

Emergency Preparedness in Germany in Perspective of Transboundary Issues

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Prepared for:

Table Ronde ACN2 France

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Situation in Germany

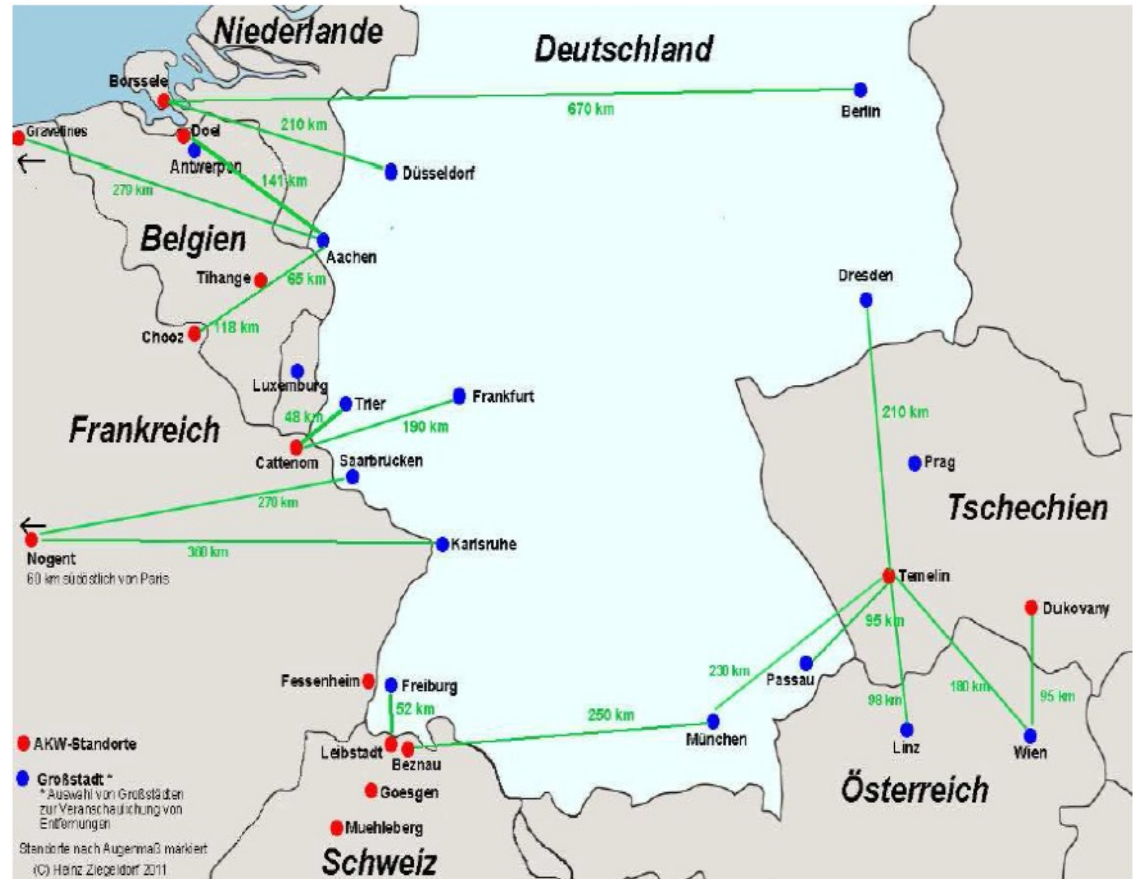
- **Nuclear Energy Phase Out Accelerated as a political consequence of Fukushima Dai-ichi Accident**
- **No more operating power reactors in 2023, leaving foreign NPP accidents and non NPP scenarios as remaining risk**
- **High public concern about radioactivity and ionising radiation in Germany in general**
- **Implementation of the EU BSS initiated a complete revision of Emergency Management in Germany**



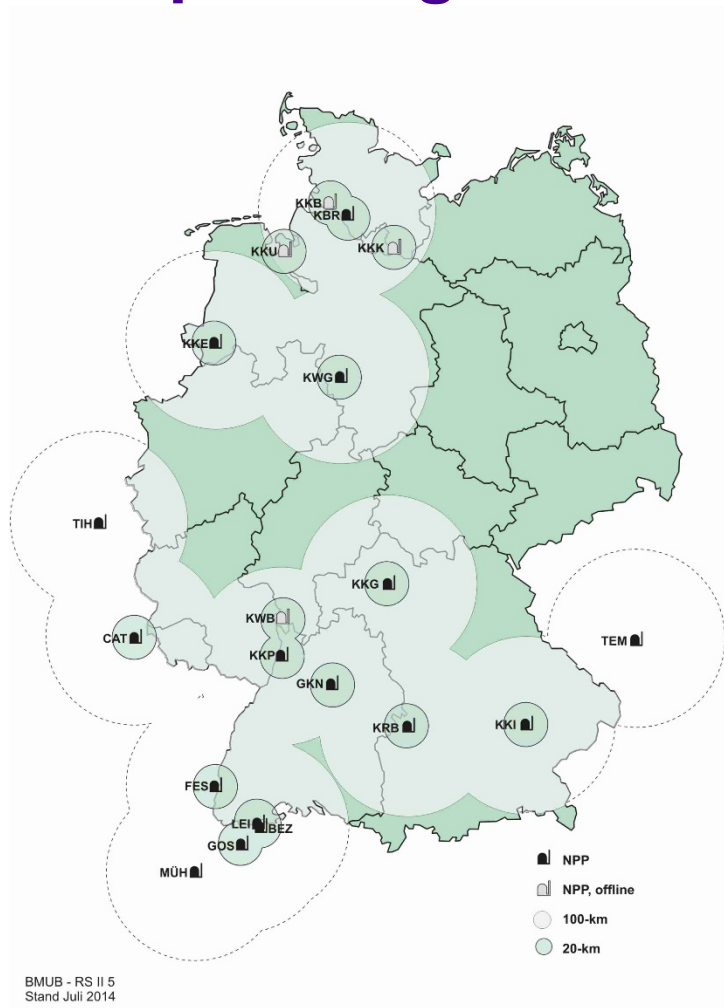
NPPs close to the German Border

- Less than 5 km:
Leibstadt (CH)
Fessenheim (F)
- Less than 20 km:
Beznau (CH)
Cattenom

Emsland (D)
Philippsburg (D) (F)



100km planning zones for foreign (and domestic) NP



Foreign NPPs within planning zones

Evacuation
Sheltering
ITB

Fessenheim (F)
Leibstadt (CH)
Betzau (CH)
Gösgen (CH)
Cattenom (F)

Only ITB and
Sheltering

Tihange (B)
Temelin (CZ)
Mühleberg (CH)

Basis for decisions on countermeasures: Intervention levels

Counter-measure	Reference Levels		
	Dose to thyroid	Effective Dose	Exposure Pathways and Time of Integration
Sheltering		10 mSv	Sum of external dose rate und inhalation dose integrated over 7 days
Intake of Iodine tablets	50 mSv Children until 18 years, pregnant woman, 250 mSv adults		Equivalent dose to inhalation of radioiodine inhaled within 7 days
Evacuation		100 mSv	External dose integrated over 7 days

NPP emergency planning zones

Zone	Countermeasure	Old radius for NPP	New radius for NPP
Central Zone	Evacuation within 6h *)	2 km	5 km
Middle Zone	Evacuation within 24h *)	10 km	20 km
Outer Zone	Iodine Blocking (all < 45y) Sheltering	25 km	100 km
Remaining national territory	Iodine Blocking for Children <18y and Pregnant Women		
	*) sheltering and ITB also apply		

Bilateral Agreements of Germany in the Nuclear Field and in the Area of Radiation Protection



Bilateral Commissions and Working Groups

Franco-German Commission (DFK)



Working Group 2 “Emergency Preparedness & Response”

Working Group 3 “Radiation protection”

Ad-hoc Sub-Working Group with the mandate

„Status and further development of Franco-German data exchange“

German-Swiss Commission (DSK)



Working Group 2 “Emergency Preparedness & Response”

Working Group 3 “Radiation protection”

(Joint) Sub-Working Group “Data and information exchange”

Dutch-German Commission (NDKK)



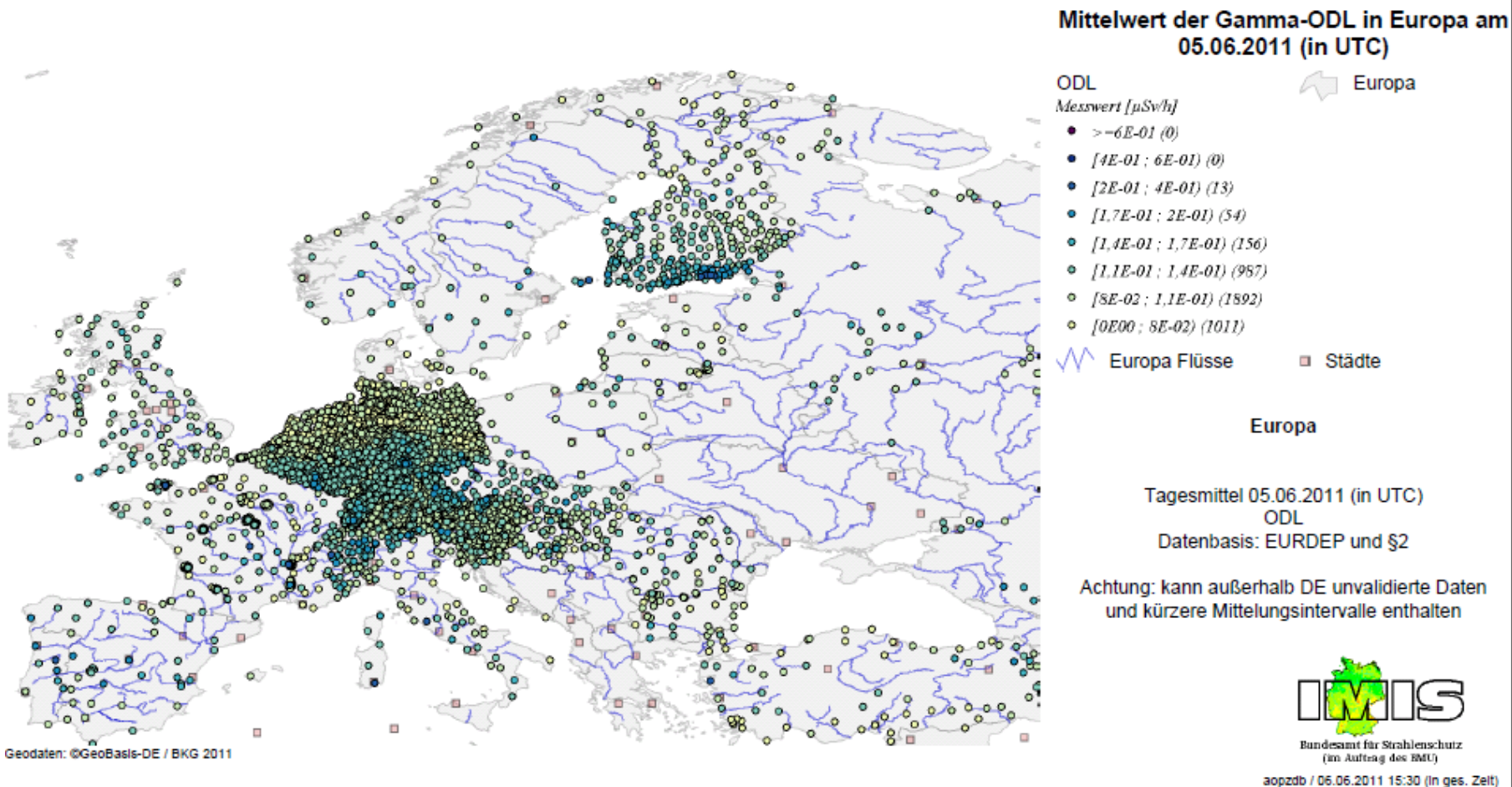
Working Group 2 “Emergency Preparedness & Response”

Sub-Working Group with the mandate

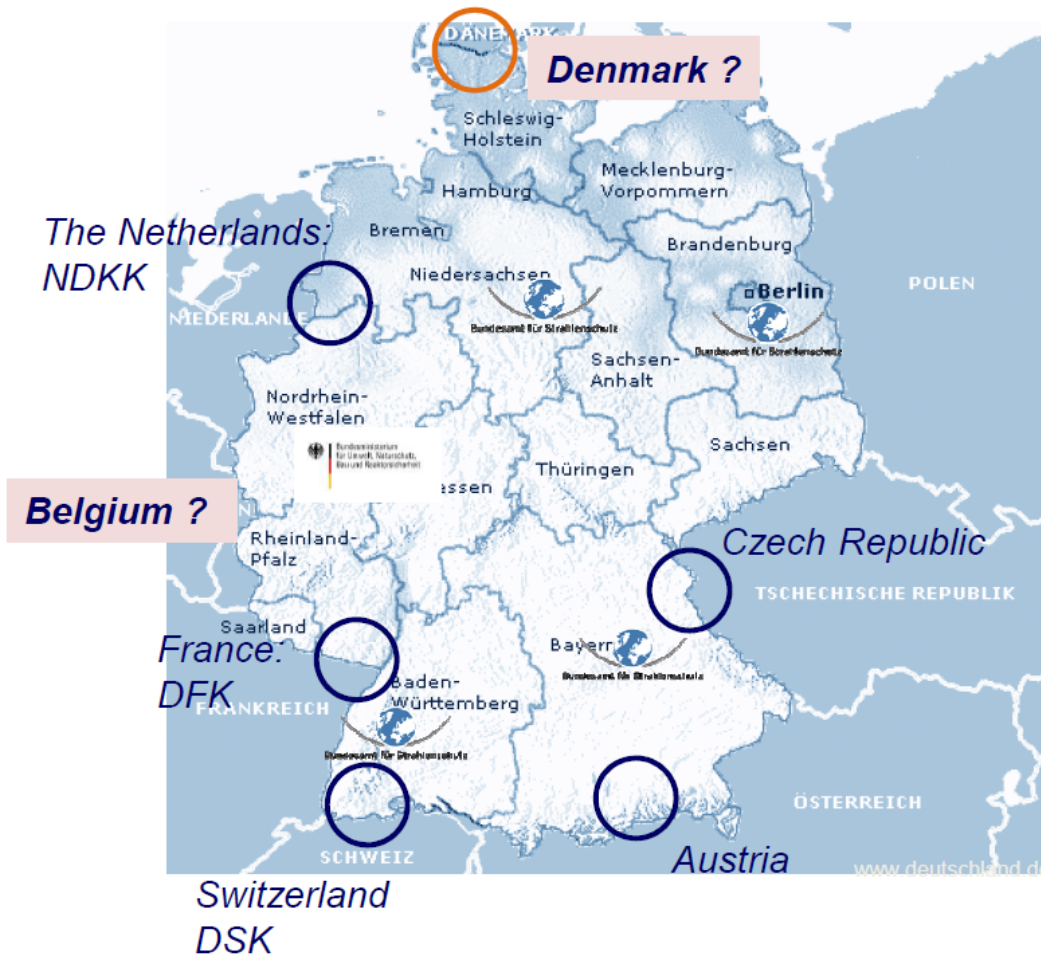
“Information exchange and communication including arrangements with other countries and the European Commission”.

EURDEP Network

access to data for all contributors



Bilateral Data- and Information Exchange



The Netherlands:
Dutch-German Commission (NDKK)

France:
Franco-German Commission (DFK)

Switzerland:
German-Swiss Commission (DSK)

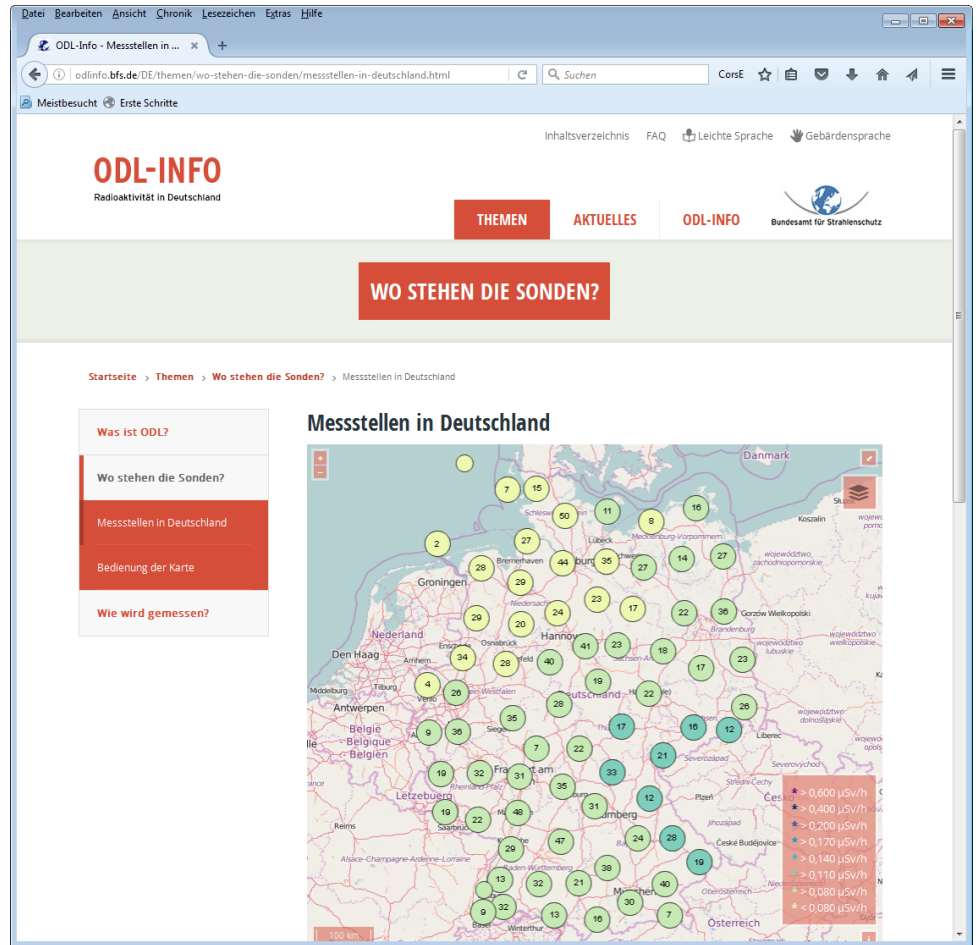
Austria:
bilateral exchange of gamma dose rate operational

Czech Republic:
No bilateral procedures,
data exchange via EURDEP

Denmark:
bilateral exchange of gamma dose rate in test run,
co-operation desired

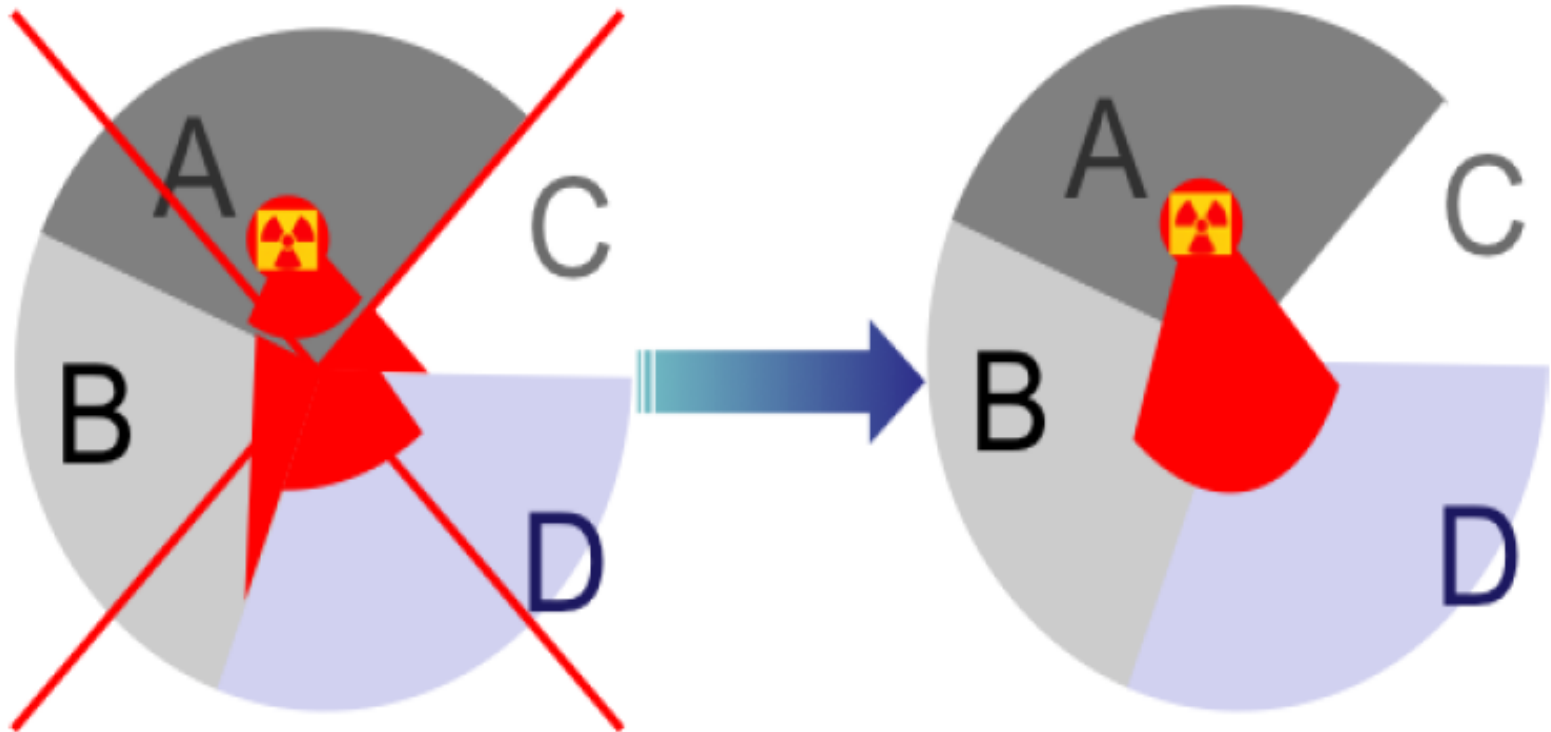
Public information of dose rate data

odlinfo.bfs.de



HERCA/WENRA Approach

We do what our neighbours do!



Conclusions

- **Germany phasing out nuclear energy, last shutdown in 2022**
- **High public concern on radioation risk from neighbouring NPPs**
- **Transborder data exchange and transparency essential for EP&R**