

# The Role of European Commission in Developing Regional Networking in Emergency Preparedness

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# **EC** departments and services

The Commission is divided into departments (Directorates-General (DGs)) per policy area and services

#### **Departments (DGs)**

. . .

Energy (ENER)

EuropeAid Development & Cooperation (DEVCO)
Joint Research Center (JRC)

...

## **INSC & IFS**



### EU external relations budget 2014-2020

Policy priorities: enlargement, neighbourhood, cooperation with strategic partners and development cooperation











Instrument contributing to Stability and Peace





# **Historical background**

- 2009 Assessment of potential areas for collaboration on nuclear safety between EU and SEA (INSC)
- Fukushima, 2011: scheme disturbed but increased interest in EP&R
- ASEM seminar (Singapore, June 2012)
  - Broad consensus to establish and strengthen regional emergency response mechanisms
- Summer 2013: meetings between EC and 6 national regulatory authorities of ASEAN + concluding workshop (Kuala Lumpur)
  - Strong support to launch this feasibility study to bring arrangements and capabilities in the region using best international practice and ensure sustainability.

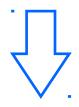
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# EU Legal background European Commission

IAEA Early Notification Convention (27/10/86)

**Early Assistance Convention (26/2/87)** 

EC Council Decision 87/600 (14/12/87)



**European Community Urgent Radiological Information Exchange (ECURIE)** 



### Preparedness for nuclear emergencies Community legal framework

- Basic Safety Standards
- Early exchange of information
- Foodstuffs regulations
- Information of the public



# Recasting of the European Radiation Protection Legislation

- Combine the following into one legal instrument:
  - Basic Safety Standards, Directive 96/29/Euratom
  - Medical Exposures, Directive 97/43/Euratom
  - Public Information, Directive 89/618/Euratom
  - Outside Workers, Directive 90/641/Euratom
  - Control of high-activity sealed radioactive sources and orphan sources,
     Directive 2003/122/Euratom
  - Radon, Commission Recommendation 90/143/Euratom
- The new Euratom BSS Directive 2013/59/EURATOM was adopted in December 2013
- Transposition by the Member States before 18 February 2018



# Early Exchange of Information Commission responsibilities

The Commission shall after receiving the initial notification:

- Forward the received information to all Member States, Macedonia and Switzerland.
  - (In practice also to the IAEA)
- Forward any information about significant radioactivity increase in non EC countries, especially in those adjacent to the Community.
- Manage and exercise the information exchange system



# **Early Exchange of Information When?**

- Whenever a Member State decides to take measures
  - of a widespread nature
  - in order to protect the general public
  - in case of a radiological emergency
- Following
- an accident on its territory
- the detection, within or outside its territory, of abnormal levels of radioactivity which are likely to be detrimental to public health in that Member State.

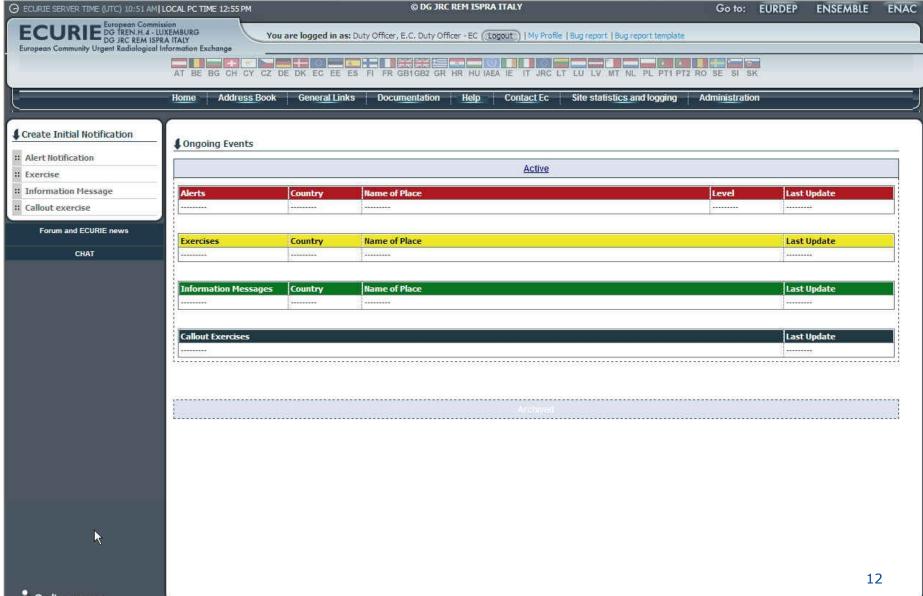


# **Early Exchange of Information How?**

- Member States indicate competent national authorities and points of contact
  - Commission distributes this information, together with details of the designated
     Commission services
- Points of contact and the designated Commission services are available on 24-hour basis
- Detailed procedures are agreed among the Member States competent authorities and tested at regular intervals
- Current technical implementation systems:
   WebECURIE and EURDEP

#### WebECURIE





## **WebECURIE**

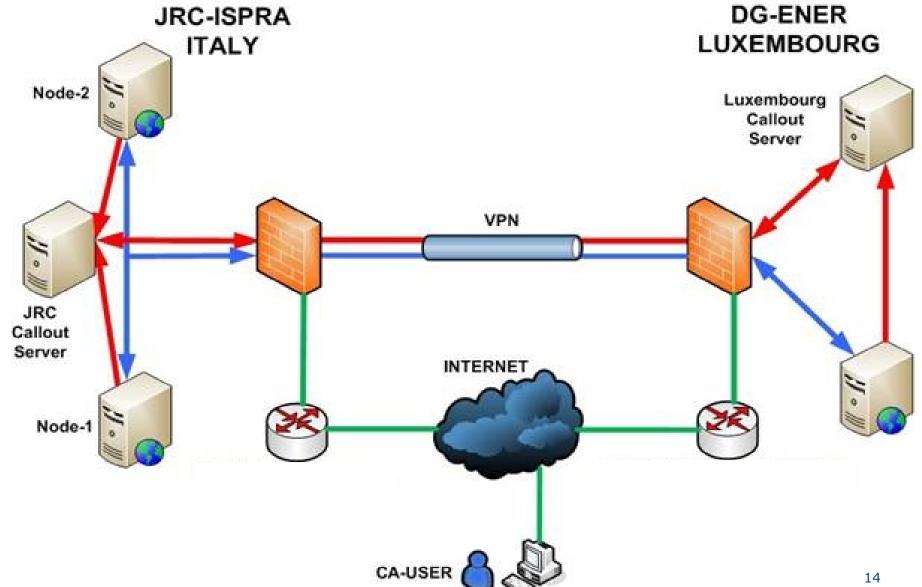


# **Status board**

Field	Value	Country	User	Updated
Date and time of event*:	2012-03-29T08:00:00Z	Poland	PLCA	2012-03-29 08:20
Event type*: 🐠	<b>⊕</b> Nuclear installation event	Poland	PLCA	2012-03-29 08:43
Other type of event: **(*)				
Type of facility/activity: 🕜	Research reactor	Poland	PLCA	2012-03-29 08:20
Other object: 🕡				
Type of reactor: 🐠	Other	Poland	PLCA	2012-03-29 08:20
Emergency class declared:	<b>⊕</b> General emergency	O EC (DG ENER)	duty.officer	2012-03-29 09:17
Provisional INES rating:	□ INES 6	Poland	PLCA	2012-03-29 08:51
	- INES 5	Poland	PLCA	2012-03-29 08:45
	- INES 3	Poland	PLCA	2012-03-29 08:45
	- INES 4	Poland	PLCA	2012-03-29 08:20

### **ECURIE**





# Intl. collaboration



#### **ECURIE <> IAEA**

- USIE is the IAEA counterpart of ECURIE for early notification and assistance (EMERCON/ENATOM).
- Intense collaborations have resulted in the definition of a common data-format (International Radiological Information eXchange: IRIX) and an identical set of information to exchange during an event.
- The EC has signed the IAEA early notification convention.
- WebECURIE and USIE (IAEA) are both compatible to the IRIX standards.
- Being able to use the same data-format for the EC and the IAEA reduces need for duplication, therefore the EU MSs are strongly facilitated in notifying the two organizations during an accident.

#### **EURDEP**

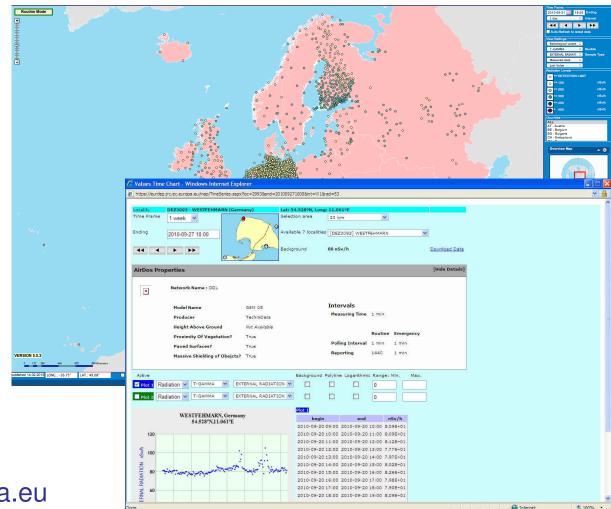


Research

#### Current status

- Internationally recognized standard format for radiological data;
- Network (37 European countries with > 4400 stations participating);
- daily and hourly transmissions, mostly γ-dose rates;
- Raw data available at 3
  mirror-sites (Ispra, Italy

   Freiburg, Germany Luxembourg)
- Web-site to view and download data.



http://eurdep.jrc.ec.europa.eu

November 5, 2014



# **Summary Role of the European Community**

In legal terms: the EC has a very limited role in a nuclear emergency preparedness and situation management

- Early exchange of information
- Community emergency foodstuff regulations

In practise: EC has also the following tasks

- Information to the public through the media
- Respond to information and assistance requests
- Preparation for political action
- Promote research and co-operation
- Organise exercises



# Community radiation protection actions during the Fukushima crisis

Fukushima did not create a significant radiation threat in Europe

- No ECURIE alert level messages (many ECURIE information messages were distributed)
- No need to implement Community foodstuffs regulations, but a regulation on Japanese food/feed import monitoring was issued (activity values revised to match the Japanese values).
- Recommendation to screen ships and containers arriving from Japan was issued, later removed.

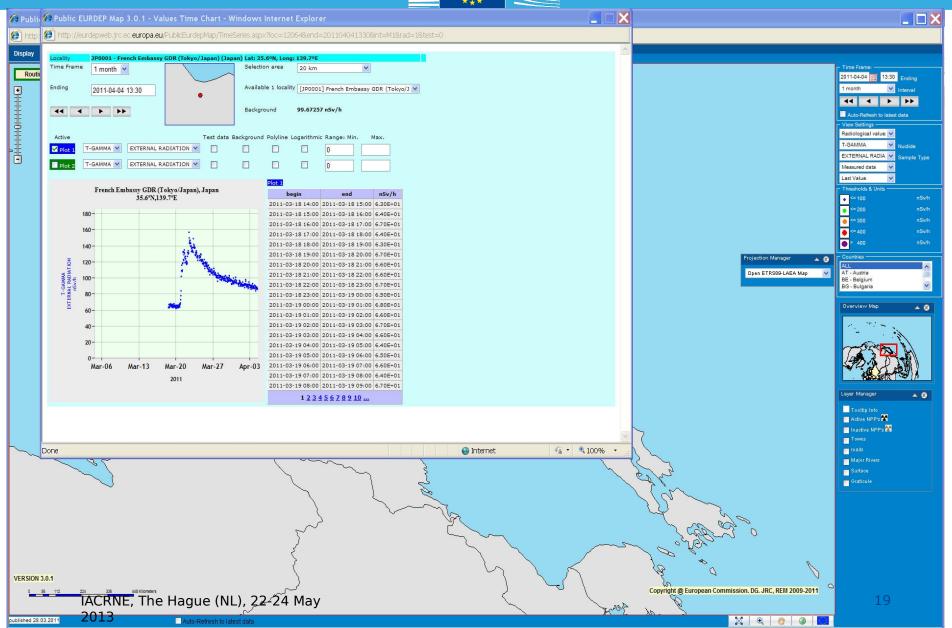
No community recommended protective actions in Japan

Each MS issued itsown advice, the Commission tried to compile the info.

# Fukushima experience



# EURDEP public access

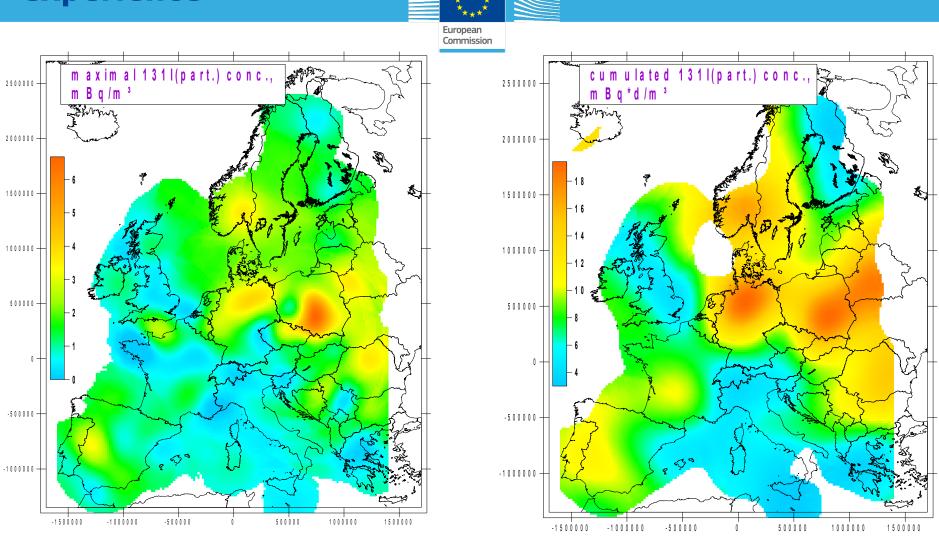


# Fukushima experience



- Remote accident for Europe -> delay in cloud arrival and with very low radiological levels
- EURDEP worked normally for GDR, but only 7 countries sent airborne concentration data; data from 20 additional countries had to be obtained (direct contacts, web-site info) and imported in manual way
- Public informed by the media on the radioactive cloud heading towards Europe, but didn't find evidence in the GDR results on the public EURDEP web-site, airborne concentration data on EURDEP with important delay -> questions from press media, politicians and general public that could have been better anticipated

# Fukushima experience



Evaluation of I-131 air concentrations (by P. Bossew (BfS Berlin) and REM)



- Improve exchange measurements on additional sample types (air conc., deposition, milk,...)
  - Stimulate all MSs to exchange air concentration (7 countries on regular basis, 20 additional countries inserted "manually" during March-April)
  - synchronisation of sampling times, harmonisation of measurements and reporting
- Improve the communication with the public
  - Invest on communication via new technologies
  - Improve the perceptual aspect of the information provided



#### Public information Framework

- Council Directive 89/618/EURATOM
  - Health protection measures to be applied and steps to be taken in the event of a radiological emergency
- Commission Communication 91C 103/03 on implementation of 89/618/EURATOM



### Public information In the event of an emergency

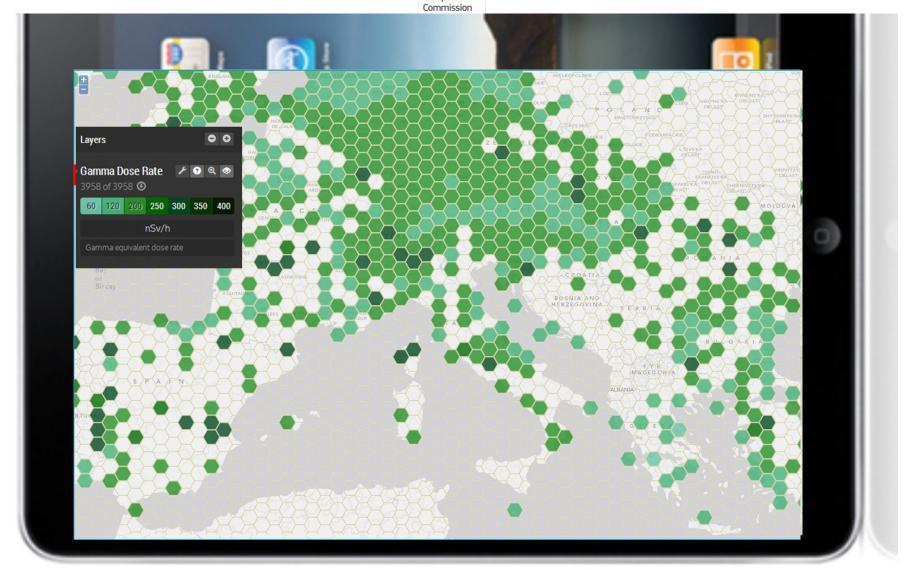
- Information should be given rapidly, openly and systematically
  - type of emergency
  - applied countermeasures
  - further information
- •No contradictory information !



### **EURDEP**



## **Tools & services**



### **EURDEP**



#### **Collaboration with IRMIS**







http://itu.jrc.ec.europa.eu http://rem.jrc.ec.europa.eu