

Scenario Based Nuclear and Radiological Emergency Preparedness in a Non- Nuclear Country (Norway)

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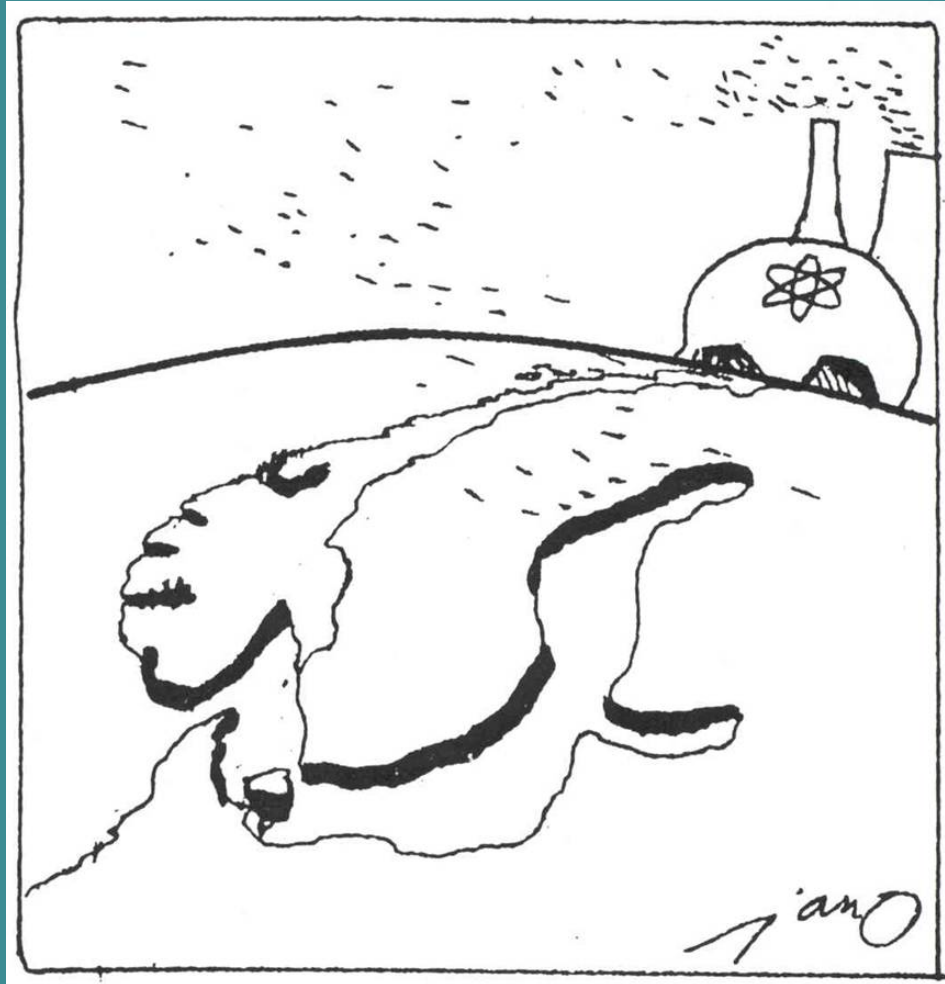
XVII Conference of the NSFS, Roskilde 24-27 August 2015



Statens strålevern
Norwegian Radiation Protection Authority

www.nrpa.no

The world according to a non-nuclear country

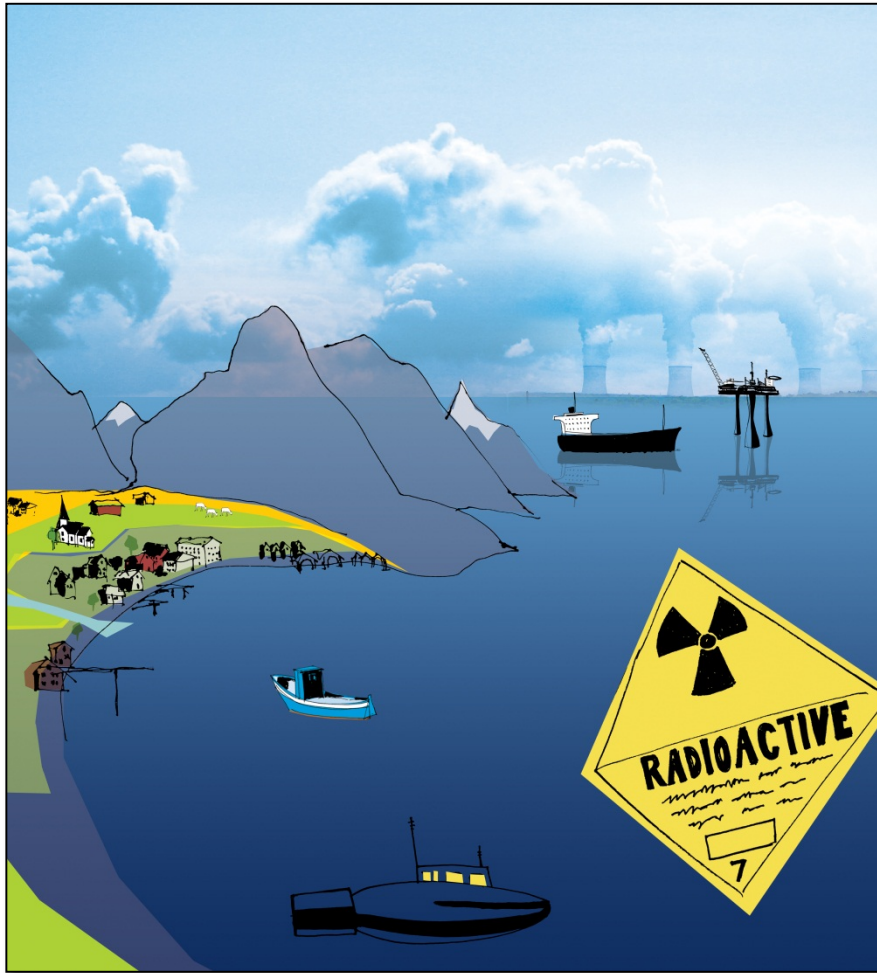


Norwegian concerns (overview)

- Foreign nuclear power plants and other nuclear installations
- Domestic research reactors
- Floating nuclear power plants, nuclear-powered marine vessels, visits from allied nuclear-powered marine vessels
- Transportation of spent nuclear fuel along the Norwegian coastline
- Radiation sources in use in the Norwegian society
- Satellites and space crafts
- Old nuclear and radiological waste, “nuclear legacy”
- Criminal acts, terrorism, illicit trafficking
- Security issues, unrest (fx. Ukraine)
- Nuclear weapons



Nuclear and radiological events in general...



Call for quick implementation of protective measures

May affect large geographical areas

Have impact on many sides of society

Call for specialized knowledge

Call for good coordination and information exchange nationally and internationally



Norwegian authorities must be
prepared to handle:

Six scenarios

decided by the Government in May 2010

Purpose

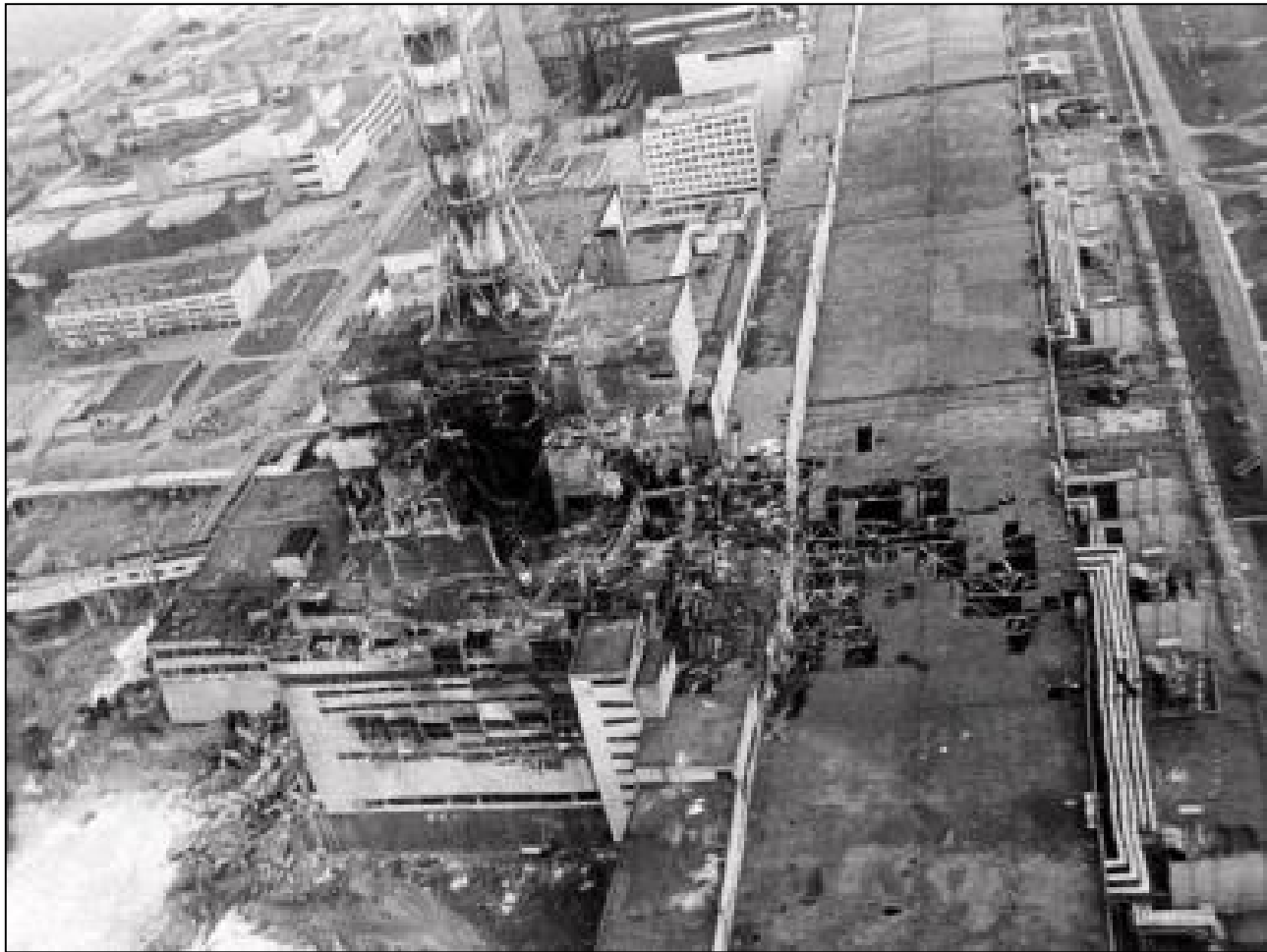
- Joint and comprehensive understanding of different nuclear and radiological events and crisis management needs
- Raise general consciousness on different needs in emergency response
- Prioritise needs and plan an as good as possible national nuclear and radiological emergency preparedness

Primary users:

All authorities with responsibilities in nuclear and radiological emergency preparedness and response



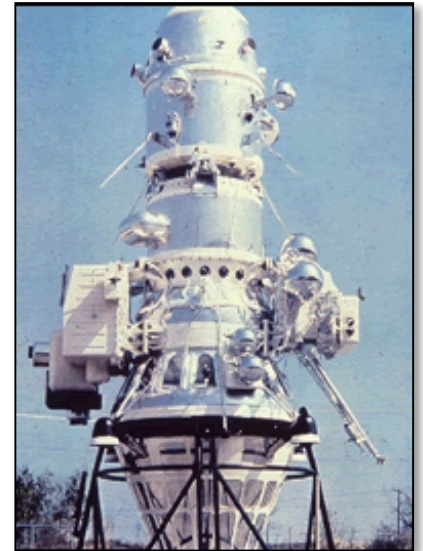
Scenario 1: Large airborne release from another country



Scenario 2: Airborne release from facility in Norway



Scenario 3: Local event from mobile source



Scenario 4: Local event evolving over time



Scenario 5: Marine release, and/or fear of contamination



Scenario 6:
Severe events abroad without
direct consequences for
Norwegian territory



Terrorism and nuclear weapons

Terrorism:

- Relevant for all scenarios

Nuclear weapons:

- Use of nuclear weapons against Norwegian territory is not emphasised
- More likely that nuclear weapons may be used in some regions abroad in the future



Use of the scenarios (examples)

Discussions with stakeholders and non-experts



Countermeasure and crisis management strategies

Strategi for forvaltning av radioaktivitet i fôr og næringsmidler

Utarbeidet av
Statens strålevern og Mattilsynet
2013



*“Strategy for management of radioactivity in
fodder and food stuffs” by the NRPA and the
Norwegian Food Safety Authority (2013)*



Joint plans between authorities



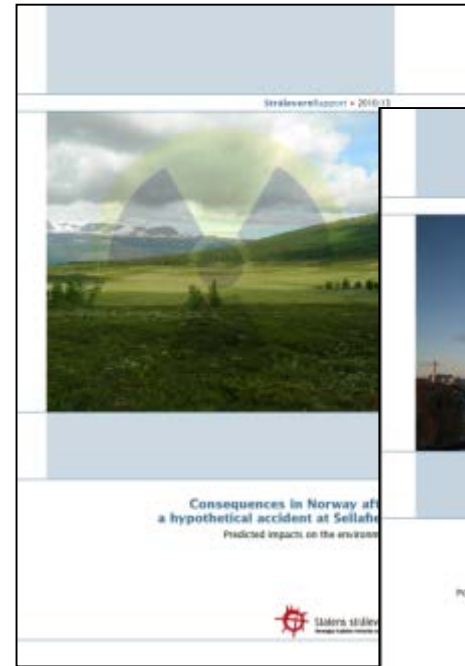
Strategic planning



NRPA Report 2008:11
“Nuclear and radiological threats” (in Norwegian)



NRPA Report 2012:5 “Roles, responsibilities, crisis management and challenges in Norwegian nuclear and radiological preparedness” (in Norwegian)



NRPA Report 2010:13
“Consequences in Norway after a hypothetical accident in Sellafield”



NRPA Report 2012:4 “Potential consequences in Norway after a hypothetical accident at Leningrad nuclear power plant”



