

# Sweden

## EPR Fact Sheet

### Decision making

The decision making in case of an emergency at a nuclear installation rests with those organisations normally responsible for the sector sectors and administrative regions. For protective actions that have an impact on the population (e.g. sheltering, evacuation and decontamination), the responsible authority is the County Administrative Board. The Swedish Civil Contingencies Agency (MSB) is responsible for the coordination and supervision of the preparedness at the national level and supports the coordination of relevant authorities' response actions during crises. The Swedish Radiation Safety Authority (SSM) decides on, and supervises compliance with, regulations for the nuclear installations, including provisions for licensees emergency planning.

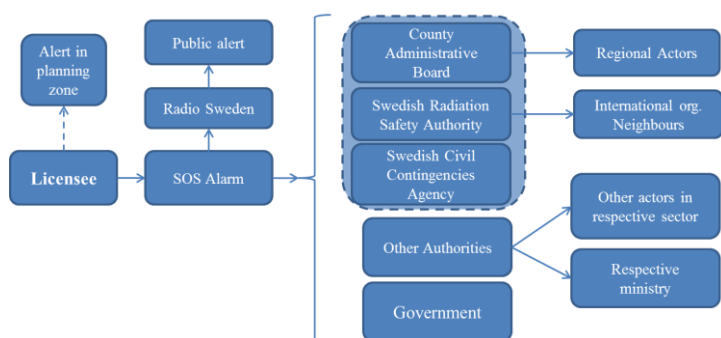
### Advice

SSM provides advice and expert assistance to other authorities. SSM operates a fixed radiation monitoring network and a network of air sampling stations. A national expert response organisation for radiological measurements and sampling is also maintained by SSM. The Swedish Meteorological and Hydrological Institute (SMHI) assists SSM by providing weather forecasts and data for dispersion calculations.

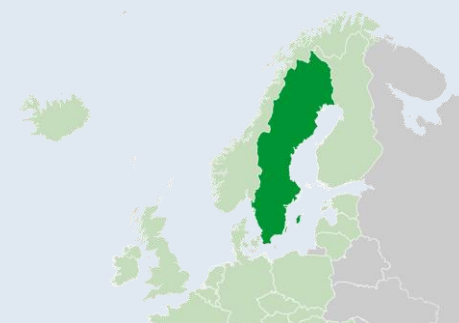
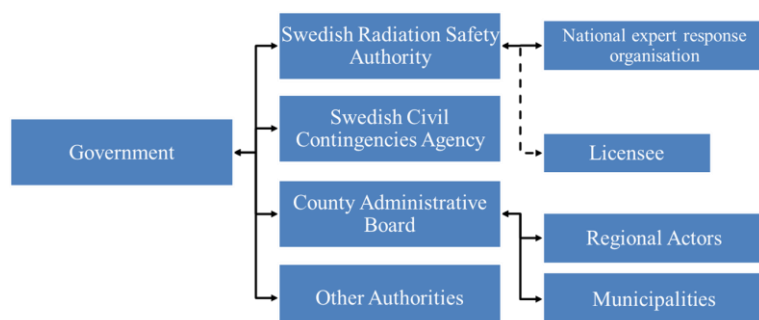
### Licensee

The licensee should, in the event of an emergency, take prompt actions in order to classify the event according to the alarm criteria, alert the facility's emergency response organisation and responsible authorities, assess possible releases and time related aspects and restore the facility to a safe and stable state.

### Alarming



### Organizational structure



### Country info

Capital	Stockholm
Official language	Swedish
Population	9.7 M
Area	447 000 km <sup>2</sup>
Currency	Krona (SEK)
Time zone	UTC+1
Calling code	+46
Internet TLD	.se
NPPs /ele. share	3/41%

### NWP\*

Swedish Meteorological and Hydrological Institute (SMHI)

### NCA\*

Swedish Radiation Safety Authority (SSM)

### Emergency website

[www.krisinformation.se](http://www.krisinformation.se)

### Online measurements

<http://eurdepweb.jrc.ec.europa.eu/EurdepMap/Default.aspx>

### Bilateral agreements

Denmark, Finland, Germany, Norway, Russia, Ukraine

### RANET capabilities

- Source Search and Recovery
- Radiation Survey
- Environmental Sampling and Analysis
- Radiological Assessment and Advice
- Internal Dose Assessment

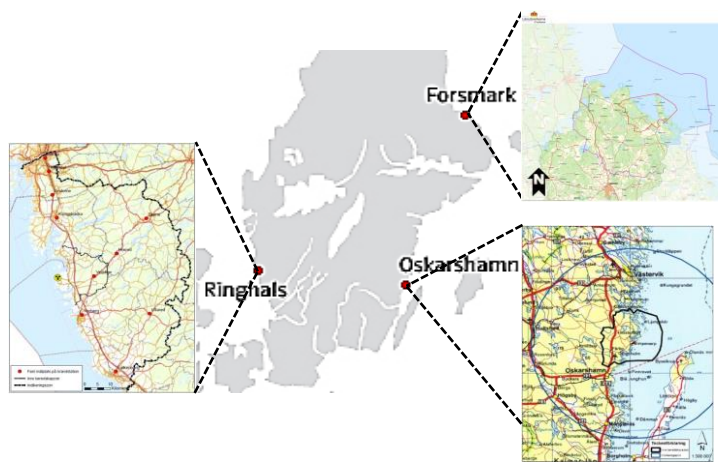
\*National Warning Point and Competent Authority under the Emergency Conventions

## Nuclear facilities\* and population

Facility	Type	MW <sub>e</sub>	GPS coordinates	5 km pop.	20 km pop.	Comments	
Forsmark	F1	BWR	1000	60.402925 N 18.173812 E	78	9081	Permanent residents, significant more during summertime
	F2	BWR	1200				
	F3	BWR	1200				
Oskarshamn	O1	BWR	500	57.416730 N 16.673064 E	172	6183	
	O2	BWR	700				
	O3	BWR	1500				
Ringhals	R1	BWR	900	57.259765 N 12.111266 E	3494	58712	
	R2	PWR	900				
	R3	PWR	1100				
	R4	PWR	1100				

\*The IAEA emergency preparedness category 1 and other relevant facilities

## Planning zones



**Planning zones:** In the maps, the outer emergency planning zones (approx. 50 km) are shown as well as the inner emergency planning zones (approx. 12-15 km). In the case of general emergency, indoor sheltering is recommended in the inner emergency planning zone.

## Protection strategy

Sweden is currently implementing a national protection strategy for radiological emergencies that will be based on the protection strategy outlined in the Nordic Flag Book.

## Criteria

Protective Action	Comments
Evacuation	If the projected effective dose is expected to exceed 20 mSv during one week, or indoor sheltering is expected to last more than 48 hours.
Indoor sheltering	If the projected effective dose is expected to exceed 10 mSv during 48 hours.
ITB	Iodine tablets to children ( $\leq 18$ years) and adults ( $< 40$ years) if the projected equivalent dose to the thyroid is expected to exceed 10 mSv and 50 mSv respectively. The tablets are pre-distributed in the inner emergency planning zone.

## Emergency classification

### Alert

An event or disruption occurring at a nuclear power plant which jeopardises safety at the facility. The facility: 1) deviates from expected performance in connection with disturbances implying that at least two barriers have been breached or been significantly threatened, or 2) has been subjected to an impact whose consequences have not been analyzed or for some reason cannot be comprehensively examined. No release of radioactive materials calling for public protective actions have occurred.

### General emergency

An event or disruption at a nuclear power plant, implying that a discharge is in progress or cannot be ruled out over the next twelve hours. The situation necessitates public protective actions outside the facility area.