose a threat to it and the soil protection measures, are an important instrument in controlling the soil quality and managing soil streams, priority will be given to drawing up soil management plans over the policy period of the DMB 2004. These plans will be formulated for all major Defence objects where building activities frequently occur or where the activities taking place entail a higher risk of soil contamination. This concerns some 50 objects (air force bases/naval air stations, large army barracks, workshop complexes, fuel storage sites, large training areas and firing ranges).

Objectives

11. By 2023 at the latest, the Defence organisation will have cleaned up or controlled all severe soil contamination on Defence sites.
12. By 2008, the Defence organisation will have completed soil management plans for the 50 most relevant Defence objects.



4.3.4 Integral water management

Government policy

In the year 2000, the EU Water Framework Directive was approved, leading to changes in the Water Management Act and the Environmental Management Act.

The Framework Directive has a river basin-oriented approach and concerns both surface water and groundwater bodies.

The directive is aimed at:

- preventing ecosystems in or in the vicinity of bodies of water from further degradation and promoting their protection and enhancement;
- promoting sustainable water use based through a long-term protection of available water resources;





- enhanced protection and improvement of the aquatic environment, inter alia by reducing or phasing out discharges, emissions and/or losses of priority substances;
- reducing groundwater pollution and
- mitigating the effects of floods and droughts.

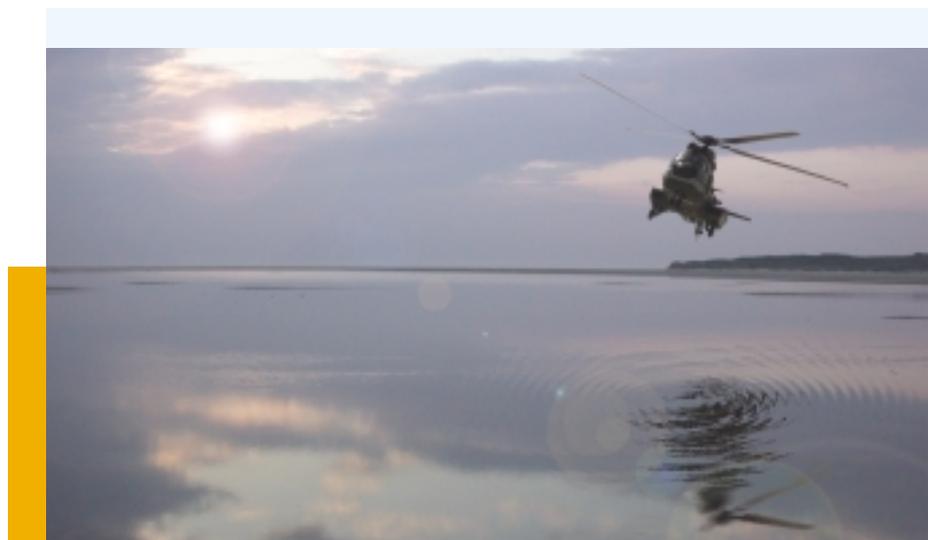
These objectives correspond to a great extent with the purport of the integral water policy pursued in the Netherlands, taking into account the relationships between water quantity and water quality aspects of both surface water and groundwater. Water quality is not limited to chemical aspects, but also has a strong ecological dimension.

The policy memorandum on “Changing the way we live with water” by the Ministry of Transport, Public Works and Water Management, published in 2001, sets out the Dutch water policy in the 21st century. The new policy bids farewell to the long-standing tradition of pumping as much and discharging as fast as possible. All water managers operate on the basis of a three-tier system of containment, storage and discharge based on the principle of excess water containment at source. This means that rather than discharging as quickly as possible, water is contained for as long as possible. When containment is no longer possible, water is stored in specially designated areas. Water is discharged only when there is no other alternative.

By the end of 2004, the river basins must be charted at a national level; by 2006 water status monitoring programmes need to be operational. Based on the monitoring results, programmes of measures are to be drafted by 2012 at the latest.

State of affairs at Defence

In the DMB policy period, special attention has been given to integral water management. A number of pilot studies focused on the streams at relevant objects and four related aspects, namely: the water cycle, water quantity, water quality and nature and ecology. Based on this analysis, measures are formulated for each object aimed at reducing water use at the object, improving the water quality of surface and groundwater and ‘containing’ water at the object. Measures could include fitting water saving taps and toilets, disconnecting rainwater drains and re-using water used at vehicle cleaning installations.



Defence policy

Defence shall contribute to realising the objectives formulated in the policy memorandum on “Changing the way we live with water” and take into account the Water Framework Directive in formulating its own policy. To this end, and in compliance with the time frame stated in the monitoring programmes mentioned above, water management plans will be formulated for 20 large-scale objects by 2008 at the latest. These plans will focus on a sustainable water management system, where operational, economic and ecological aspects will be weighed on an equal scale. The plans will involve the formulation of recommendations aimed at achieving water saving, containing the water in the area and improving water quality. Measures with a short return on investment period will be implemented as quickly as possible.

In the course of the planning period, based on the experience gained, an inventory will be made of measures to be implemented as standard measures.

Objective

13. By 2008 at the latest, the Defence organisation will have drawn up integral water management plans for 20 major Defence objects and implemented the resulting cost-effective measures. During the policy period the Defence organisation will determine what standard control measures can be specified.

water

4.3.5 Waste

Virtually all operating processes involve the generation of one or more waste categories. The type and quantity of waste are determined to a large extent by the nature and scope of the operating processes. Waste policy concerns all operational management aspects, from procurement to the moment where the waste stream leaves the company.

Government policy

Government policy focuses on waste separation and takes as its starting point that waste streams that are generated as separate waste streams are not to be mixed with other waste streams. This means separation at the source. Waste separation policy has been laid down in the National Waste Management Plan 2002-2012, which has been in force since March 2003. The regulations on waste separation are specified in the Environmental Management Act.

The general starting point is that companies have a statutory obligation to separate waste materials, keep them separately and transfer them separately unless they cannot reasonably be expected to do so. Given the variety in nature and scope of the industrial



processes, the National Waste Management Plan does not specify an exhaustive list of waste materials to be separated by industry. In regard to waste collection, companies have a duty of care, however, namely to prevent the generation of waste and to ensure responsible management of waste materials. In addition, specific rules and regulations apply, as well as licensing procedures.

The national waste policy uses the following preferred hierarchy: prevent waste from being generated; promote useful applications of waste materials; ensure optimum use of the energy content of non-reusable waste and limit the volume of landfill and incineration waste. Incineration of organic waste (biomass) is designated as sustainable energy.

State of affairs at Defence

The Defence organisation has charted its waste streams over the previous policy period, including industrial waste water. From 2003, Defence has registered the waste from its operating processes in terms of twelve waste streams, while it aims for a separate collection of these waste streams. The organisation does not have full insight into the waste volumes for all waste streams, however. This is because the current multi-year contracts with waste disposal companies do not always offer insight into the volumes of waste disposed of. In concluding new contracts in the future, this shortcoming will be addressed.

Defence policy

The Defence organisation links up with the central themes from government policy: prevention, reuse and waste separation. To this end, the waste separation percentages for the Defence waste streams will be determined starting from 2004. This is an essential condition for controlling and cutting disposal costs and complying with government policy. These percentages will then be compared to the waste separation percentages achieved in the Netherlands, to be calculated by the Ministry of Housing, Spatial Planning and the Environment on a four-year basis. By 2006 at the latest or as much earlier as possible, reduction targets will be formulated for each waste stream.

Defence shall monitor the waste separation percentage and keep records of waste disposal costs. Priority will be given to the most cost-effective reduction possibilities.

Objectives

14. With effect from 2004, the Defence organisation will lay down the volume and waste separation percentages of the Defence waste streams. By 2006 at the latest, reduction targets will be formulated for each individual waste stream. From then on, the armed forces Services are obliged to achieve these percentages.
15. From 2004, the Defence organisation will monitor the waste separation process, register the waste disposal costs and chart the most cost-effective reduction possibilities.



4.3.6 External safety

Government policy

External safety is concerned with the risks to man in the vicinity of installations storing hazardous substances, such as fuels, explosive ordnance and chemicals. External safety also extends to the transport of hazardous substances and the safety at and around airfields.

State of affairs at Defence

Defence follows government policy where the storage of hazardous substances and chemicals is concerned. The same holds true for the transport of hazardous substances using armed forces transport means, provided that exceptions may be made for specific military uses. Defence policy on external safety at and around military air stations will be dealt with in the Second Military Sites Structure Plan 2 (SMT 2). The Defence organisation is the only organisation in the Netherlands to store explosives and ammunition on such a large scale. The Ministry of Housing, Spatial Planning and the Environment and the Ministry of Defence have therefore developed a specific safety policy.

External safety policy around ammunition complexes was specified by the Van Houwelingen circular letter of 1988. The calculation of the safety distances for determining the safety zones has been derived from NATO's Allied Ammunition Storage and Transport Publication (AASTP-1). Based on an effect-oriented approach, the Van Houwelingen circular letter specifies safety zones in the vicinity of ammunition storage complexes and aims to promote the safety situation around these complexes by including constraints on spatial planning resulting from safety zones in zoning plans. The circular also formulates rules for dealing with 'inherited' incompatibilities within the safety zones. In the letter to Parliament (the House of Representatives) of 17 April 2001 by the Minister of VROM concerning the safety analysis of Defence ammunition storage complexes, a programme of action was announced to align the external safety situation in the vicinity of ammunition storage sites with the Van Houwelingen circular without delay where required. Municipal authorities must incorporate these safety zones in their zoning plans to prevent conflicting uses or activities in these zones, such as building within the safety zone. The term 'incompatible uses or activities' in this context refers to prohibited objects or activities within safety zones. The extent to which conflicting or incompatible uses can be acceptable is determined by risk analyses. In cases where a situation is to be characterised as insufficiently safe on the basis of current risk standards, the Minister of Defence, in consultation with the Minister of VROM and the other authorities involved, shall propose clean-up measures to comply with the risk standards in question.

Defence policy

The "Defence Ammunition Storage Sites Risk Analyses" programme, commissioned by Defence to the Netherlands Organisation for Applied Scientific Research (TNO), is to be completed in the spring of 2005. On the basis of the results, the policy laid down in the Van Houwelingen circular letter will be reviewed and adjusted where required. To date, there are no indications that would suggest that the two-tier approach adopted by Van Houwelingen – an effect-oriented approach whereby scope is provided for zoning and risk analyses are only carried out if and when there are breaches of safety – needs to be abandoned. The increased focus on external safety concerns is to result in continuous monitoring of the integrity of the safety zones by the authorities. In evaluating the Van





Houwelingen circular letter, an analysis will also be made of the possible consequences of stricter legal criteria from civil risk policy anticipated for the DMB 2004 policy period. For the coming DMB policy period, Defence will aim at concentrating ammunition storage in as few depots as possible. There are constraints, however, on the possibilities for concentration in the light of both internal and external safety aspects and operational considerations.

Safety zones around installations where storage of ammunition is terminated will be abolished. Safety zones around complexes where the storage of ammunition is concentrated are likely to be extended. The total land use on account of safety zones around ammunition storage sites throughout the Netherlands, however, shall not increase because of this operation.

Objective

16. In 2005 the Defence organisation will complete the Defence Ammunition Storage Risk Analyses programme. On the basis of the results, the policy laid down in the Van Houwelingen circular letter will be reviewed and adjusted, if necessary.

Safety

4.4 Biodiversity and nature conservation

The Defence organisation is one of the larger land managers in the Netherlands. As a manager of areas which represent considerable natural values both from a national and an international perspective, the Defence organisation accepts and shoulders its responsibilities. Responsible coordination of the military and nature function is achieved in such a way that the armed forces are able to achieve and maintain the required level of proficiency, whilst simultaneously maintaining the natural values represented on the sites and, wherever possible, further enhancing them by means of targeted management.

Government policy

Government policy on nature conservation has been laid down in the NMP4 and in the memorandum on "Nature, Forests and Landscape in the 21st century". Over the past few years, there have been significant legislative changes in the field of nature. The Dutch Fauna and Flora Act and the Nature Conservation Act have been amended to implement European legislation, namely the EU Birds and Habitats directives. Under these two directives, member states are obliged to set up extensive monitoring systems to identify natural values and significant fluctuations therein.

The National Nature Targets Map of the Ministry of Agriculture, Nature Management and Food Quality (LNV) defines what nature targets are aimed for in the nature areas. This map shows the situation anticipated for 2018. In nature areas where the targets have not yet been achieved at this stage, appropriate measures are to be taken to achieve the required situation by 2018.

State of affairs at Defence

Since 1996, Defence has been engaged in making inventories of the natural values and the fauna and flora on its sites. This is done in conjunction with the Ministry of LNV Expertise Centre. At the end of 2002, the inventory of natural values had been completed

for 97% of the nature areas. The evaluation and monitoring of natural values has shown that various Defence sites harbour valuable, and in a number of cases, unique natural values. Defence sites play host to protected species, such as the common viper and certain butterfly and dragonfly species. The flora, likewise, is unique. Wherever possible, the use and management of Defence sites are geared to the existing natural values. Twenty per cent of the forests on Defence sites are currently managed in accordance with natural forestry principles.

Relevant for Defence purposes is the fact that the entire Wadden Sea and the Veluwe region are designated areas under both the Birds and Habitats directives. All coastal and inland dune areas come under the Habitats Directive. As a consequence, all Defence firing ranges and nearly half of the training areas in the Netherlands (in all some 30 areas) come under the Habitats and/or the Birds Directive(s).

Defence policy

A monitoring system for natural values has been developed in order to be able to take account of the natural values on Defence sites and to evaluate and adjust management of these values, where required. This system is mainly concerned with vegetation, breeding birds, butterfly species, dragonfly species, amphibians and reptiles. To be able to comply with the new legislation mentioned earlier, the monitoring system will be expanded to include:

- monitoring the priority species specified in Annex 4 of the Habitats Directive in the relevant areas governed by this directive;
- monitoring the relevant bird species that qualify under the Birds Directive in the relevant areas governed by this directive;
- checking for the occurrence of protected species under the Fauna and Flora Act.

The latter is necessary to be able to determine the possible impact of new plans concerning the use or infrastructure of Defence sites on the natural values on these sites and to prevent possible damage. If these plans are shown to have a detrimental effect, the required analysis of the consequences for the natural values involved will be carried out on a project basis.

On Defence sites where the nature targets specified by the National Nature Targets Map of the Ministry of LNV have not yet been realised, appropriate measures will be taken to achieve these nature targets before 2018. This means that the nature targets will be incorporated in Defence management plans. This map defines in main outline what natural qualities are envisaged for the relevant Defence sites by the Ministry of LNV and the Ministry of Defence. Agreements have also been reached on the procedures to be followed in the event of adjusting nature targets.



Management plans, finally, will be developed for all relevant Defence sites with a view to complying with the new Nature Conservation Act. These management plans are aimed at aligning the existing Defence activities with the natural interests to be protected. The management plans, once approved in consultation with the Ministry of LNV, remove the need for obtaining a permit under the Nature Conservation Act.

It is only when new Defence activities or projects are proposed that the different interests involved will have to be carefully weighed in the light of the new situation. These management plans will have been completed by 2006, subject to lengthy legal procedures.

Objectives

17. In 2004 the existing monitoring system will be expanded to include species listed in the EU Habitats and Birds Directives and the Fauna and Flora Act;
18. In 2006, conservation management plans for all relevant Defence sites will have been completed, subject to lengthy legal procedures.

nature

5 Tools and instruments

5.1 Environmental management

The Defence organisation, with some 70,000 employees, is one of the major companies in the Netherlands. Some of the activities carried out have an exceptional character: the operational task. To a great extent, however, the activities can be compared to the activities conducted by civil companies, such as equipment maintenance and office work. On account of this largely regular character of the Defence activities, a decision was made many years ago to introduce environmental management systems. The benefits of having environmental management systems, which are now working well, are becoming increasingly manifest. It is an effective instrument in ensuring and monitoring compliance with current legislation, regulations and policy objectives. The environmental risks involved in the activities and the costs entailed can be identified and controlled at an earlier stage. In the context of the relationship with the competent authority, the environmental management system enables the Defence organisation to obtain permits along main lines, which clearly benefits flexibility. Finally, residents living in the vicinity of Defence objects can be better informed as to what measures are being taken to reduce environmental impacts to a minimum.

Government policy

The NMP3 includes an objective in the field of environmental management which obligates government departments to put in place “effective” environmental management systems before 2004. Certification is not mandatory in this case.

State of affairs at Defence

To meet this objective, all parts of the Defence organisation have been ordered to develop and introduce environmental management systems pursuant to the ISO 14000 standard. All parts of the Defence organisation have made concerted efforts to achieve the environmental management objective and a great deal of progress has been made so far. The Royal Marechaussee in its entirety, Leeuwarden Air Base and the Royal Netherlands Air Force Logistics Branch in Rhenen (Netherlands) have been fully ISO 14000 certified. The facilitative processes of the Personnel and Salaries Administration and the Central Organisation have also been certified.

Following conclusion of the administrative procedures in respect of the environmental management systems of the Royal Netherlands Navy, Air Force and the Defence Interservice Support Service, the first improvement cycle took place in 2003. The introduction of environmental management systems by the Royal Netherlands Army and the core department where the primary process is concerned has suffered a delay; this has been reported to Parliament. The administrative procedures for these systems will be completed in 2003, so as to enable the first improvement cycle to take place in 2004.

Defence policy

The Defence objective remains that all parts of the Defence organisation will put in place effective environmental management systems for all processes under their responsibility. As indicated above, this situation will be reached by the end of 2003; for the RNLA and the Central Organisation this will be the end of 2004. At Central Organisation level a decision was made for the facilitative process, the materiel-related processes and the Defence Staff processes to be brought under the environmental management system.





The next step involves the finding by an independent body that the required level has been achieved, followed by a system of periodic checks of the functioning of the environmental management systems.

Defence has opted for not making certification by a certifying body mandatory. When parts of the organisation wish to be eligible for certification, they can do so on a voluntary basis. This is in line with government policy. Environmental management systems without external certification will be audited on the basis of the ISO 14000 standard and the SCCM guidelines. The auditing process comprises two steps: the documentary audit and the implementation audit; the Defence Audit Board is responsible for the latter. The implementation audits will have been concluded by 31 December 2005 at the latest. Once the environmental management system has been officially approved, three-yearly tests will be carried out to determine whether the system continues to function well. These follow-up tests are carried out under the responsibility of a certifying organisation or the Defence Audit Board. Audit plans are drawn up annually and integrated into the regular Defence audit planning.

Objectives

19. From the start of the policy period, all parts of the Defence organisation will have well-functioning environmental management systems for all their operating processes. The Royal Netherlands Army and the Central Organisation (the Ministry itself) will have reached this situation by the end of 2004.
20. Before 31 December 2005, the Defence Audit Board will have assessed all non-certified environmental management systems on the basis of the ISO 14000 standard and the SCCM guidelines. After this, three-yearly follow-up audits will be conducted.

5.2 Environmental management during exercises and operations

Environmental management is increasingly taken into account in the planning of exercises and operations with a view to minimising environmental impacts from operational activities and in order to comply with international and national legislation and regulations.

NATO environmental policy has been developed over the past few years at the highest military level, the NATO Military Principles and Policies for Environmental Protection (EP). This policy starts from the principle that, in as far as operational constraints allow, environmental aspects are to be taken into consideration during exercises and operations as much as possible. This policy has been translated into a standard procedure, the so-called NATO Standard Agreement (STANAG) 7141 EP "Joint NATO doctrine for

environmental protection during NATO led operations and exercises". This STANAG addresses the environmental responsibilities of the operational field commander and serves as the basis for the environmental annex to the operation orders for peace operations, such as in Bosnia, Kosovo and Afghanistan. The Netherlands has made a significant contribution to the completion of this STANAG through the procedures used by the Dutch armed forces.

The Dutch model mainly involves a reconnaissance unit with environmental expertise being sent to assess the local situation prior to large-scale exercises or operations taking place. Environmental matters looked into include soil, air and (drinking) water quality, the presence of hazardous substances in the exercise or operation area, the possibilities for waste and waste water treatment and the possibilities for using the local environmental infrastructure or coalition partner owned facilities. Attention is mainly focused on military compounds, with particular emphasis on waste and waste water processing and soil protection. The findings are then included in the planning documents for the exercise or the operation.

Planning in advance precludes unwelcome surprises in the course of carrying out or completing the exercise or the operation, enables alternatives to be weighed carefully and prevents environmental claims being made in the aftermath of operations or exercises.

The starting point for exercises and operations abroad is the Dutch legislation and regulations level, unless operational and/or local circumstances preclude the application of Dutch law, or if the local legislation is more stringent than the Dutch equivalent. STANAG 7141EP mentioned earlier applies to NATO-led operations and exercises. In order to prevent having to work with different procedures, the Netherlands will also use this STANAG in exercises and operations not led by NATO. Practical circumstances during exercises and operations are also kept the same as much as possible to meet the 'train as you fight' principle. It goes without saying that the application of environmental legislation and regulations needs to be feasible in operational terms, not entailing unacceptable risks to personnel and/or equipment. To this end, environmental aspects will be integrated into the relevant operational planning procedures and documents at all levels in the organisation. An important document in this context is an environmental planning guideline or field manual with a checklist and detailed information on the aspects to be addressed.

Objective

21. NATO procedure STANAG 7141 EP will be used in the planning of all major exercises and operations. To this end, environmental aspects will be integrated into the relevant operational planning procedures and documents at all levels in the organisation.

5.3 Policy, Planning and Budgeting Process

Preconditions

The Defence management policy outlines the management, control, supervision and accounting procedures related to the operating processes in the Defence organisation. It is essential for environmental policy to be embedded in these procedures. On the basis of the ISO 14001 standard on environmental management systems, Defence uses the 'Deming' cycle for environmental policy (plan, do, check, act). This cycle is explained below.



Defence aims for complete integration of environmental management into its operating processes. Defence wants to achieve this situation during the DMB 2004 policy period.

Plan

Under the responsibility of the State Secretary for Defence and the Secretary-General, the Defence Coordinator for Spatial Planning and the Environment (CROMD) is charged with developing Defence environmental policy.

The Policy, Planning and Budgeting Process (BPB) is the framework which ensures that environmental measures are implemented in a systematic way. The Services of the armed forces are to work out the objectives from the DMB 2004 in annual implementation plans and provide a financial basis for these plans which are subsequently submitted to the BPB. At the request of the Chief of the Defence Staff, the Defence Environmental Coordinator (CROMD) will assess the implementation plans in the framework of the BPB. The progress of the realisation of the implementation plans will be reported in the periodic reports by the Services of the armed services.

The new steering model specified in the Defence Plan (DP) means a significant change of course. The DP will replace the separate plans formulated by the Services.

As a direct consequence, environmental planning will also be implemented differently in the future. The more centralised management by the Chief of the Defence Staff will, more than was previously the case, result in greater differentiation between the objectives set for the various parts of the Defence organisation when it turns out that environmental gains are made more efficiently by one part than by another. Although the central objective remains unchanged, the parts of the Defence organisation may differ in the scope of their contribution.

For the time being, the need for a separate environmental budget remains. This budget is part of the BPB-process, while the assessment of the projects covered by this budget is the responsibility of the CROMD.

Do

The commanders-in-chief, the deputy secretary-general and the director of DICO are responsible for the implementation of the DMB 2004 in the area of their command responsibility. They have their own environmental management systems to help them realise the targets from the DMB 2004. The annual implementation plans and the financial resources allocated ensure a structural approach towards and realisation of the environmental targets. Following the abolishment of the position of commander-in-chief (with the exception of the Commander-in-Chief of the Royal Netherlands Marechaussee), this responsibility will be shifted to the level assigned under the new steering model.

Check

The Dutch Parliament requires the central government to provide progress reports on the implementation of the policy objectives. To meet this requirement a policy instrument referred to as "From policy budgeting to policy accountability" (abbreviated to VBTB in Dutch) has been developed. This instrument requires ministries to report on the realisation of the intentions laid down in the budget of the previous year. To ensure that the correct information is provided to the two houses of Parliament, timely and sound



audits need to be carried out at all levels. The Defence Audit Board bears final responsibility for conducting audits within the Defence organisation. This organisation operates independently of policymakers, implementers and plan formulators. The Audit Board, as part of its regular set of tasks, also carries out environmental audits. The scope of the environmental audits is determined by the Audit Committee.

The Defence audit requirement comprises three levels:

- All systems without environmental management certification from outside the Defence organisation. These systems are to demonstrably comply with the ISO 14001 standard. Section 5.2 “Environmental Management” sets out this part of the audit process.
- Checking the realisation of all objectives from the Defence environmental policy will become a regular annual task of the Defence Audit Board as of this policy period. This is done to be able to ascertain without a doubt and objectively the extent to which targets have been met.
- Finally, as was done previously by the Auditing Department, the Defence Audit Board will perform annual quality checks of the environmental data collected.

The environmental annual report and the set of related environmental data (Defence Environmental Data Formats) are to be maintained. In this way, Defence can continue to provide insight into the extent to which it implements the central government’s environmental policy and the extent of its contribution to achieving the policy objectives. At this stage it is not yet possible to present fully validated environmental data over the previous year in May.

The aim is to include validated data in the Defence annual report, which is to be presented to parliament in May by the end of this policy period. In addition to the data, as indicated before, there continues to be a need for reports on the implementation of the environmental policy and the related topics. Because of this and for reasons of readability and accessibility to the general public, there continues to be a need for a separate environmental annual report.

Objective

22. The Defence Audit Board conducts annual reviews to establish the extent to which the DMB objectives have been met and validates the quality of the environmental data with a view to the environmental annual report and the VBTB (“From policy budgeting to policy accountability”) reports.

Act

If it is found that implementation is behind schedule in comparison with planning, the necessary measures ought to be taken in the line management. Once fully integrated into the Integral Defence Planning Process, this will automatically be the case.

5.4 Defence Materiel Selection Process

Defence environmental impact is also determined by movable property: its vehicles, ships and aircraft. There are few possibilities for influencing environmental impacts during the life cycle of equipment, as the use of equipment is essential with a view to achieving the required proficiency level and/or actual deployment. An excellent opportunity for influencing environmental impacts from movable property, however, is during the materiel selection process. Important aspects of environmental impacts are energy





consumption, noise emission, the use of hazardous substances and waste at the end of the lifecycle. In general, defence equipment has a long lifecycle of thirty to forty years, which means that choices, once made, have long-term effects. The procedure of equipment selection and procurement has been laid down in the Defence Materiel Selection Process.

Large-scale procurement projects

For some years now, one of the Defence environmental policy demands being made is for environmental aspects to be taken into account in large-scale procurement projects as a fully equal criterion for assessment. The way in which environmental aspects are weighed up has not been standardised and cannot be easily traced afterwards. In the light of the importance of a sound assessment, the Principal Directorate of Materiel will draw up an assessment framework in 2004 including procedures aimed at improving insight into and monitoring of environmental considerations. The Defence Environmental Coordinator (CROMD) will provide support in formulating the assessment framework and supervising its application.

Other equipment, goods and services

Cooperation between government authorities and trade and industry aimed at facilitating and enhancing environmental and energy consciousness in the context of purchasing goods and services has resulted in a number of instruments. Energy labels, eco-labels and environmental management systems can be used easily and effectively in the selection process. Defence makes conscious use of these instruments in procuring off-the-shelf equipment, goods and/or services.

- When procuring energy-label products⁴, products are selected exclusively on the basis of being above average in terms of energy efficiency ("category C" indication or higher);
- When procuring other off-the-shelf products, products carrying a recognised⁵ eco-label are preferred. Products without such a label can be procured only when they are demonstrably more suitable and/or when their cost price is more than 5 per cent below that of the eco-label product;
- When procuring services which have a bearing on environmentally relevant aspects of Defence operating processes, such as waste disposal or processing, cleaning activities, etc., the fact that a given company can show that it has an environmental management system constitutes a standard⁶ criterion for awarding contracts.

Objectives

23. In 2004 the Defence organisation will develop a decision evaluation framework for environmental aspects to be used defence-wide in the context of the Defence Materiel Selection Process.
24. When acquiring widely available commercial (off-the-shelf) goods and services, the Defence organisation, in the course of the policy period, will use energy labels, recognised eco-labels and environmental management certificates as criteria for awarding contracts.

⁴ Labelling prescribed by a decree; as of mid-2003, this applies to passenger cars, washing machines, dryers, dishwashers, light bulbs, refrigerators and deep freezers.

⁵ A recognised eco-label is approved and managed by the European Committee or recognised on the basis of a decree.

⁶ An exception can be made in the events of insufficient competition.

5.5 *Infrastructure process*

Government policy

Since 1995, environmental aspects have been given serious attention in the Netherlands in the framework of immovable property through the Sustainable Building policy. Sustainable building, abbreviated to Dubo in Dutch, is aimed at reducing the impact on health and the environment as a result of construction, buildings and the built-up environment, according to the NMP Plus. Although at first the focus was mainly on residential building, from 1997 this also included the utility building sector. From then onwards, Defence has been actively involved in the implementation of Sustainable Building in the immovable property process. The main instruments are the measures from the National Package of Sustainable Building Measures in Utility Building, which are implemented on a voluntary basis, and the fifth pillar of the Housing Act, “the Environment”, in which sustainable measures such as those in the field of energy saving have been made mandatory. The central government has, moreover, committed itself to setting an example in the field of Sustainable Building by complying with the basic level of the National Package of Sustainable Building Measures for Utility Building.

State of affairs at Defence

Defence has expressed and anchored its policy choice of Sustainable Building in the DMB 2000 and the Immovable Property Directive by the Director-General of the Directorate of Materiel. In addition, a package of measures in respect of defence infrastructure was formulated, which virtually corresponds with the basic level of the National Package of Sustainable Building Measures for the Utility Sector. Within NATO, the Netherlands has enhanced familiarity with and knowledge of sustainable building by organising seminars. The Defence package of measures is applied to all new building and large-scale renovation and maintenance projects. These are measures aimed at promoting energy saving and sustainable energy, reduction of water consumption, a healthy indoor environment, reuse of building materials and the reduction of building and demolition waste. All measures in the Defence package are either cost neutral or will pay for themselves in the course of the building's lifecycle.

Defence policy

The main instrument aimed at reducing the environmental impact from infrastructure and realising a healthy living and working environment is the Dubo package of measures. This package fluctuates constantly as the most effective measures are to be removed from the Dubo package after having been gradually incorporated in the Housing Act. Measures, which are not immediately profitable or cost effective can become so at a certain point due to their being implemented in a wider context or owing to new technological developments. The National Package of Dubo measures in the Utility Sector is therefore updated at regular intervals to reflect the latest developments. In view of the fact that the Defence Package is deviating less and less from the basic level specified in the National Dubo Package and the fact that keeping the Defence Package up to date takes up a disproportionate amount of time and money, Defence will follow the National Package of Dubo Measures for the Utility Sector as of 2004.



Objective

25. From 2004, the Defence organisation will comply with the basic level of the Sustainable Building (Dubo) National Package for non-residential Engineering for all new building and major maintenance projects.

Infrastructure





5.6 Relationship between working conditions and the environment

Working conditions and the environment are often mentioned in the same breath, but there are differences as well as similarities. Working conditions are mainly concerned with individual health and health and welfare of the personnel in the working context. The environment is mainly concerned with the living environment.

The most important similarities between working conditions and the environment are in the fields of noise, (external) safety, hazardous substances and the control of operating processes by means of management systems.

Defence policy in the fields of noise and external safety is set out in sections 4.3.1 and 4.3.6 of this plan respectively.

The measurement and registration of hazardous substances in the fields of the environment and working conditions have been integrated. There is a database for substances and products, while integrated inventories are made.

In respect of management systems, the environment sector is ahead, as these systems were introduced here at an earlier stage. The working conditions component of the Defence organisation is able to catch up fast thanks to the experiences gained in the environment component. The possibilities of integrating the two management systems will be explored shortly. In the fields of monitoring and audits a joint effort can possibly be made so that parts of the Defence organisation only need to be approached once.

5.7 Finance

Under the Strategic Accord (Balkenende I administration) and the Coalition Agreement 2003 (Balkenende II administration) the Ministry of Defence was given a far-reaching financial objective. In consequence, the Defence environmental policy was also reviewed in the light of its financial consequences.

Annex B shows the Defence environmental policy budgets envisaged for the period of 2004 to 2008 along with the cumulative amounts for the entire plan period up to and including 2008. These budgets are part of the Defence budget.

5.8 Communication

For years, the Ministry of Defence has had a strong environmental and nature conservation policy. Nevertheless, the Dutch public has little knowledge of the efforts made by the Defence organisation to protect and enhance natural values on Defence sites and to prevent damage to the environment. For this reason, Defence wants to devote more attention and energy to bringing its activities in the fields of nature and the environment to the attention of the general public.

Since 1998 Defence has published an annual public environmental report to provide insight into the environmental activities of the ministry and the environmental impact caused by Defence. Over the DMB plan period, Defence shall continue to publish an environmental annual report. In the longer run, the chances are that the environmental annual report will be integrated into the general Defence annual report.

Objective

26. The Defence organisation issues an annual environmental report before 1 June of each year.

communication



Annex A: List of Abbreviations

AASTP-1	Allied Ammunition Storage and Transport Publication
ADD	<i>Auditdienst Defensie</i> (Defence Audit Board)
ARBO	<i>Arbeidsomstandigheden</i> (Working conditions)
BGW	<i>Bodemgebruikswaarden</i> (Soil use parameters)
BLOW	<i>Bestuursovereenkomst Landelijke Ontwikkeling Windenergie</i> (Administrative Agreement on the National Development of Wind Energy)
BPB	<i>Beleids-, Plannings, en Begrotingsproces</i> (Policy, Planning and Budgeting Process)
CFK	<i>Chloorfluorkoolwaterstof</i> (Chlorofluorocarbon, CFC)
CIM	<i>Coördinatie Internationale Milieuzaken</i> (Coordination of International Environmental Affairs)
CO	<i>Centrale Organisatie</i> (Central Organisation)
CO ₂	Carbon dioxide
CROMD	Coordinator for Spatial Planning and Environmental Affairs of the Netherlands Ministry of Defence
dB(A)	Decibel recorded using an A filter
DICO	<i>Defensie Interservice Commando</i> (Defence Interservice Support Service)
DMB	<i>Defensie Milieubeleidsnota</i> (Defence Environmental Policy Plan)
DMP	<i>Defensie Materieelkeuzeprocess</i> (Defence Materiel Selection Process)
DUBO	<i>Duurzaam Bouwen</i> (Sustainable Building)
EU	European Union
HR	<i>Hoog Rendement</i> (High Efficiency)
ISO	International Standardisation Organisation
KL	<i>Koninklijke Landmacht</i> (Royal Netherlands Army)
KLu	<i>Koninklijke Luchtmacht</i> (Royal Netherlands Air Force)
KM	<i>Koninklijke Marine</i> (Royal Netherlands Navy)
KMar	<i>Koninklijke Marechaussee</i> (Royal Netherlands Marechaussee)
LAP	<i>Landelijk Afvalbeheersplan</i> (National Waste Control Plan)
LNV	<i>Landbouw, Natuurbeheer en Voedselkwaliteit</i> (Ministry of Agriculture, Nature Management and Food Quality)
MW	Megawatt
NATO	North Atlantic Treaty Organisation
NMP	<i>Nationaal Milieubeleidsplan</i> (National Environmental Policy Plan)
PBT	Persistent, Bioaccumulation and Toxic
PCBs	Polychlorinated biphenyls
PKB	Key Spatial Planning Decision
PM ₁₀	Particulate Matter <10µm (Fine Dust)
POP	Persistent Organic Pollutant
PSG	Deputy Secretary-General
SCCM	<i>Stichting Coördinatie Certificatie Milieuzorgsystemen</i> (National Foundation for the Coordination of Certification of Environmental Management Systems)
SMART	<i>Specifiek, Meetbaar, Actueel/Aanvaardbaar, Tijdgebonden</i> (Specific, Measurable, Up-to-date/Acceptable, Time-related).



SMT	<i>Structuurschema Militaire Terreinen</i> (Military Training Grounds Structure Plan.)
SOMS	<i>Strategienota Omgaan Met Stoffen</i> (Strategic Memorandum on Handling Substances)
STANAG	NATO Standard Agreement
TK	<i>Tweede Kamer der Staten-Generaal</i> (House of Representatives of Parliament)
TNO	<i>Nederlandse Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek</i> (Netherlands Organisation for Applied Scientific Research)
VBTB	<i>Van Beleidsbegroting Tot Beleidsverantwoording</i> (From Policy Budgeting to Policy Accountability)
UN	The United Nations
VROM	<i>Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer</i> (Ministry of Housing, Spatial Planning and the Environment)
V & W	<i>Verkeer en Waterstaat</i> (Ministry of Transport, Public Works and Water Management)
Wm	<i>Wet milieubeheer</i> (Environmental Management Act)

Annex B Planned Budgets



**Planned budgets - Environmental policy 2004 - 2008
per objective**

Amounts in 1,000 Euro

Objectives Description	end date	2004	2005	2006	2007	2008	Total cost
1a energy performance analysis of buildings	2006	510	510	510	0	0	1530
1b installing High Efficiency boilers	2008	1100	1100	1100	1100	1100	5500
1c Energy Efficiency improvement of buildings (on top of DUBO package)	2008	1105					1105
2a 75% sustainable electricity (average additional costs comp. to 2003)	2008	1100	2200	3300	4400	5500	16500
2b other Sustainable Energy measures	2004 f.f.	340					340
3 facilitate placement of 20 MW wind turbines	2010	750					750
Sustainable Energy/Energy Efficiency projects (1c, 2b and 3) (broken down on the basis of project proposals)	2004 f.f.	4334	6544	7423	7923	4418	30642
4 development of noise assessment standards	2004 f.f.	175	175	120			470
5 determination of land use from noise for objects	2008	800	800	800	800	800	4000
6 zero increase in total surface area of land use from noise	2004 f.f.	n/a	n/a	n/a	n/a	n/a	n/a
7 drafting of hazardous substances list	2004	16					16
8 charting of PBT emission levels	2008	30	30	30	30	30	150
9 charting of emitters of particulate matter	2005	60	60				120
10 study into emission reduction in particulate matter	2006	n/a	n/a	n/a			n/a
11 end date for soil remediation 2023 instead of 2010	2023	8000	7000	6000	5500	5000	31500
12 soil management plans for 50 objects	2008	150	150	150	150	150	750
13 integral water management plans for 20 objects	2008	77	77	77	77	77	385
14 quantitative waste inventory / reduction targets	2006	n/a	n/a	n/a			n/a
15 management of waste materials	2004 f.f.	54	54				108
16 completion of "Defence Ammunition Storage Risk Analysis"	2005	770	770				1540
17 expansion of nature values monitoring system	2004 f.f.	300	305	310	320	325	1560
18 nature conservation management plans	2006	500	500	500			1500
19 well-functioning environmental management systems	2004	n/a	n/a	n/a	n/a	n/a	n/a
20 Defence Audit Board environmental management audits	2005	n/a	n/a	n/a	n/a	n/a	n/a
21 STANAG 7141EP	2004 f.f.	n/a	n/a	n/a	n/a	n/a	n/a
22 checking of objectives/validation environmental data by Defence Audit Board	2004 f.f.	n/a	n/a	n/a	n/a	n/a	n/a
23 drafting of evaluation framework for Materiel Selection Process	2004	4					
24 energy labels/eco-labels for commercial goods	2004 f.f.	12	13	12	13	13	63
25 adoption of basic level of National Sustainable Building package	2004 f.f.	1150	1150	1150	1150	1150	5750
26 annual environmental report	2004 f.f.	10	10	10	10	10	50
Total		21347	21448	21492	21473	18573	104333

Abbreviations:

ff and following years
n/a not applicable



The logo of the Ministry of Defence, featuring a stylized graphic of a sword or lance with a blue tip and yellow shaft, positioned to the right of the text.

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