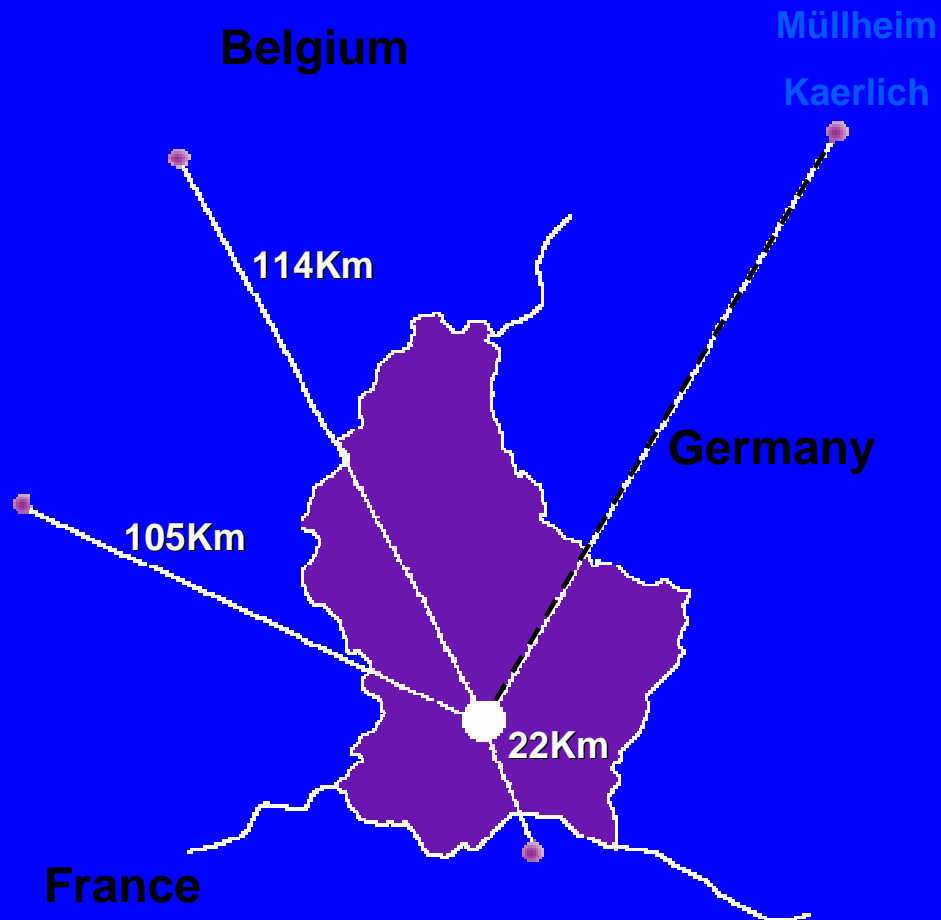


Creating synergies on regional assistance capabilities for nuclear / radiological emergency response

**“Nuclear/Radiological Emergency
Response and Preparedness”
A view from a non-nuclear country**

LUXEMBOURG

THE LUXEMBOURG SITUATION



**More than
10'000 MWeI
are produced
in the vicinity
of
Luxembourg**

THE SOCIO-ECONOMIC SITUATION

- **250.000 people are living within 25 km radius from NPP Cattenom (total population 450.000)**
- **100.000 frontier commuters every day**
- **ca. 3/4 of economic activity within 30 km radius from NPP Cattenom**

EMERGENCY PREPAREDNESS 1

If there are no nuclear activities in a country

human resources and capacities for nuclear emergency planning and for handling large scale radiological emergencies are quite limited.

But

the Country needs to fulfil all its international as well as its national obligations in emergency preparedness.

EMERGENCY PREPARDNESS 2

A nuclear accident in a near border NPP means:

- **No alerting from this NPP operator**
- **No site information from this NPP operator**
- **No direct information about planned actions by the foreign Government**

With following consequences for your country:

- **alerting, information and protection of the population cannot be assured**
- **decision makers risk step behind the information released by media**

EMERGENCY PREPARDNESS 3

- **To avoid getting in a chaotic situation and for assuring correct response to the emergency in such a situation, decision makers need:**

ASSISTANCE

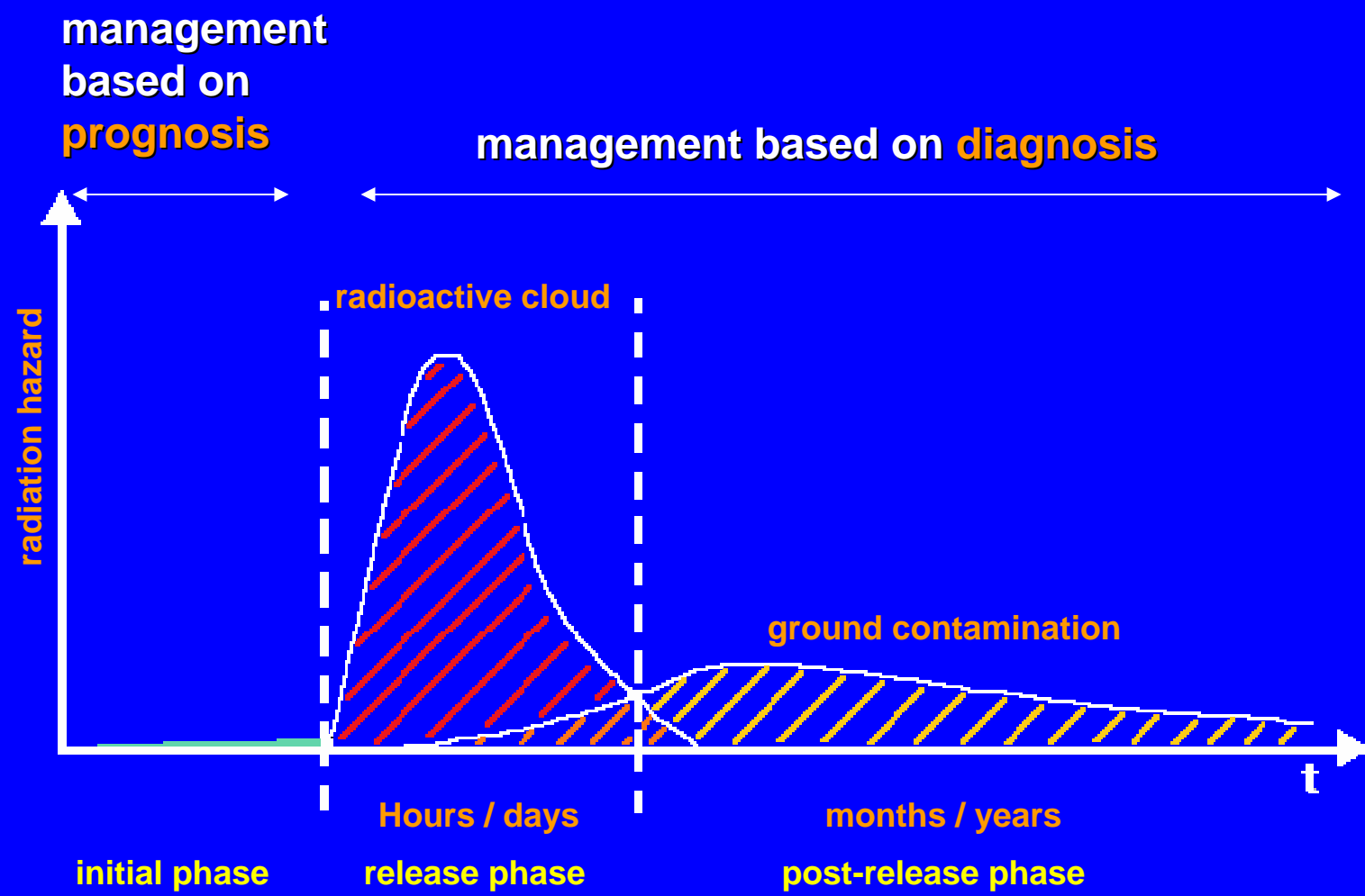
- **A special kind of “Assistance” as:**
 - **Accident alert transmission - Information exchange - etc**
 - **Cooperation and coordination in actions with neighbour countries**

NUCLEAR EMERGENCY MANAGEMENT

Therefore:

- **International agreements or conventions have been signed assuring rapid alert in case of emergency**
 - **EU ECURIE system**
 - **IAEA Conventions on Early Notification and Assistance**
- **Bilateral agreements have been made with:
France and Belgium**

NUCLEAR EMERGENCY MANAGEMENT



FOR **PROGNOSIS**: BI-MULTILATERAL AGREEMENTS ARE ESSENTIAL

- **bilateral** agreements for accidents in **nearby** nuclear installations
- international agreements, conventions, treaties for accidents in far away nuclear installations

CO-OPERATION AND BILATERAL AGREEMENTS

Agreement signed with France in 1983

- **mutual information within short delay**
- **content of information**
- **contact points 24/24 hours available**
- **communication system 24/24 hours available**
- **exchange of liaison officers**

LUXEMBOURG-FRENCH CO-OPERATION

French-Luxembourg Commission created in 1994

- **questions related to nuclear safety and security**
- **two technical groups:**
 - **nuclear safety and radiation protection**
 - **civil defence matters**

BILATERAL AGREEMENT: IDENTITY OF THE ACTORS !

Luxembourg

- **Civil Defence Organisation (Ministry of Interior)**
- **Radiation Protection Department (Ministry of Health)**
- **Information and Press Department (Prime Minister)**

France

- **Nuclear Safety Authority (ASN-DGSNR)**
- **Radiation Protection and Nuclear Safety Institute (IRSN)**
- **Local authorities (Préfecture)**
- **Licence (EDF)**

INFORMATION TO BE EXCHANGED !

- **description of the accident**
- **source term assessment**
- **activity released**
- **plant condition (diagnosis & prognosis)**
- **areas at risk (including cross border areas)**
- **meteorological conditions**

INFORMATION TO BE EXCHANGED ! (cont.)

- **dose assessment (thyroid doses,.....)**
- **radiological data exchange**
- **mutual information on countermeasures envisaged / prepared / taken**
- **co-ordination of countermeasures (traffic, food, access control,...)**
- **co-ordination and harmonisation of press release**
- **.....**

DEDICATED COMMUNICATION SYSTEM AVAILABLE 24/24 h

Dedicated communication system between France, Luxembourg, Germany (Rhineland and Saarland), EDF

- automatic triggering of the **alert by the NPP operator** (EDF)
- dedicated phone lines for fax and phone
- e-mail, (web technologies)

INTERNATIONAL CONVENTIONS/DECISIONS ON NUCLEAR EMERGENCY RESPONSE

IAEA:

- **Convention on early notification, 1986**
- **Convention on assistance, 1986**

EC:

- **Council Decision on early exchange of information (87/600/EURATOM)**
- **Council Decision on Community mechanism (2001/792/EC)**

INTERNATIONAL ALERT AND INFORMATION SYSTEMS

- **EMERCON: IAEA, R & N information/assistance network**
- **ECURIE: EC, radiological emergency network**
- **EURDEP: EC, radiological data exchange platform**
- **MIC: EC, Civil Protection network**
- **BICHAT: EC, BC threats, also for R & N**
- **RASFF: EC, contamination of food & feed**
- **WHO**
- **NATO**

CONDITION TO IMPLEMENT EMERGENCY RESPONSE:

BI- AND MULTILATERAL EXERCISES

- **simple communication exercises**
- **on-field exercises**
- **table top exercises**
- **command post exercises**
- **real time general exercises**

AIM OF BI- AND MULTILATERAL EXERCISES

Test:

- **notification- and communication procedures**
- **procedures within/between command posts**
- **content of exchanged information**
- **exchange of liaison officers**
- **harmonisation of countermeasures**
- **harmonisation of press bulletins**
- **communication with the media**

NUCLEAR SAFETY EMERGENCY EXERCISES 1

Emergency exercises: legal obligation in Luxembourg

- national exercises since more than 25 years (Civil Protection)
- bilateral exercises with Germany and France since 1990
- ECURIE exercises
- INEX exercises
- JINEX 1 exercise
- CONVEX exercises
- *MIC exercises CE*

NUCLEAR SAFETY EMERGENCY EXERCISES 2

EULUX 2007

A large scale exercise based on Assistance

Each year the European Commission co-funds one or more simulation exercises in the context of the Community Mechanism for Civil Protection.

The size of the Grand-Duchy of Luxembourg is such that it supports a realistic ground for the exercise. As the country is small, the need for **assistance** in case of a major incident, requiring more intervention teams than the country's capacities can provide, is very plausible.

NUCLEAR SAFETY EMERGENCY EXERCISES 3

EULUX 2007

It is the first time that an exercise is organized by four countries in collaboration.

Luxembourg

Belgium

France

Germany

Apart from the four organising countries, there are four participating countries,

Hungary

the Netherlands

Poland

Portugal

each taking part in the exercise with intervention teams and/or experts

NUCLEAR SAFETY EMERGENCY EXERCISES 3

EULUX 2007

The European Commission is also taking part through the European Monitoring and Information Centre (MIC), that allows the Commission to facilitate the mobilisation of civil protection resources, including experts, from the Member States in the event of an emergency.

The exercise, called EULUX 2007, is taking place from 6-9 June 2007 in the south of Luxembourg

<http://www.eulux2007.eu>

Assistance and Synergies on regional or international level in emergency planning

For non-nuclear countries like Luxembourg, creating synergies on assistance capabilities for nuclear / radiological emergency are fundamental in

NUCLEAR EMERGENCY PLANNING & MANAGEMENT

