

The Netherlands

EPR Fact Sheet

Decision making

The Minister of Infrastructure and Water Management (I&W) and the minister(s) concerned are responsible for the preparation of radiological protective actions and the coordination and the implementation of those actions. Intersectoral crisis management will be coordinated in the *Interdepartmental Crisis Management Committee (ICCb)* and the *Ministerial Crisis Management Committee (MCCb)*. They are responsible for (strategic) decision making.

In the initial phase of an emergency the local authorities (Safety Regions) may initiate protective actions, such as evacuation, sheltering, ITB etc, as described in the Safety Regional nuclear emergency response plans.

Advice

The *Crisis Expert Team radiation & nuclear (CETsn)* is responsible to collect and assess information about the technical, meteorological and radiological situation and to advice on radiological protective actions. The CETsn consists of a front office, the Crisis Organisation of the Authority for Nuclear Safety and Radiation Protection (ANVS-CO), and a back office with eight organisations (a.o. the ANVS Task Force, the National Institute of Public Health and the Environment, the Royal Netherlands Meteorological Institute, RIKILT). The CETsn is chaired by the ANVS.

Information and advice from the CETsn will be provided to the relevant (inter)national authorities as well as the local authorities.

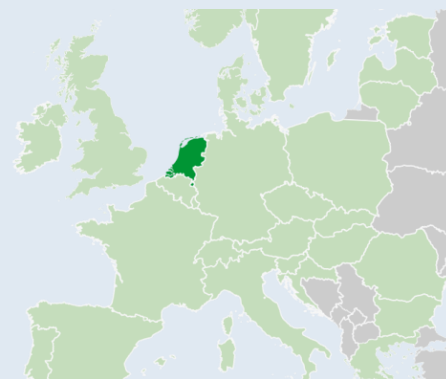
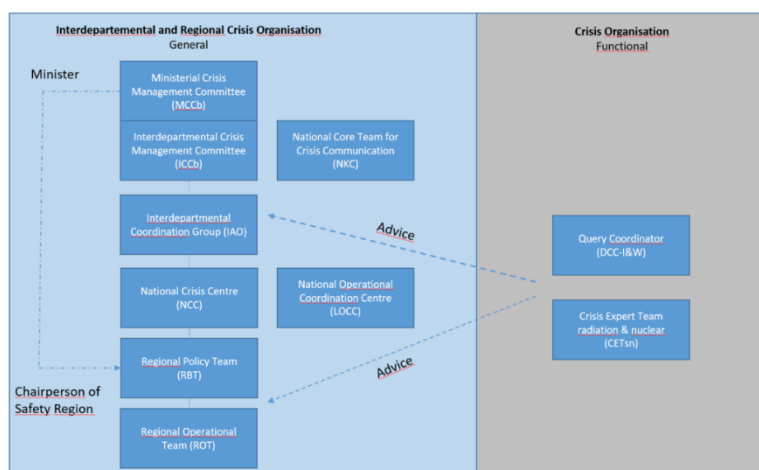
Licensee

The licensee is responsible for actions taken on-site to mitigate the situation. The licensee is obliged to provide all information required for crisis management to the ANVS, the mayor and the Safety Region.

Alarming

In case of a radiation incident the licensee is obliged to notify the ANVS, the mayor and the Safety Region.

Organizational structure



Country info

Capital	Amsterdam
Official language	Dutch
Population	17 M
Area	41 500 km ²
Currency	Euro (€)
Time zone	UTC +1
Calling code	31
Internet TLD	.nl
NPPs /ele. share	1/3%

NWP*

ANVS (Authority for Nuclear Safety and Radiation Protection)

NCA*

ANVS (Authority for Nuclear Safety and Radiation Protection)

The NCA for RANET is DCC-I&W (Ministry of Infrastructure and Water Management - Crisis Management Centre)

Emergency website

<http://www.crisis.nl>

Online measurements

http://www.rivm.nl/Onderwerpen/N/Nationaal_Meetnet_Radioactiviteit/Resultaten

Bilateral agreements

Belgium, Germany

RANET capabilities

None.

*National Warning Point and Competent Authority under the Emergency Conventions

Nuclear facilities* and population

NPP	Type	MW _e	GPS coordinates	5 km pop.	10 km pop.	20 km pop.	100 km pop.	Comments	
Borssele	KCB	PWR	490	51.43126° N 3.717364° E	4 400	57 000	240 000	4.8 M	
Petten ^b	HFR	Pool	45 ^a	52.78786° N 4.677731° E	4 700	48 000	344 000	8.0 M	
	MPF	n.a.	n.a.						
Delft ^c	HOR	Pool	2 ^a	51.99119° N 4.381675° E	152 000	882 500	2 470 000	11.2 M	
NPP (foreign)			GPS coordinates	5 km pop.	10 km pop.	20 km pop.	25 km pop.	100 km pop.	Comments
Doel	Be		51.3239° N 4.2592° E	37	5 800	100 000	171 000	6.5 M	In total 4 reactors
Tihange	Be		50.5351° N 5.2737° E	n.a.	n.a.	n.a.	n.a.	1.1 M	In total 3 reactors
SCK-Mol	Be		51.2160° N 5.0901° E	n.a.	n.a.	24 000	60 000	7.5 M	Research Reactor
Emsland	De		52.4742° N 7.3178° E	n.a.	n.a.	n.a.	11 000	2.9 M	

* The IAEA emergency preparedness category 1 and other relevant facilities

^a MW_{th}

^b Petten: 3 km population=2 400.

^c Delft: 0.5 km population=2.

Planning zones



Emergency classification

Emergency Standby: Situation requiring increased vigilance. No protective actions off-site are required.

Plant Emergency: Event with possible on-site radiological effects. No protective actions off-site are required.

Site Emergency: Event with possible radiological effects on-site and in the near surrounding.

No direct protective actions (sheltering, ITB or evacuation) are required. Protective actions for the food chain might be required.

Off-site Emergency: An emergency requiring direct protective actions (sheltering, ITB or evacuation), as well as actions to protect the food chain.

Protection strategy

The protection strategy is based on the reduction of the projected dose.

The Netherlands has a harmonized approach for a nuclear accident in a neighbouring country. Initially the protective actions in the neighbouring country will be followed. For this, planning zones have been aligned with the neighbouring countries.

The Default Guidance Levels are set for an emergency situation with a Dutch nuclear facility. For an emergency situation with cross border effects or with a NPP in a neighbouring country for each Protective Action a range of intervention levels is established which includes the intervention levels of our neighbouring countries.

For emergency exposure situations a reference level is set of 100 mSv effective dose (acute or annual).

ITB has been pre-distributed in both the planning zones.

Criteria

Protective Action	Default Guidance Level [range] (projected dose*)	Planning Zone (km)		
		KCB (Borssele)	HFR (Petten)	HOR (Delft)
Evacuation	100 [50-100] mSv (E)	10**	3	
Sheltering	10 [5- 10] mSv (E)	20	3	0.5
ITB ≤ 40 a	100 [50-250] mSv (H _{thy})	20		
ITB < 18 a or pregnant	50 [10- 50] mSv (H _{thy})	100	3	0.5
Water, food and feed protection	Radionuclide specific OIL's			

*Time period for dose integration is 48 hours.

** The evacuation of the inner circle (5 km) is given priority.