Countering CBRN terrorism and responding to disasters

2005 progress report

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Chapter 1: Introduction

In the past few years a great deal has been done to counter terrorism and prepare for an attack, possibly involving chemical, biological, radiological or nuclear (CBRN) agents. The intelligence services consider a CBRN attack unlikely, but certainly do not rule one out.

The first priority, of course, is to prevent CBRN terrorist attacks. The criminal investigation and intelligence services are doing their utmost in this regard, but there can be no 100% guarantee that such an attack will not occur. Given the specific nature of CBRN attacks, much has already been done to prepare for and respond to them.

The House of Representatives of the States General has been kept informed about these efforts every year since 2002 (Parliamentary Papers 27 925, Nos. 54, 99 and 180). These progress reports indicate what has been done throughout the security chain. In line with current international terminology, the acronym CBRN is now used rather than NBC (as in previous reports). The R stands for 'radiological', which in previous reports was included under the N for 'nuclear'.

One basic principle of CBRN policy is that optimal use should be made of the Netherlands' scarce expertise in this area. This has resulted in nationwide rapid response procedures and round-the-clock availability on the part of centres of expertise such as the National Institute of Public Health and the Environment (RIVM) and the Netherlands Organisation for Applied Scientific Research (TNO).

Since – fortunately – a CBRN attack is not part of the emergency services' daily routine, another basic principle is that maximum use should be made of existing procedures for responding to accidents involving hazardous substances. The necessary additional skills and expertise are located in the fire service's six regional CBRN response centres, allowing quality and management to be kept up to standard in a systematic way.

The office of the National Coordinator for Counterterrorism (NCTb), which was established in late 2004, is a central organisational unit that ensures more effective coordination and closer supervision of counterterrorist activities. The various activities have been screened with reference to the security chain (proactive thinking, prevention, preparation, response and follow-up). The analysis revealed the need for a higher level of security in order to prevent terrorists from unlawfully acquiring CBRN materials or knowledge. A number of projects have therefore been set up, under NCTb coordination, to achieve this as quickly as possible.

CBRN policy comprises two elements: (1) proactive, preventive measures to counter CBRN terrorism and (2) CBRN disaster response. The proactive and preventive element is coordinated by the NCTb, which reports to the House of Representatives in the form of counterterrorism progress reports. The preparation and follow-up element is coordinated by the Ministry of the Interior and Kingdom Relations. The NCTb and the Ministry have set up a joint CBRN secretariat to ensure coherent action throughout the security chain.

The progress reports are structured around the security chain. All the reports have the same layout, so that it is easier to compare the progress made. Although many activities have been finalised, preparations for CBRN attacks and their impact remain incomplete. Many of the activities described in this report are aimed at achieving the desired level of facilities and capabilities in the Netherlands. These systematic efforts form part of the regular policy activities of the various ministries. Accordingly, this progress report is the last separate CBRN progress report in its present form. Improvements in areas where shortcomings have been noted will be carried out on a project-by-project basis. Next year, therefore, reports will only be issued on the separate projects. This report explains how the House of Representatives will be kept informed about the regular policy activities.

The structure of the report is the same as in previous years. Chapter 2 describes three different areas in which efforts are being made to prevent a terrorist attack involving CBRN agents. Chapter 3 discusses the progress made in preparing for a possible CBRN terrorist attack and its impact. Unlike in previous years, a distinction has now been made between the various preparatory components that are needed in order to respond appropriately to a CBRN attack. The investigation phase (Chapter 4) is conducted with the help of the passive CBRN defence chain, similar to the one used in the military sector. Chapter 4 also looks more closely at the follow-up phase. Finally, Chapter 5 focuses on informing the public about CBRN attacks.

This progress report has been drawn up by the interministerial CBRN coordinating committee, which includes representatives of the Ministries of General Affairs, Foreign Affairs, the Interior & Kingdom Relations, Defence, Justice, Agriculture, Nature & Food Quality, Transport, Public Works & Water Management, Housing, Spatial Planning & the Environment, and Health, Welfare & Sport. Minutes from the meeting and other relevant information are sent to the Ministry of Social Affairs and Employment.

Chapter 2: Preventing a CBRN terrorist attack

The CBRN threat can be countered in three different ways:

- Non-proliferation
- Disarmament
- Prevention of the use of CBRN agents in terrorist attacks.

2.1 Non-proliferation

The first line of defence in countering the spread of weapons of mass destruction is the non-proliferation regime, which consists of agreements such as the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the Chemical Weapons Convention (CWC) and the Biological and Toxin Weapons Convention (BTWC), as well as other agreements on border controls or the interception of suspicious consignments and the associated verification mechanisms. It includes rules on CBRN weapons, their means of delivery, raw materials and dual-use goods. The adoption of UN Security Council Resolution 1540 on 28 April 2004 has provided an additional framework for action to prevent weapons of mass destruction from falling into the hands of terrorists. The resolution requires countries to report what legislation they have in place to prevent this. The Netherlands submitted its national report to the 1540 Committee on 28 October 2004. A further report was submitted on 17 November 2005 at the Committee's request.

At international level, the Netherlands does what it can to help strengthen the various non-proliferation treaties, emphasising their universal applicability and enforceability. It also makes efforts to strengthen the organisations that monitor and encourage the implementation of the treaties, such as the International Atomic Energy Agency (IAEA) and the Organisation for the Prohibition of Chemical Weapons (OPCW). It is also involved in the international forums that deal with border controls (the Missile Technology Control Regime (MTCR), the Australia Group (AG), the Nuclear Suppliers Group (NSG) and the Wassenaar Arrangement). Since late 2003, Dutch non-proliferation policy has been increasingly influenced by that of the European Union. Agreements between the EU and third countries include a non-proliferation clause, and the Union makes financial contributions to bodies such as IAEA and OPCW.

To prevent proliferation from the Netherlands, legislation has been adopted in pursuance of the various agreements to which this country is party, such as the Nuclear Energy Act (in

fulfilment of NPT obligations) and legislation implementing the CWC and the BWC. Along with that, parliament has adopted national border control legislation. Other legislation is also helping to bolster national resistance to the spread of weapons of mass destruction or related knowledge and raw materials. This includes occupational health and safety legislation and legislation on the transport of hazardous substances. Where relevant, this legislation was mentioned in the reports to the 1540 Committee referred to above. As regards the BWC, the potential value of codes of conduct in making scientists more alert to and aware of the possible misuse of scientific knowledge was discussed in 2005. Such codes of conduct are generally held to be a valuable instrument in preventing the proliferation of weapons of mass destruction. The Ministry of Education, Culture and Science and the Royal Netherlands Academy of Arts and Sciences are examining how best to focus attention on these issues in this country (see also Section 2.3).

In the Netherlands, the Ministries of Foreign Affairs, Defence, the Interior & Kingdom Relations, Justice, Housing, Spatial Planning & the Environment, Agriculture, Nature & Food Quality, Health, Welfare & Sport, and Economic Affairs are responsible for non-proliferation policy. However, the Ministries of Social Affairs & Employment, Transport, Public Works & Water Management, and Education, Culture & Science also have a part to play.

Obstacles to non-proliferation:

- The non-proliferation treaties are not universally accepted.
- Many signatory states have not yet fully implemented the treaties in national legislation.
- The goals and effectiveness of such legislation must be regularly assessed in the light of new security and scientific developments. International agreements often have a major stimulatory and regulatory impact in this regard. In the past few years, however, it has proved difficult to achieve a consensus.
- International treaties do not have watertight verification regimes and can still be circumvented.
- A non-proliferation regime that is not sufficiently effective or universal gives terrorist groups an opportunity to circumvent legislation.

Non-proliferation policy initiatives:

- The failure of the NPT Review Conference in May 2005 and the absence of any agreements on non-proliferation and disarmament in the final document of the UN Millennium Review Summit in September of the same year were major disappointments.
- However, a number of non-proliferation strategy goals were achieved at EU level. For example, it was once again agreed to make a financial contribution (€1.8 million) to the work of the OPCW. Partly at the Netherlands' insistence, specific efforts will be made to improve legislation in Africa. A new Joint Action has also been agreed with IAEA.
- Efforts to establish a structure that will allow the EU to support implementation of the BWC have also been very successful. The first projects in this nearly finalised Joint Action are scheduled to be carried out in early 2006.
- Agreement has been reached between the EU and the 79 ACP countries on a robust non-proliferation clause.
- In April 2005 the Netherlands held an EU seminar in The Hague to discuss specific, feasible ways of reinforcing the BWC. The results of the seminar have been used by the EU to draw up a Common Position (due to be finalised in early 2006) and have formed the basis for initial informal talks with other signatories about the BWC Review Conference to be held in late 2006. In 2006 the Netherlands will continue to press for reinforcement of the Convention.
- At home, there have been further efforts (coordinated by the NCTb since October 2005) to tighten up security policy on CBRN agents and materials.
- Proliferation Security Initiative (PSI): in 2005 there were further interministerial efforts to draw up a plan that will ensure appropriate responses to intelligence and requests concerning the transport of weapons of mass destruction, their means of delivery and related goods. Preparations for a PSI exercise in the Netherlands in April 2006 are also well under way.

In its foreign relations, both domestically and at EU level, the Netherlands will continue to emphasise the importance of non-proliferation. Progress on non-proliferation of CBRN agents and materials from the Netherlands will be discussed in regular consultations with the House of Representatives.

2.2 Disarmament

A second important element in the prevention of terrorist attacks involving CBRN agents is disarmament. There is an international disarmament policy for CBRN weapons, though there are still no agreements on means of delivery such as ballistic missiles. Specific progress is being made on two of the aforementioned categories of weapons. Chemical weapons are being destroyed under OPCW supervision in four – soon to be six – countries. Nuclear weapons are being unilaterally destroyed by a number of nuclear states, without supervision by international organisations. Many nuclear states have reduced their nuclear arsenals substantially. Moreover, the traditional nuclear states, which are signatories to the NPT, have committed themselves to aim for total nuclear disarmament. However, the past year has seen the presumed proliferation of nuclear weapons in a number of countries. In view of this, complete disarmament does not seem feasible in the short term. The Ministry of Foreign Affairs represents the Netherlands in international disarmament talks (including UN talks such as the Conference on Disarmament in Geneva). Since disarmament is in principle the responsibility of the country where the arms are located, the international community can generally only encourage progress by means of diplomatic pressure. In a number of cases the international community helps finance disarmament. For example, the Netherlands and other countries are making a specific contribution to the destruction of chemical weapons in the Russian Federation. Under the G8 Global Partnership against the Spread of Weapons and Materials of Mass Destruction, considerable sums have been set aside for the destruction of existing stocks of nuclear and chemical weapons, particularly in the Russian Federation. To ensure that the contributions by the various donors to the destruction of chemical weapons in the Russian Federation are better coordinated, a meeting of donors (chaired by the Netherlands) is held every three months in The Hague. It should also be noted that there are EU projects on chemical disarmament in the Russian Federation.

Obstacles to disarmament:

- The reduction and disposal of the various types of weaponry is a lengthy process that will require considerable financial sacrifices by various parties.
- The BWC does not include an instrument for verifying the possession and destruction of biological weapons (such as exists for chemical weapons). There are virtually no projects on biological disarmament.

- The Netherlands is endeavouring to step up its disarmament activities by seeking potential partners for disarmament projects and helping to coordinate efforts in this area. In 2005, for example, it contributed €2.5 million to the destruction of chemical weapons in Russia under the auspices of projects organised by the United Kingdom and the United States. In 2006, the Netherlands will again seek partners for projects in the Russian Federation.

2.3 Measures to counter or prevent CBRN terrorism

CBRN policy comprises two elements: (1) proactive, preventive measures to counter CBRN terrorism and (2) disaster response. The proactive and preventive element is in principle discussed in progress reports on counterterrorism. This strategy was adopted in September 2005 in order to take a more proactive and preventive approach to CBRN terrorist attacks.

The mission statement for countering CBRN terrorism reads as follows:
Carrying out activities designed to minimise the likelihood of an attack involving chemical, biological, radiological or nuclear agents.

Such agents can potentially be used by terrorists in one of two ways:
- directly as weapons
- contained in objects that are used as weapons.

The NCTb is coordinating four specific projects in cooperation with executive agencies and relevant policy units in numerous ministries. The projects concern unauthorised acquisition of CBRN agents, CBRN border controls, CBRN intelligence and CBRN communications.

- Unauthorised acquisition of CBRN agents: a higher level of security in order to prevent the acquisition of relevant CBRN materials and knowledge in the Netherlands. The project focuses on attaining a higher level of security in order to prevent unauthorised acquisition of CBRN materials or deliberate interference in public or private-sector organisations that use materials listed as being of likely interest to terrorists.
- CBRN border controls: prevention of the illegal import and export of CBRN agents.
- CBRN intelligence: further improvement of the arrangements for making integrated analyses of the threat posed by CBRN terrorism, based on the knowledge available to all relevant actors (including, for example, information provided by Customs and the Royal Military Constabulary).

- CBRN communications: preparation for providing appropriate, attack-specific information to the public in the event of a CBRN threat or an actual terrorist attack, as well as communication of a realistic picture of CBRN attacks (see also Chapter 5).

The purpose of the first two projects is to provide a higher level of security for processes, organisations and persons which are in some way involved with CBRN agents. The CBRN intelligence project is aimed at further improving intelligence on CBRN terrorism. The CBRN education project mainly focuses on informing the general public and government bodies about CBRN terrorism when a threat occurs (see also Chapter 5). These projects deal not only with 'classic' weapons such as nerve gases, but also potentially hazardous agents such as those used in industry.

The projects were commissioned by the steering group on CBRN terrorism, which is chaired by the NCTb and composed of fifteen representatives of ministries and executive agencies. The projects, which were launched in October 2005, will run for about eighteen months.

One important aspect of efforts to counter CBRN and other terrorism is our intelligence position. The General Intelligence and Security Service (AIVD) performs threat and risk analyses of actual and potential threats to persons, objects and services that are part of the so-called central government domain. It also draws up threat analyses indicating trends and developments. These more general analyses can help the relevant ministries craft their policies. For example, the AIVD has produced an analysis indicating the need for greater focus on security measures to foil attempts by ill-intentioned persons to obtain CBRN agents. As indicated above, a number of projects (coordinated by the NCTb) have now been launched for this purpose. In consultation and coordination with the AIVD, the Military Intelligence and Security Service (MIVD) investigates the worldwide proliferation of weapons of mass destruction and provides threat analyses for conflict zones.

The qualitative threat analysis indicates, in general terms, what terrorists are likely to do (particularly in the light of relevant scientific developments, which can be explained by research institutes) and what specific terrorist groups are likely to do, in terms of the knowledge, skills and materials available to them and in terms of their motives, goals and willingness to use CBRN agents. This is the task of the intelligence and security services.

The work that the AIVD does in pursuance of Section 6 (particularly subsection 1) of the Intelligence and Security Services Act yields information that can be used when performing and issuing analyses of either specific or general threats.

The threat analyses provide guidance in developing appropriate countermeasures. Perception of threats forms the basis for the preparation of all other activities, such as decisions to take (or prepare to take) preventive medical action.

- Existing arrangements for assessing threats have been continued, and the activities of the intelligence and security services, as well as cooperation between them, have been stepped up.
- International cooperation between the intelligence and security services has been stepped up on their own initiative.

In 2006 and beyond, increased intelligence efforts with regard to CBRN terrorism will be maintained at both national and international level. Public reporting will occur in the form of annual reports by the AIVD.

Chapter 3: Preparations for attacks or threatened attacks involving CBRN agents

Preparations for action by the authorities and the emergency services are made in accordance with existing national and local guidelines, protocols and procedures for disaster relief. Examples of existing national guidelines are the National Handbook on Decision-Making in Crisis Situations, the description of medical assistance in the event of accidents and disasters, the National Nuclear Accident Response Plan, the handbook on accidents involving hazardous substances and numerous ministerial schemes. Examples of non-centralised guidelines are the local authorities' disaster plans and disaster management plans for specific objects or situations. In the medical sphere there are also a large number of treatment protocols and procedures for reporting and treating diseases and cases of poisoning.

A number of additional specific projects and procedures have been launched (and largely completed) in the past few years.

The following have been identified as key elements of an appropriate response to CBRN incidents, partly in the light of evaluations of exercises and incidents in other countries (such as the sarin attack in Tokyo):

1. Reporting system and supply of information
2. Information / awareness training for relief workers
3. General guidelines, protocols and plans
4. Expertise
5. Detection
6. Protection
7. Contamination control / Decontamination
8. Training / exercises

3.1 Reporting system and supply of information network

Numerous exercises and incidents have revealed that there is a problem with the information supply, and, as a corollary of this, the reporting system. Given the complexity of the task and the large number of actors required, there has been a greater focus on the reporting system and the arrangements for providing information.

- A reporting system has been set up, centring on the National Coordination Centre (NCC). If reports are received through the Ministry of Housing, Spatial Planning and the

Environment, the Ministry will notify the NCC, and vice versa. The Policy Support Team for Environmental Incidents (BOT-mi), the Nuclear Planning and Advisory Unit (EPA-n) and similar bodies can be activated through the Ministry of Housing, Spatial Planning and the Environment. The purpose of these planning and advisory arrangements is to make the expertise that exists in the Netherlands quickly and efficiently available to authorities and emergency services. In the light of the two major national exercises (the National Nuclear Staff Exercise (NSO-n) and the large-scale terrorism response exercise code-named Bonfire), further changes have been made to the NCC's working procedures and methods for assembling expertise.

- The establishment of the National Operational Coordinating Centre (LOCC) has made it easier to assist affected regions.
- The final draft Protocol on Suspicious Objects (PVO) includes agreements on how information is to be shared between the disaster relief and criminal justice sectors.
- A reporting and information-sharing system has been set up for laboratories that are part of the National Laboratory Network for Terrorist Attacks (LLN-ta).

3.2 Information / awareness training for relief workers

An important part of a rapid, appropriate response is early recognition of a CBRN attack and its symptoms. Proper awareness training and information for primary relief workers is essential. This means that:

- Information material has been developed for relief workers:
  - The Health Care Inspectorate has drawn up instructions for general practitioners. The information is also available online.
  - The Ministry of the Interior and Kingdom Relations has produced a leaflet to make primary relief workers more aware of symptoms and recognise them quickly.
- A CBRN handbook has been produced for relief workers and serves as the basis for teaching modules.
- A CBRN information centre has been set up for relief workers.

3.3 General guidelines, protocols and plans

Once an incident is recognised as a CBRN attack, there must be a clear procedure. The necessary procedures and protocols must be set out in a plan:

- A smallpox plan has been drawn up. Enough vaccine has been produced for the entire Dutch population. The plan, which allows for either ring vaccination or mass vaccination, has been tested up to ministerial policy team level.
- A revitalised National Nuclear Accident Response Plan was tested during the NSO-n exercise. Several products became available in the run-up to this exercise, including a monitoring strategy for the fire service, a number of standard scenarios and a procedure for dealing with radioactivity. The House of Representatives has been informed about this separately. These products can also be used in a 'dirty bomb' scenario.
- An updated version of the Ministry of Agriculture, Nature and Food Quality's Nuclear Accident Response Plan was tested during the NSO-n exercise.
- A Protocol for Suspicious Objects has been presented to the relevant umbrella organisations. It describes where the various kinds of expertise are to be found, how information should be shared and how suspicious objects or samples should be delivered to the LLN-ta. An implementation phase, during which the protocol will be tested, will follow in 2006.
- In 2005, measures that may prove useful in the event of a bioterrorist attack were added to all the Ministry of Agriculture, Nature and Food Quality's crisis handbooks. The main types of attack anticipated are the spread of animal diseases and contamination of the food chain.
- The Minister of Health, Welfare and Sport's powers have been extended so that in certain situations he or she will be in charge of substantive medical action to combat outbreaks of infectious diseases. The purpose of this is to ensure better, faster, nationwide management of such action.
- In 2004 preparations were made for a policy plan for influenza pandemics and the associated nationwide models for operational plans. In 2005 the operational plans were implemented in all 25 regional Centres for Medical Assistance following Accidents and Disasters (GHOR). The policy plan provides an overall picture of the issues raised by the distribution of scarce resources and care and can thus prove very useful for combating outbreaks of disease due to bioterrorist attacks involving unknown agents. The development of this plan was supported by both the Ministry of Health, Welfare and Sport and the Ministry of the Interior and Kingdom Relations.
- The LLN-ta handbook is ready. It describes the various procedures for promptly determining which agent has been used and how information is being shared. These procedures have been practised.

3.4 Expertise

There is a scarcity of expertise on CBRN agents in this country. It is therefore important to assemble such expertise as effectively as possible and to make it available to the affected region or regions as quickly as possible.

- The ministries have linked up their research establishments to form a Policy Support Team for Environmental Incidents (BOT-mi). This has been done using secure Internet technology. In the event of an environmental incident or a chemical attack, BOT-mi will advise the affected local authority or region on how to combat it and on what the short- and long-term impact will be.
- Similar interministerial arrangements, centring on the Nuclear Planning and Advisory Unit (EPA-n), have been made to deal with nuclear and radiological incidents.
- A national Infectious Diseases Control Centre has been set up. The new centre will be required to amalgamate and consolidate existing nationwide tasks. It will also be given new tasks, including communication of risks and other information and control of the infectious disease chain, thus supporting local efforts to combat infectious diseases.
- The various ministries' laboratories are working together in the LLN-ta network. The network has made an inventory of the analytical capacity available in the Netherlands, so that the content of suspicious samples can be determined as quickly and accurately as possible. The network has a secure website which can be used by the various laboratories to exchange information and share knowledge and experience. Working methods, procedures and management arrangements will be worked out in detail and formally adopted in 2006.

3.5 Detection

An effective response strategy depends on effective detection capabilities. This section describes national detection resources and arrangements. The following chapter (see Section 4.3) will describe the specific resources available to primary relief workers when responding to a CBRN attack. As previous progress reports have indicated, the Netherlands has various detection systems to monitor food and water, air quality (the National Air Quality Monitoring Network) and atmospheric radioactivity (the National Radioactivity Monitoring Network). The National Coordinating Agency for Infectious Disease Control (LCI), the Health Care Inspectorate and RIVM are responsible for reporting increased numbers of patients with notifiable or other infectious diseases.

Previous reports have also emphasised the importance of early detection of CBRN agents, so that relief workers can operate safely and the general public can be alerted in time.

- The various ministries support the development of new detection equipment. For example, the Ministry of Defence has its own research programme and schemes for the development of mobile, operational equipment for the detection of biological and chemical agents.
- The Environmental Accident Service (MOD), which is part of RIVM, can support local fire services with monitoring equipment and vehicles.
- The Radiation Research Laboratory, which is also part of RIVM, has a vehicle that can carry out more specific on-the-spot radiological monitoring.
- The Ministry of Defence has purchased six German vehicles for the detection of chemical, nuclear and radiological agents. Personnel will be trained in the coming period. The vehicles can operate in contaminated areas.
- Steps have recently been taken to acquire an additional six vehicles for the detection of biological agents.
- Cooperation agreements with the research establishments RIVM and TNO have been renewed. RIVM and TNO (through its Prince Maurits Laboratory) carry out tests and measurements requiring specialised knowledge and equipment. They can support emergency services from their laboratories or, if necessary, on the spot.
- The Port of Rotterdam customs authority has radiological monitoring equipment to check containers for nuclear and other radioactive material.
- RIVM holds weekly ‘notification meetings’ at which various experts discuss rumoured and confirmed signs of outbreaks of infectious diseases here and around the world. Reports of these meetings are sent directly to the Ministry of Health, Welfare and Sport and to a large number of physicians and hospitals. The meetings can be held more frequently if necessary, for example in order to monitor developments regarding avian flu and report these to the minister.
- All the regional fire services have radiological monitoring equipment and gas detection tubes for both industrial gases and chemical weapons.
- The National Radioactivity Monitoring Network is being modernised and equipped to test certain foods that are particularly susceptible to radioactive contamination.
- The Ministry of Health, Welfare and Sport has requested RIVM to cultivate its knowledge of syndrome surveillance, so as to allow notification of outbreaks of uncommon diseases that ordinary disease-specific surveillance would miss entirely, or only identify much later.

- The Ministry of Housing, Spatial Planning and the Environment has requested RIVM to develop early-warning systems for drinking water.
- The LLN-ta network has developed a screening strategy in order to obtain a preliminary indication of the agent used (or possibly rule an agent out). This will allow more targeted use of analytical techniques.

3.6 Protection

In the event of a CBRN attack, both victims and the site may be contaminated. Relief workers who have to operate in this 'dirty' zone or who may come into contact with contaminated victims must be protected from possible contamination.

- Each region in the Netherlands has an organisation (OGS) for responding to accidents involving hazardous substances, with special teams that can operate in gas or chemical suits.
- Additional protective suits have been issued to the fire service' six regional CBRN response centres in order to increase their rescue capability.
- Under existing procedures, the fire service is responsible for rescuing and decontaminating victims, so as to keep police officers and medical personnel from becoming contaminated. The extent to which the police and medical personnel require protective equipment is currently being assessed. If they turn out to need such equipment, it will be purchased.

3.7 Decontamination

In order to increase victims' chances of survival, they will have to be decontaminated as quickly as possible. Rapid decontamination is also necessary to avert the danger of secondary contamination of relief workers, so that victims can be given the medical care they need with out endangering relief workers or nursing personnel. This section focuses on existing procedural agreements and protocols. The chapter on response (Chapter 4) will look more closely at the required resources and manpower.

- An interdisciplinary working group is currently examining existing decontamination protocols to determine whether they can cope with large numbers of victims. Changes to these protocols may have implications for, among other things, the required level of protection for medical personnel (see Section 3.6 on protection).

- The Ministry of Health, Welfare and Sport has drawn up an amendment to the Infectious Diseases Act that includes quarantine arrangements. The amendment has since been passed by the House of Representatives.
- In order to combat infectious diseases more effectively, a study is being conducted of what specific powers the Minister of Health, Welfare and Sport requires in order to direct such efforts, including contamination control, in special situations.
- The Ministry of the Interior and Kingdom Relations and the Ministry of Defence are discussing an arrangement that will allow the use of Ministry of Defence decontamination equipment.
- Off-site contamination control procedures will be drawn up in cooperation with the relevant partners in order to tackle the problem of people reporting to hospitals or physicians of their own accord and to devise measures for dealing with extremely large numbers of contaminated victims. Guidelines on alternative methods of decontamination (self-decontamination, decontamination in existing facilities such as swimming pools, etc.) will therefore be drawn up.

3.8 Training and exercises

There is no point in drawing up plans and purchasing equipment unless the response organisation as a whole is properly trained and tested.

- Specific CBRN training modules have been developed for relief workers.
- A National Nuclear Staff Exercise (NSO-n) was carried out to test regional and national response structures. The exercise involved a non-terrorist incident, but the response structures would be much the same for a terrorist attack involving a nuclear or radiological agent. In the event of an attack the criminal justice system will have a greater part to play; this was addressed in the Bonfire exercise.
- Links between disaster and crisis management structures and criminal justice structures were tested in the large-scale national Bonfire exercise, which involved responding to an attack on the Amsterdam ArenA stadium.
- The lessons learned from the two exercises have been used to further improve response structures.
- In November 2005, the Haaglanden region conducted several exercises to test deployment procedures for rescuing and decontaminating victims.

- The procedures are being slightly modified in the light of these exercises, so that the fire service's regional response arrangements can be further implemented in a smooth and uniform manner around the country.
- The agreements with the six regional CBRN response centres include a requirement to conduct CBRN exercises, so that knowledge of the prescribed procedures can be tested annually.
- There will be annual monitoring exercises so that the regional response centres can continue to practise using their monitoring equipment and implementing their monitoring strategies.
- In cooperation with the Ministry of Health, Welfare and Sport, the Ministry of Agriculture, Nature and Food Quality conducted a food safety exercise involving deliberate contamination of the food chain.
- There have been two exercises at EU level, involving an outbreak of smallpox and an influenza pandemic respectively.
- The EU smallpox exercise was mainly a table-top exercise for decision-making structures and national response organisations.
- An EU influenza pandemic exercise was held in November 2005. In the Netherlands this involved not only the relevant ministries but also two regional Centres for Medical Assistance following Accidents and Disasters (GHOR), so that almost all the operational and administrative tiers took part. In the light of the two exercises, links between efforts to combat infectious diseases and disaster relief were further developed.
- In November 2005 the LLN-ta network conducted an exercise in which the contents of a suspicious package had to be identified as quickly and accurately as possible. Communication lines and the supply of information (including confidential information) were also tested. The exercise was a great success.

3.9 Other initiatives

Initiatives were also launched or completed in a number of other areas in 2005.

- The Ministry of Defence operationalised the 101 NBC defence company. The primary task of this unit is to help protect military personnel against a CBRN attack under operational conditions. To this end it has been fitted with reconnaissance, decontamination and other capabilities. When not deployed for operational missions, the unit can provide support to third parties. The extent to which arrangements can be made to use its capabilities for civil purposes and disaster relief has been examined. Details of

these arrangements are currently being worked out as part of efforts to enhance civil-military cooperation.

- The Dutch Forensic Institute (NFI) set up a Quick Response Team (QRT) to carry out forensic analysis in aid of criminal investigations related to terrorist attacks and threats.
- The QRT is a centre of expertise on forensic investigation and CBRN terrorism that can be used by authorities such as the police and the Ministry of Justice.
- The Ministry of Housing, Spatial Planning and the Environment has made funding available so that CBRN activities can be systematically built up and maintained within RIVM. The main activities are strengthening the knowledge base of the National Information Centre for Cases of Poisoning (NVIC), facilitating the work of BOT-mi and EPA-n, and setting up, maintaining and managing the LLN-ta network. In connection with this, RIVM will invest in mobile monitoring capacity in order to carry out initial on-the-spot tests for CBRN agents.
- The Ministry of Agriculture, Nature and Food Quality has conducted an expert analysis of the likelihood of animal diseases, including zoonoses, being used as terrorist weapons. The analysis identified a number of animal diseases that require particular attention. The EU is in the process of compiling a list of animal diseases for which strategic stocks of vaccine should be built up in connection with terrorism. The results of the analysis will also be used to determine whether additional biosecurity measures are required and, if so, what they should be.
- The Ministry of Agriculture, Nature and Food Quality is currently conducting an expert analysis of the likelihood of plant diseases and pests being used as terrorist weapons. It will then determine whether additional preparatory biosecurity measures are required and, if so, which (e.g. building up strategic stocks of pesticides).
- The EU's Monitoring and Information Centre has set up a database indicating the capabilities available in the member states, so that the EU can assist affected countries more rapidly.
- Following the NSO-n exercise, a management plan was drawn up and steps were taken to ensure that certain knowledge and skills are available as a matter of course in the various regions of the Netherlands. This management phase and associated activities will continue into 2006 and beyond.
- The agreements with the regional CBRN response centres stipulate that activities be evaluated annually so that the level of knowledge and skills can be assessed. The focus here is on training and exercises.
- In 2006 the Food and Consumer Product Safety Authority (VWA) will continue to conduct inspections in the food-processing industry to increase awareness of possible attacks

and, using the Hazard Analysis and Critical Control Point (HACCP) approach, encourage the adoption of security measures. These inspections are part of the Ministry of Agriculture, Nature and Food Quality's contribution to the Protection of Vital Infrastructure project.

- The Ministry of Agriculture, Nature and Food Quality is running a project to assess and, wherever possible, improve the tracking and tracing of foodstuffs in connection with bioterrorism and attacks on the food chain.

The House of Representatives will be kept informed of CBRN policy efforts through various channels. In the future the main channels will be progress reports on the Crisis Management Policy Plan and general progress reports on counterterrorism.

The House of Representatives will be informed separately about certain specific activities. Information will be covered in the progress reports by the Advisory Committee on Disaster Response Information (ACIR). The Ministry of Health, Welfare and Sport will inform the House about preparations for large-scale outbreaks of infectious diseases.

The Ministry of Housing, Spatial Planning and the Environment bears final responsibility for reporting on the management of the National Nuclear Accident Control Plan and the lessons learned from the NSO-n exercise.

Chapter 4: Response to attacks or threatened attacks involving CBRN agents

The eight components of passive CBRN defence were introduced in earlier reports. These components, which are derived from the military CBRN doctrine and which are in line with 'security chain' thinking, are:

- Threat analysis
- Prophylaxis
- Detection and alert
- Identification
- Physical protection
- Contamination control
- Diagnosis
- Treatment

4.1 Threat analysis

The efforts made by the intelligence services were described in Chapter 2. In the event of an actual attack, the intelligence services will be requested, through the NCTb, to make their information available so that it can be taken into account when deciding what action to take.

4.2 Prophylaxis (protective agents)

Prophylactics are designed to counter the effects of contamination with a CBRN agent as effectively as possible. They work best when administered before exposure, but can still have some effect if used afterwards. Examples include vaccination or prior treatment to combat the effects of nerve gases. The effectiveness of prophylactics must always be weighed against their side effects.

- A smallpox vaccine has been produced in order to protect the Dutch population in the event of an outbreak of smallpox in the Netherlands (initially through ring vaccination). A mass vaccination plan has also been developed to vaccinate the entire population within four days. A table-top exercise was held to test these plans.
- Initiatives have been taken to cooperate with other European countries and private organisations in developing, manufacturing and building up stocks of antibiotics, specific vaccines and antiviral agents.

- A new supply of iodine prophylactics has been purchased. These can be used in nuclear or radiological incidents involving a risk of exposure to radioactive iodine.
- RIVM has produced a report on the desirability of distributing potassium iodate tablets (if necessary in advance). This would be desirable within a small radius of the nuclear power stations in Borsele, Doel (just across the Belgian border) and Emsland (just across the German border) for people under 45 years of age. The report has been taken under advisement by the Association of Municipal Health Services, which is working out detailed plans for decentralised storage and distribution.
- An inventory has been made of existing stocks of antibiotics in the Netherlands.
- Following a recommendation by the Health Council, five million doses of Tamiflu have been ordered so as to respond more effectively to a threatened or actual influenza pandemic.
- A small stock of antiviral agents that can be used to counter certain side effects of the smallpox vaccine has been purchased.
- The Ministry of Agriculture, Nature and Food Quality has made an inventory of the quantities of vaccine for the livestock sector. The EU is examining whether to build up additional strategic stocks of vaccine for combating certain 'terrorism-sensitive' animal diseases and whether to develop certain additional vaccines.
- Plans indicating who is primarily eligible for vaccines or antiviral agents are being further developed.
- Plans for decentralised storage and distribution of potassium iodate tablets will be worked out in further detail.
- Prophylactic research will be carried out as part of the Ministry of Defence research programme.

Further information on prophylactic measures will be provided in reports on infectious diseases and at parliamentary committee meetings with the relevant members of government.

4.3 Detection and alert

In the event of a CBRN attack it is important to determine at once which agent has been used, where the danger zones are, how they are to be monitored and how people in those areas can be alerted. The ways in which relief workers can practise rapid initial detection are listed below. They are intended to allow initial detection and an assessment of the impact of

the attack. They are backed up by the arrangements and nationwide monitoring networks referred to in Section 3.5.

- All the regional fire services have gas detection tubes to detect the presence of chemical weapons.
- The six regional CBRN response centres have additional stocks of these tubes (both simultaneous test sets and single-use detection tubes).
- The centres also have two Enhanced Chemical Agent Monitors (E-CAMs) which can be used to provide semi-quantitative monitoring of nerve gases or blister agents.
- A bioterrorist attack will be detected by ordinary surveillance systems.
- All the fire services have radiological monitoring equipment (dosimeters for their own personnel and dose-rate meters that can be used to identify affected areas).
- The Ministry of Defence has a range of radiological and chemical detection devices that can be used under the arrangements for civil-military administration.
- The Ministry of Defence's work on the development of bioaerosol detection equipment is well under way. The equipment will be built into the German detection vehicles that have been purchased for this purpose.

4.4 Identification

Identification of the CBRN agent used will often require a well-equipped laboratory that can apply at least two independent techniques.

- The Ministry of Health, Welfare and Sport has signed contracts (through RIVM) with relevant laboratories in order to ensure that knowledge and facilities are available for diagnostic testing of human samples.
- Arrangements have been made to set up a national laboratory network (LLN-ta), which would contain all the necessary analytical capacity, particularly for the analysis of environmental samples. To this end, various ministries have put their research establishments in touch with one another so that they can make arrangements for cooperation and coordination. The laboratories regularly discuss the progress and working procedures of the network, for which the Ministry of Housing, Spatial Planning and the Environment bears overall responsibility.
- Besides the aforementioned research establishments, other research centres (including universities) will need to be brought into the network under existing or new cooperation agreements and contracts.

- The LLN-ta network is endeavouring to create a transparent structure and procedures, so that it will be clear which of the various partners is responsible for what. An exercise was held in 2005 to test the structure and its information components. This did not reveal any insurmountable problems. The various ministries are supporting the further development of the network, which will be granted formal status shortly.
- RIVM has developed a project plan for improving diagnostic methods.
- The Ministry of Health, Welfare and Sport is supporting the construction and equipment of a high-security biosafety laboratory that will be able to handle and analyse the most pathogenic viruses and organisms safely.
- CBRN agents will be analysed in a manner more compatible with the Public Prosecution Service's need to identify and prosecute perpetrators more easily.
- The Ministry of Defence can use its German detection vehicles to take soil and air samples. The chemical or radiological samples can then be forwarded to the LLN-ta network.
- Together with TNO's Prince Maurits Laboratory, the NFI has launched a project to develop specific methods for forensic testing of biological and chemical agents. The purpose of this is twofold:
  - to determine the composition, nature and origin of the agents
  - to identify similarities to materials that have been found on suspects, confiscated from illegal laboratories, etc.

4.5 Physical protection

Physical protection means protection required either to avoid becoming contaminated or to enter or leave a contaminated area safely.

- A CBRN protocol on how to act during CBRN incidents and how to deal with suspicious packages and objects (the Protocol on Suspicious Objects) has been drawn up and will be distributed in 2006. In suspicious situations the procedure will be similar to that adopted for dealing with accidents involving hazardous substances (use of gas suits).
- A tendering procedure for additional stocks of protective CBRN clothing has been completed. The clothing was delivered in 2005.
- Both the Ministry of Defence and the Ministry of the Interior and Kingdom Relations have purchased additional personal protective equipment for their own staff.

4.6 Contamination control

Among other things, the CBRN plans deal with contamination control, in which quarantine may be a key measure. Section 3.7 discusses the protocols and procedural arrangements in connection with preparation for incidents. The specific results are as follows:

- Each region has a small decontamination unit which is part of the OGS organisation and can be used to decontaminate a small number of civilian victims.
- The regional response centres each have a large-scale decontamination container that can handle 60 to 100 victims an hour. A procedure for its use has been drawn up and tested. Some minor changes have yet to be made.
- Since summer 2005 the Ministry of Defence has had operational capacity for large-scale decontamination (located in the 101 NBC defence company).
- There are thirty quarantine beds at the Central Military Hospital / Disaster Hospital.

4.7 Diagnosis

Diagnosis means determining the nature of a pathological condition and thereby enabling medical personnel to start the correct treatment. This can often be done on the basis of the medical personnel's experience (clinical diagnosis). In many cases, however, additional laboratory testing is needed, particularly for determining the degree of contamination:

- In coordination with TNO, RIVM has drawn up a project plan to improve diagnostic methods so that rare or unknown pathogens can be identified more accurately and rapidly.
- The Health Care Inspectorate has developed literature to make it easier to identify syndromes caused by attacks involving biological agents. This material has been widely distributed and is also available online.
- The LCI is developing special protocols and plans for dealing with CBRN agents, including information on situations in which such agents are deliberately introduced.
- Agreements have been reached between the various laboratories (including TNO, RIVM, Erasmus University in Rotterdam and the Central Institute for Animal Disease Control in Lelystad) on diagnostic and dosimetric methods.
- Diagnostic testing is now part of the Ministry of Defence scientific research programme.

4.8 Treatment

The purpose of treatment is to counter the adverse health impact of exposure as effectively as possible. Psychiatric care and follow-up are important aspects of any course of treatment.

- An inventory has been made of available stocks of antibiotics that can be used to combat anthrax and other forms of bioterrorism.
- RIVM has set up a department to investigate the health of disaster victims and relief workers.
- Efforts are being made to reach agreements in the EU on the development, production and storage of medicines.
- International agreements are being reached on the use of specialised relief workers.
- The development of new treatments and the further development of existing ones is now part of the Ministry of Defence research programme.
- As part of efforts to enhance civil-military cooperation, an inventory has been made of the help required by civil relief services when treating CBRN-contaminated victims. Ministry of Defence capabilities are now being used under the terms of the revised voluntary agreement on civil-military administration. The House of Representatives will be informed separately about these matters.

Chapter 5: Information and communication

In 2005, the Ministry of the Interior and Kingdom Relations set up an Expertise Centre for Risk and Crisis Communication (ERC), which, among other things, is responsible for coordinating government communication relating to actual or potential disasters and crises.

The basic principle of communication regarding actual or potential terrorist attacks is to make clear to the general public that the government is doing all it can to prevent attacks but can give no guarantee that an attack will not occur.

A survey of the public perception of terrorism in August 2005 revealed that 55% of Dutch people considered it 'quite likely' to 'extremely likely' that a terrorist attack would take place in the near future. The public want more certainty about the extent to which the government has the terrorist threat under control. People are aware that there can be no 100% guarantee, and do not expect one. The survey also indicated that people want to be informed not only about what the government is doing, but also about what they themselves can do, both in suspicious situations and after an attack. These concerns will be addressed in a publicity campaign by the NCTb starting at the end of February 2006.

The ERC's basic principles for crisis communication vis-a-vis CBRN and other terrorist attacks are:

- Active, targeted communication
- Open, honest, realistic information, focusing on the needs of those receiving it
- Proactive communication (e.g. reporting certain risks).

The ERC is also responsible for the disaster information campaign, which includes terrorism-related crises. The campaign is being thoroughly revised, and the updated version will be launched in September 2006.

In 2006, together with the NCTb, the ERC will continue its communication on CBRN terrorism in cooperation with the parties involved. This will be discussed in the general progress reports on counterterrorism.