The Inspectorate of the Environment and Transport's (ILT) nuclear emergency response strategy

Emergency Preparedness & Response (EP&R) 6 February 2014
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Introduction and guide for readers

This memorandum describes the strategy for managing the National Nuclear Emergency Plan (NPK) in the Netherlands. This is a fleshed out form of the international requirements for Emergency Preparedness and Response. It is part of the Management System. The "Preparation process description" and the "Response process description" are more detailed descriptions of the processes associated with the tasks set out in this strategy document. The first section of this memorandum describes the requirements (shown in grey text blocks) imposed by the IAEA on the management system with regard to EP&R and how these are met in the Netherlands. Next, the EP&R objectives (both of the preparation phase and the response phase) are described. The third section describes how ILT/the Enforcement Policy Directorate (TAN) manages the National Nuclear Emergency Plan. A distinction is made here between the preparation phase, the response phase and the international tasks. In the text, references to NPK documents are **bold and underlined**.

1. IAEA Requirements

The IAEA requirements for the management system originate from GS-G-1.1 and GS-R-2.
The Appendix contains brief descriptions of the management system requirements, and how these are implemented in the Netherlands. The purpose of these IAEA requirements is to ensure that governments are prepared for radiation emergencies. This involves a continuously available, educated, trained and experienced response organisation with access to the requisite resources. This emergency organisation must be prepared for the various emergency scenarios identified by the Netherlands. One management aspect arising from this objective is that, if a response organisation is to function effectively, it is important that tasks and responsibilities (both in the preparation phase and in the response phase) be assigned to the appropriate individuals within the organisations involved.

2. EP&R objectives

The main objective of a nuclear emergency response is to minimise or neutralise the effects of an emergency, as much as possible. See **Nuclear Energy Act, Section 46.1**.

This can be translated into the following sub-objectives:

- Taking measures (prevention) to prevent incidents at nuclear facilities;
- When an incident occurs, take measures to prevent or minimise the effects as much as possible.

The safety train illustrates the steps associated with the safety of (in this case) a nuclear facility. The first step is proaction. With regard to a nuclear emergency response, this can be translated into policies in the area of nuclear emergency response and the licensing of nuclear facilities, both of which were drawn up by the Ministry of Economic Affairs (EZ). The second step is prevention. This can be translated as enforcement, which – within this dossier – is the task of the Department of Nuclear Safety, Security and Safeguards (KFD). The third step is preparation. For the purposes of on-site emergency response, this step has been assigned to the licensees (supervised by the KFD). With regard to off-site emergency response, this step has been assigned to TAN (at national level) and to the Security Regions (at regional level). The fourth step is the response phase. This is implemented by the Nuclear Planning and Advice Unit (EPAn) and the Security Regions. The final step – the recovery phase – is the EPAn's task.

The EP&R objectives (in accordance with the IAEA) are described in section 2 of the **GS-R-2**. These correspond to the Dutch objectives for the response to radiation accidents.

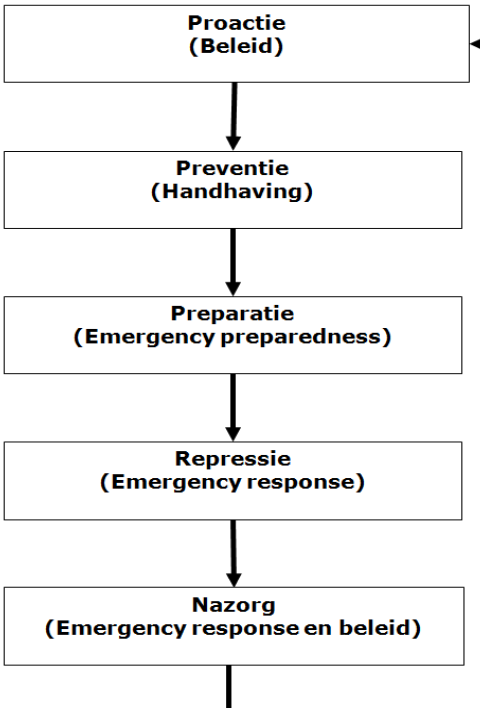
Figure1: The safety train

GS-R-2 Requirements 2.1 and 2.2: *"Protection objective: to p deterministic effects in individuals by keeping doses below the re that all reasonable steps are taken to reduce the occurrence of s at present and in the future."*

"Radiation protection objective: To ensure… mitigation of the rad emergencies."

"Technical safety objective: To take all reasonably practical meas nuclear installations and to mitigate their consequences should th level of confidence that, for all possible accidents taken into acco installation, including those of very low probability, any radiologi and below prescribed limits..."

GS-R-2 Requirement 2.6:
"To ensure that arrangements are in place for a timely, managed effective response at the scene, and at the local, regional, nation nuclear or radiological emergency."



Dutch policy in the area of nuclear emergency response and the response to radiological accidents is fleshed out in the **National Nuclear Emergency Plan**.

3. The Dutch system

The objective of the Dutch nuclear emergency response system is to prevent or minimise, as much as possible, any harmful effects to humans and the environment that are associated with radiation incidents. The Dutch system is subdivided into the Response phase and the Preparation phase. As these two phases involve very different responsibilities and tasks, they are described separately.

3.1 Response organisation

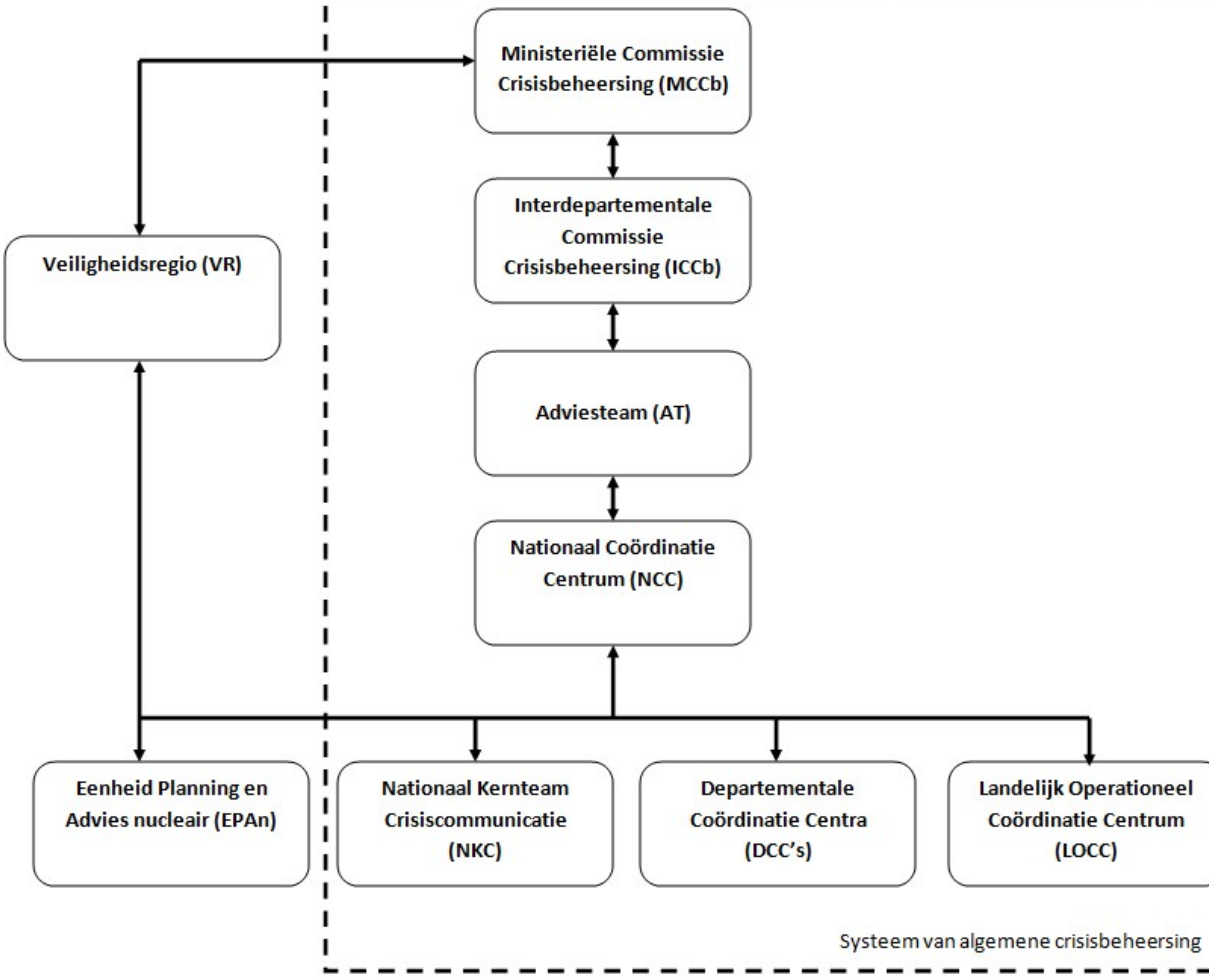
The system of crisis management in the Netherlands is distributed across several response organisations. In addition to the general crisis management system, there is the Nuclear Planning and Advice Unit or EPAn (which handles responses to nuclear emergencies). The latter advises ministers and the Security Regions in the event of a radiation incident or a nuclear accident.

The system of general crisis management is described in the **National Manual on Decision-Making in Crisis Situations**. The figure on the following page illustrates the general system of crisis management and its relationship to the EPAn.

The Minister of Security and Justice is responsible for general crisis management. The Minister of Economic Affairs is responsible nuclear emergency response. Furthermore, in the event of a nuclear accident, the ministers themselves are responsible for any measures taken in their policy areas. One exception to this is that central government (EZ) is responsible for crisis communication. In this case, unlike in other types of crisis, the Security Region must coordinate with EZ regarding all crisis communications.

The Nuclear Planning and Advice Unit (EPAn) was established for responses to nuclear emergencies (see **Decree establishing the EPAn**). During an incident involving a category A facility, the EPAn analyses the radiological situation and advises the Ministerial Crisis Management Committee (MCCb) on measures pertaining to radiation protection.
Currently, the EPAn still has two Back Offices (the Radiological Information Back Office and the Medical Information Back Office) and a Front Office (FO). The Back Offices, which consist of various knowledge institutes, illustrate the radiological situation using measurement data and models. They

also advise the FO about radiation measures.



The FO consists of representatives of various departments. They prepare the policy consideration regarding measures recommended to the MCCb, maintain contact with the affected Security Region, and notify the MCCb about any dilemmas relating to the recommended measures. They are also responsible for the exchange of information at international level.

National Contact Point (CP) and National Competent Authority (CA)
The ILT is the Netherlands' CP and CA for nuclear incidents and radiological incidents. This means that the IAEA and the EU will inform the ILT about any incidents that occur abroad. If an incident occurs in the Netherlands, the ILT will be responsible for informing other countries.

The CP function lies with the ILT/Reporting and Information Centre (MIC). This means that it must be possible to contact them and that they must be available to take phone calls, and to receive and forward faxes to the relevant on-call official 24/7. Allowance is made for the fact that, during an incident, numerous phone calls must be dealt with in a short period of time.

ILT/TAN is the Netherlands' CA. In the context of informing other countries, they are responsible for disseminating information from the Netherlands during an incident. The Chairman of the EPAn is responsible for the content of international notifications.

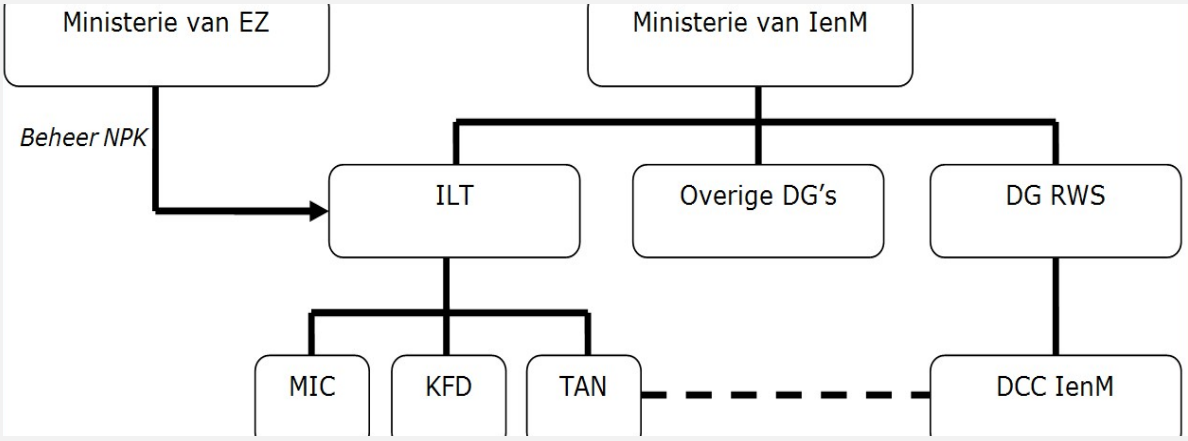
ICAweb

ICAweb is the secure crisis website used for the exchange of information between the Back Office for Radiological Information (BORI), the Back Office for Medical Information (BOGI), and the EPAn FO during an incident. Management of the website is outsourced to the Ministry of Infrastructure and the Environment's Ministerial Crisis Coordination Centre (DCC). The ILT has final responsibility for the EPAn section of the website.

Facilitating the EPAn FO

The EPAn FO meets during incidents. The ILT is responsible for facilitating the EPAn FO (rooms, equipment, etc.). The FO meets at the Ministry of Infrastructure and the Environment's DCC. While facilitation is assigned to the DCC, final responsibility for this lies with the ILT.

Summary of the ILT´s role in the <u>response</u> to nuclear emergencies



MIC:

1. Contact Point, hotline for radiation emergencies

TAN:

1. Responsibility for informing other countries, in the role of Competent Authority, has been assigned to TAN
2. Duty official (DDA), informs the chairman of the EPAn in the event of incidents
3. Participation of the EPAn FO as process manager

KFD:

1. Participation in the EPAn BORI (becomes Crisis Expert Team) during incident
2. Participation in the EPAn FO during incident

DCC:

1. ILT outsources facilitation of the EPAn FO to the Ministry of Infrastructure and the Environment's DCC. Final responsibility lies with the ILT
2. ICAweb, availability of crisis website outsourced to the Ministry of Infrastructure and the Environment's DCC. Final responsibility lies with the ILT

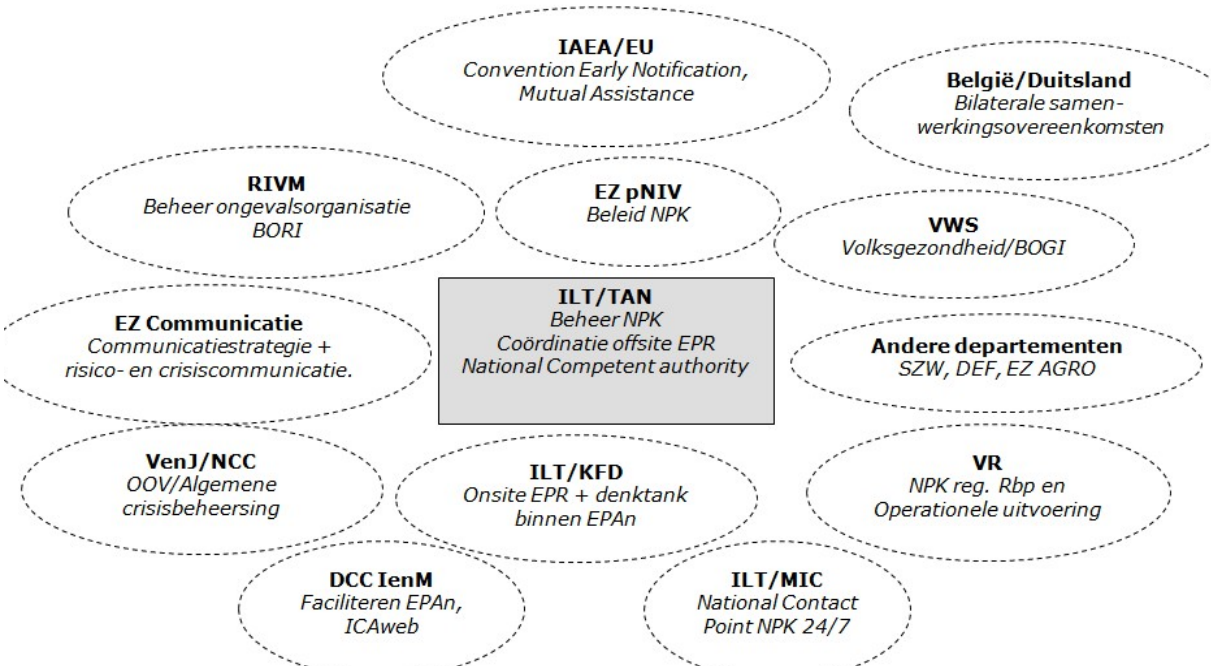
3.2 Preparation phase

In nuclear matters, ILT/TAN is tasked with "managing the NPK". Preparations for a nuclear emergency response involve various tasks:

- Implementing new national and international legislation and regulations;
- Keeping the relevant documentation up to date;
- Educating and training members of the EPAn, and carrying out exercises;
- Advising the Security Regions as they draw up their regional emergency response plans;
- Coordinating with other bodies involved in responding to nuclear emergencies.

ILT has assigned the management of the BORI organisation to the National Institute for Public Health and the Environment (RIVM). The Ministry of Health, Welfare and Sport (HWS) is responsible for managing the BOGI organisation.

Managing the NPK is a complex undertaking, as responding to nuclear emergencies intersects with many different policy areas. Accordingly, there is a very wide field of players covered by this dossier. This section only contains a description of the tasks assigned to ILT/TAN. No description is given here of the tasks carried out by the organisations concerned in the context of their individual departmental/organisational responsibilities.



ILT/TAN and other parties involved in managing and implementing the NPK

NPK Management Group and working groups

The ILT manages the NPK on behalf of EZ. An NPK Management Group has been set up to manage the NPK. This group meets four times a year. Its members are representatives of various departments, the RIVM and the Security Regions. The NPK Management Group includes five working groups:

1. **Working Group for Education, Training and Exercises.** Its members include representatives of EZ, KFD, BORI, HWS/BOGI, Security Regions, and the National Coordination Centre (NCC). This working group is responsible for drawing up the long-term exercise programme for the EPAn, and for organising exercises with the FO, BORI, BOGI and the Security Region. The working group's remit does not cover any BORI, BOGI or Security Region exercises that do not include the FO.
2. **Plans & Procedures Working Group.** Its members include representatives of KFD, BORI, NFI, NCC and the Security Region. They see to it that all NPK documents are kept up to date by the document management system.
3. **Communications Working Group.** This working group consists of EZ communications, NCC communications and the ILT. They are responsible for the preparation of risk communication and for the communication strategy for the response phase.
4. **Category A region consultation;** This working group is headed by the Security Regions Emergency Response Centre. The Working Group includes representatives from all regions within the area of influence of a category A facility. In addition, BORI, the Ministry of Defence, the KFD, ILT/TAN and NCC occasionally participate in the working group. The purpose of this working group is to translate national policies to the Security Regions, and to share knowledge about regional tasks in the context of a nuclear emergency response.

5. **Working Group for the National Coordination of Measurements during Radiation Incidents. Led by the RIVM, this** working group identifies the measurement capabilities and coordinates the measuring strategy for radiation incidents with the various monitoring bodies (RIVM, the Ministry of Defence, the fire brigade).

National Radioactivity Monitoring Network (NMR)
Management of the NMR has been outsourced to the RIVM. Three times a year, the RIVM holds a management consultation session in which ILT, KFD, EZ, and the Ministry of Security and Justice participate. The topics discussed in these sessions include operational capability and any new developments. Details of the vision/strategy are also explained here.
The NMR is funded by ILT and the Ministry of Security and Justice. The Ministry of Security and Justice makes an annual contribution of 880,000 euros to help maintain the network.

3.3 International

IAEA/EU. In the framework of its tasks as Competent Authority, every two years ILT/TAN participates in two CA meetings, one for the IAEA's CAs and the other involving the EU's CAs.

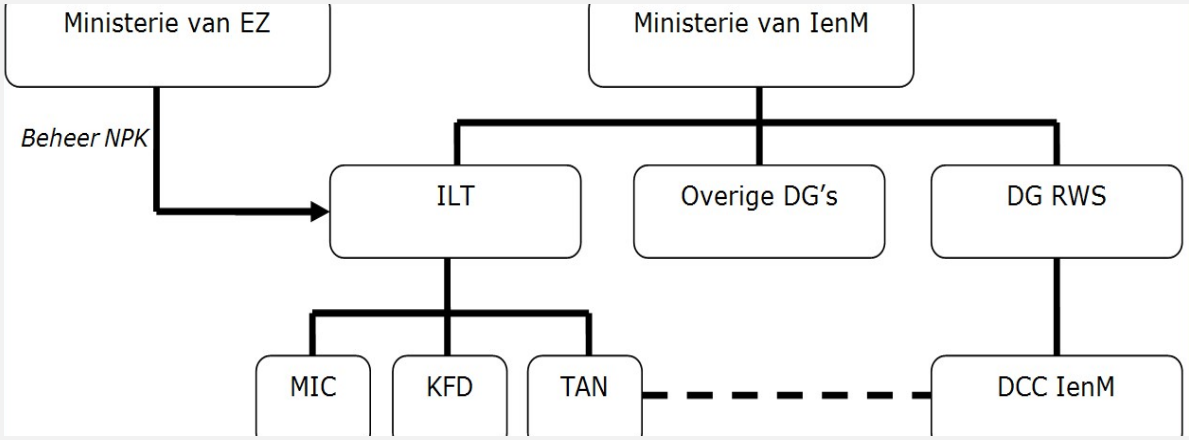
Bilateral consultations with neighbouring countries. With regard to nuclear emergency response, the Netherlands has bilateral cooperation agreements with Belgium and Germany. At least one consultation session takes place each year. Other consultation sessions have taken place in the framework of the Benelux countries, and with the UK.

OECD/NEA. ILT/TAN is a member of the Committee on Radiation Protection and Public Health (CRPPH) and the Working Party on Nuclear Emergency Matters (WPNEM). Annual meetings take place in this framework. Their purpose is to organise national and international exercises and to exchange knowledge (best practices) in the area of off-site EP&R.

Heads of the European Radiological Protection Competent Authorities (HERCA) Emergencies working group. ILT/TAN has been participating in this temporary working group since 2013. The group's purpose is to work towards a harmonised European response. This working group meets two to three times a year. EZ also takes part in this working group.

The Western European Nuclear Safety Regulators' Association (WENRA) Mutual Assistance working group. ILT/TAN and KFD have been participating in this working group since 2012. The group is attempting to improve cooperation between European countries in the area of on-site EP&R. This working group cooperates with the HERCA Emergencies working group.

Summary of ILT's role in the <u>preparation</u> for responses to nuclear emergencies



MIC:
2. Maintain Contact Point (together with TAN)

TAN:
1. Coordinating with, and advising, the Security Regions (TAN);

2. Coordinating with other bodies involved in responding to nuclear emergencies (TAN);
3. Management of the emergency organisation has been assigned to RIVM (final responsibility lies with TAN);
4. Maintaining bilateral partnerships with other countries, including the neighbouring countries (TAN);

TAN and KFD:

1. Implementing new national and international legislation and regulations (TAN, involvement of KFD);
2. Educating and training members of the EPAn FO, and carrying out exercises (TAN is project leader, KFD is involved);Keep NPK documentation up to date (TAN is project leader, KFD is involved);
3. Management of the National Radioactivity Monitoring Network has been assigned to RIVM (final responsibility lies with TAN, KFD is involved in the content);
4. International cooperation in the field of nuclear emergency response (TAN and KFD);
5. Coordinating on-site and off-site emergency response plans (TAN and KFD).

KFD:

1. Supervision of preparations for on-site emergency response.

Ministry of Infrastructure and the Environment's DCC:

1. Management of DCC facilities on behalf of the EPAn
2. Management of ICAweb

Appendix fleshing out IAEA requirements

The IAEA requirements for the management system originate from GS-G-1.1 and GS-R-2. This section contains a brief description of the management system requirements, and of how these are implemented in the Netherlands.

GS-G-1.1 Requirement 3.24: *The regulatory body shall ensure that operators have adequate arrangements for emergency preparedness (see Ref. [1], para. 3.2(3)). Again, depending on the size of the organisation, this can be undertaken by a separate unit, but it is more likely to be part of the inspection or review and assessment function.*

This requirement is related to on-site emergency response. The KFD is the regulatory organisation in this case. Any requests to implement this requirement must be submitted to the KFD.

GS-G-1.1 Requirement 3.25: *The exact role of the regulatory body in emergencies varies considerably between States, depending on how it is organised to respond to emergencies in general. In many States the regulatory body has an advisory function for the authority responsible for emergency preparedness. In all but the largest of organisations, the allocation of dedicated resources for this function is unlikely to be justified. Adequate procedures should therefore be prepared to obtain the requisite resources as necessary and to deploy them as appropriate. The organisational structure of the regulatory body should clearly indicate the responsible person or group in charge of co-ordinating the development of procedures, liaising with other organisations for emergency preparedness, and conducting exercises. For further details see Ref. [6].*

GS-R-2 Requirement 2.5: *The goals of emergency response are most likely to be achieved in accordance with the principles for intervention by having a sound programme for emergency preparedness in place as part of the infrastructure for protection and safety [3]. Emergency preparedness also helps to build confidence that an emergency response would be managed, controlled and co-ordinated effectively.*

GS-R-2 Requirement 2.6: *The practical goal of emergency preparedness may be expressed as: To ensure that arrangements are in place for a timely, managed, controlled, co-ordinated and effective response at the scene, and at the local, regional, national and international level, to any nuclear or radiological emergency.*

These requirements are set out in various documents in the Netherlands. Nuclear emergency response is enshrined in the **Nuclear Energy Act**. The basic principles of EP&R in the Netherlands are described in the **National Nuclear Emergency Plan**. This plan, which dates from 1989, is currently being updated. In addition, the nuclear emergency response system is interlinked with the general crisis management system. The general crisis management system is described in the **National Manual on Decision-Making in Crisis Situations**. The **Decree establishing the EPAn** ensures the availability of a national nuclear assessment team. The **National Nuclear Emergency Response Plan** contains details of all the organisations involved in nuclear emergency response, as well as a description of their tasks and responsibilities. Regional tasks and responsibilities are enshrined in the **Security Regions Act**. Details of nuclear emergency response at regional level are set out in the **regional emergency response plans**.

GS-R-2 Requirement 3.2*: "The arrangements for emergency response actions both within and outside facilities, if applicable, or elsewhere under the control of the operator, are dealt with through the regulatory process. [The State] shall ensure that [the regulatory body and response organisations] have the necessary resources and that they make preparations and arrangements to deal with any consequences of [a nuclear or radiological emergency] in the public domain, whether the [nuclear or radiological emergency] occurs within or beyond national [borders]. These preparations shall include the actions to be taken both in and after an emergency." (Ref. [10], para. 6.3.)*

The **National Nuclear Emergency Plan** describes the way in which the nuclear emergency response system in the Netherlands is organised. The emergency organisation's budget is guaranteed via [placeholder].

GS-R-2 Requirement 3.3: *"It is presumed that the State will have determined in advance the allocation of responsibilities for the management of interventions in emergency exposure situations between the [regulatory body], national and local [response organisations] and [operators]." (Ref. [3], Appendix V, para. V.1.)*

The response organisation is described in the **National Nuclear Emergency Response Plan**. The Minister of Economic Affairs is responsible for coordinating the radiation component when scaling up to national level during a radiation emergency. However, the ministers of the various departments remain responsible for proclaiming measures relating to their own policy areas. Furthermore, the Minister of Security and Justice is responsible for public order and security during a crisis.

GS-R-2 Requirement 3.4*: Jurisdictions of the various orders and levels of government may be laid out in substantially different ways between States. Likewise, the authorities of the various organisations that might be involved in emergency response may be allocated in substantially different ways. In this Safety Requirements publication a generic approach to the management of a nuclear or radiological emergency is therefore adopted: in many cases requirements are stated without being assigned as responsibilities of a particular organisation. Legislation shall be adopted to allocate clearly the responsibilities for preparedness and response for a nuclear or radiological emergency and for meeting the requirements established in this Safety Requirements publication. This shall include establishing or identifying an existing governmental body or organization to act as a national coordinating authority whose function, among others, is to co-ordinate the assessment of the threats within the State (see paras 3.13–3.20) and to coordinate the resolution of differences and incompatible arrangements between the various response organisations. This authority shall ensure that the functions and responsibilities of operators and response organisations as specified in these requirements are clearly assigned and are understood by all response organisations, and that arrangements are in place for achieving and enforcing compliance with the requirements.*

The responsibilities of response organisations are enshrined in the **Nuclear Energy Act**, the **Security Regions Act**, the **National Nuclear Emergency Response Plan**, and the **National Manual on Decision-Making in Crisis Situations**.

GS-R-2 Requirement 3.5*: The national coordinating authority*
shall make all reasonable efforts, in accordance with international obligations, to foster the implementation by other States of measures to fulfil their obligations in compliance with these requirements.

This requirement is not applicable, unless it also refers to the carry-over effect at regional (Security Region) level. ILT/TAN advises the Security Regions as they draw up their emergency response plans for nuclear facilities.

GS-R-2 Requirement 3.8: *The regulatory body shall require that arrangements for preparedness and response be in place for the on-site area for any practice or source that could necessitate an emergency intervention. For a facility in threat category I, II or III "Appropriate emergency [preparedness and response] arrangements shall be established from the time that nuclear fuel [or significant amounts of radioactive or fissile material] is brought to the site, and complete emergency preparedness as described here shall be ensured before the commencement of operation." (Ref. [12], para. 2.36.) The regulatory body shall ensure that such emergency arrangements are integrated with those of other response organizations as appropriate before the commencement of operation. The regulatory body shall ensure that such emergency arrangements provide a reasonable assurance of an effective response, in compliance with these requirements, in the case of a nuclear or radiological emergency. The regulatory body shall require that the emergency arrangements "shall be tested in an exercise before the commencement of operation [of a new practice]. There shall thereafter at suitable intervals be exercises of the emergency*

[arrangements], some of which shall be witnessed by the regulatory body." (Ref. [12], para. 2.37.)

This means that an on-site emergency response plan must be drawn up for nuclear facilities, that this should be coordinated with the off-site plans, and that the on-site plans must be tested. This is implemented through the **Nuclear Energy Act** and the nuclear facilities' **Nuclear Energy Act licences**. The coordination of off-site and on-site plans is included in the **National Nuclear Emergency Plan**.

GS-R-2 Requirement 3.9: *"In fulfilling its statutory obligations, the regulatory body… shall establish, promote or adopt regulations and guides upon which its regulatory actions are based;… shall provide for issuing, amending, suspending or revoking authorizations, subject to any necessary conditions, that are clear and unambiguous and which shall specify (unless elsewhere specified):… the requirements for incident reporting;… and emergency preparedness arrangements." (Ref. [10], para. 3.2.)*

The guidelines and criteria for scaling up the emergency organisation are included in the **Nuclear Energy Act** and the **National Nuclear Emergency Plan**. The criteria for incident reports by nuclear facilities are included in the **Nuclear Energy Act licence**.

GS-R-2 Requirement 3.10: *"In planning for, and in the event of [a nuclear or radiological emergency], the regulatory body shall act as an adviser to the government and [response organisations] in respect of nuclear safety and radiation protection." (Ref. [10], para. 6.6.)*

This is implemented through the **Nuclear Energy Act**, the **National Nuclear Emergency Plan** and the **Decree establishing the EPAn**. The EPAn (Nuclear Planning and Advice Unit) identifies and analyses the radiological situation in question. If risk intervention values are exceeded (or if there is a risk that this will happen), it advises the Ministerial Crisis Management Committee (MCCb) on measures pertaining to radiation protection.

GS-R-2 Requirement 3.11: *The national co-ordinating authority and the response organizations shall ensure that the arrangements for response to a nuclear or radiological emergency are co-ordinated with the arrangements for response to conventional emergencies. The regulatory body shall ensure that the co-ordinated arrangements are implemented adequately by the operators.*

This is implemented in the **National Manual on Decision-Making in Crisis Situations**. The way in which the national nuclear emergency response system is interlinked with the general crisis management system is described in the **National Nuclear Emergency Response Plan**.

GS-R-2 Requirement 3.12: *In the event of a nuclear or radiological emergency the time available for decision making and for implementing an effective strategy for response may be short. It is therefore important that an appropriate management system be used. All organisations that may be involved in the response to a nuclear or radiological emergency shall ensure that appropriate management arrangements are adopted to meet the timescales for response throughout the emergency. Where appropriate, the management system shall be consistent with that used by other response organizations in order to ensure a timely, effective and co-ordinated response.*

This is implemented by means of **on-call and accessibility arrangements**. The operational implementation of these regulations must be reviewed and tested on the basis of performance indicators (response time, etc.).

GS-R-2 Requirement 4.1: *The requirements for response established in this section apply in the event of a nuclear or radiological emergency. The response requirements must be met to achieve the practical goals of emergency response (see para. 2.3). In order to ensure that there is a capability to meet the response requirements, the requirements for preparedness apply as part of the planning and preparation process. If no threat category is indicated, the requirements apply to all threat categories. Many response requirements refer to 'arrangements': the term is used as defined in the Glossary.*

The question of exactly what these "arrangements" are, is in the hands of the IAEA.

GS-R-2 Requirement 5.2: *The authority for developing, maintaining and regulating (see para.*

3.9) arrangements for preparedness and response for a nuclear or radiological emergency shall be established by means of acts, legal codes or statutes.

This is implemented through the **Nuclear Energy Act** and the **National Nuclear Emergency Plan**.

GS-R-2 Requirement 5.3: *All the operating organizations and local and national organizations involved in the performance of the functions specified in Section 4, or in support of their performance, shall document their own roles, functions, authorities and responsibilities in an emergency response and assent to the authorities, roles and responsibilities of other response organizations. Typically this is documented as part of the appropriate national and local emergency response plans. Conflicting roles and responsibilities shall be resolved as part of the planning process or by the national coordinating authority (see para. 3.4).*

The roles and responsibilities of the organisations involved are described in the **National Nuclear Emergency Response Plan**, the **National Manual on Decision-Making in Crisis Situations**, and the **Security Regions Act**.

GS-R-2 Requirement 5.4: *The emergency arrangements shall include the clear allocation of responsibilities, authorities and arrangements for co-ordination in all phases of the response. These arrangements shall include: ensuring that for each response organization a single position has the authority and responsibility to direct its response actions; clearly assigning the responsibility for the co-ordination of the entire response and for the resolution of conflicts between response organizations; assigning to an on-site position the authority and responsibility for notifying the appropriate organization(s) of an emergency and taking immediate on-site actions; and assigning to an on-site position the responsibility for directing the entire on-site response (see paras 4.7–4.10).*

The Minister for Economic Affairs is responsible for coordinating the radiation component of the nuclear emergency response, but the Minister of Security and Justice is responsible for the general emergency response (public order and security). The responsibility of the Minister of Economic Affairs is enshrined in the **Nuclear Energy Act**.

GS-R-2 Requirement 5.5: *The arrangements for the delegation and/or transfer of authority shall be clearly specified in the relevant emergency plans, together with arrangements for notifying all the appropriate parties of the transfer.*

This is the case for category B incidents. In this connection, it is the Mayor – rather than the Minister – who is responsible for dealing with these matters (unless it is supralocal, in which case this is the responsibility of the Security Region). This is enshrined in the **Nuclear Energy Act**. The Security Region is also responsible for implementing measures, under the leadership of the Security Region chairman. This is enshrined in the **Security Regions Act**.

GS-R-2 Requirement 5.6: *The organizational relationships and interfaces between all the major response organizations shall be established.*

With regard to the response phase, the roles and responsibilities of, and relationships between, the various response organisations are described in the **National Nuclear Emergency Response Plan**. With regard to the preparation phase, these are described in the **National Nuclear Emergency Management Plan**.

GS-R-2 Requirement 5.7: *The positions responsible within each operating and response organization for the performance of the response functions specified in Section 4 shall be assigned in the emergency plans.*

With regard to the on-site situation, this is described in the operational emergency plan. For the purposes of the EPAn, this is described in the **EPAn Organisational description**, and the **BORI and BOGI organisational descriptions**.

GS-R-2 Requirement 5.8: *Personnel shall be assigned to appropriate positions in all operating and response organizations in order to perform the functions necessary to meet the requirements*

established in Section 4. 5.9. Sufficient numbers of qualified personnel shall be available at all times in order that appropriate positions can be promptly staffed as necessary following the declaration and notification of a nuclear or radiological emergency.

Key figures have been appointed to ensure that the response organisation is accessible and available on a 24/7 basis.