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EVACUATION IN CASE OF NUCLEAR ACCIDENT IN NPP KRŠKO

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Location of Municipality Krško and NPP Krško





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Nuclear safety & emergency planning

It is very unlikely that a nuclear accident with a radiological impact in environment would happen in the NPP Krško. It is very unlikely that some other radiological accident would happen in our neighborhood. However; unfortunately, we cannot exclude all possibilities for a nuclear or radiological accident. That's why we have emergency response plans on each level, from national level to the municipal level.



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Risk levels– classification of unusual event in Krško NPP

- **LEVEL 0 – AN UNUSUAL EVENT** (measures and activities in the environment are not yet needed),
- **LEVEL 1 – AN ALERT** (informing and preparedness of bodies and organizations in the environment),
- **LEVEL 2 – A SITE EMERGENCY** (a major failure of the power plant's safety functions, a risk to the nuclear power plant personnel and the nearby population, implementation of some protective measures is required)
- **LEVEL 3 – A GENERAL EMERGENCY** (a release of radioactive substances into the environment is possible).



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Immediate protective measures

In the event of a nuclear accident at the Krško NPP, the following national-level measures must first be implemented:

- a) Sheltering,
- b) Ingestion of potassium iodide tablets,
- c) **Evacuation** and
- d) Accommodation and care of the evacuated population.



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Pre-determined protective measure planning zones

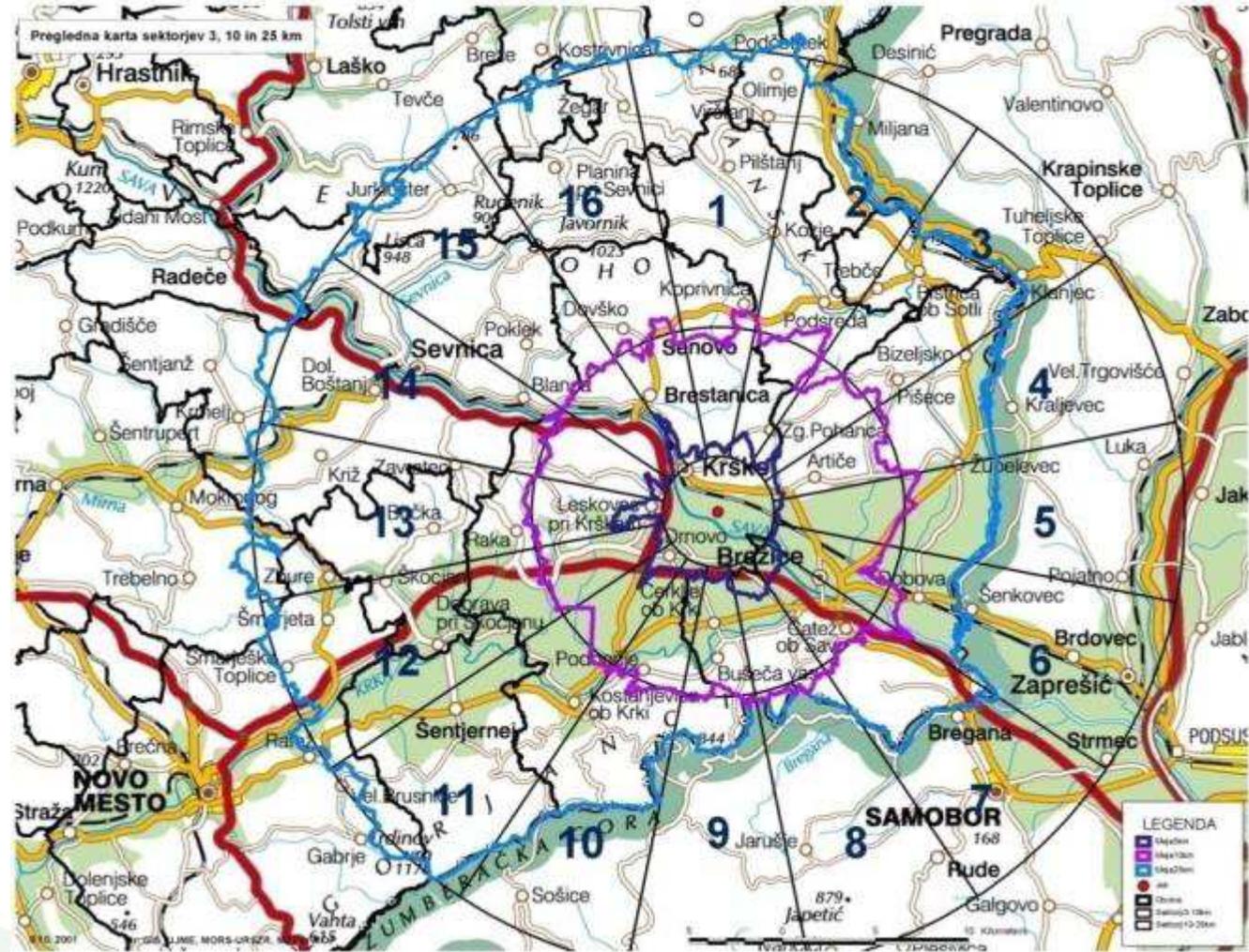
- The **Precautionary Action Zone (PAZ)** is the area within a **3 km** radius of the Krško NPP. Preventive evacuation of the population (if possible) begins immediately upon the declaration of a general emergency.
- The **Urgent Protective Action Planning Zone (UPZ)** is the area within a **10 km** radius of the Krško NPP. Protective measures in this area are implemented on the basis of the development of an accident and on the basis of measurements.
- The **Long-Term Protective Action Planning Zone (LPZ)** is the area within a **25 km** radius of the Krško NPP. Protective measures are implemented on the basis of measurements
- The **Area of General Preparedness is the entire territory of Slovenia**. Protective measures are implemented on the basis of measurements



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Pre-determined protective measure planning zones

- PAZ
3 km
- UPZ
10 km
- LPZ
25 km

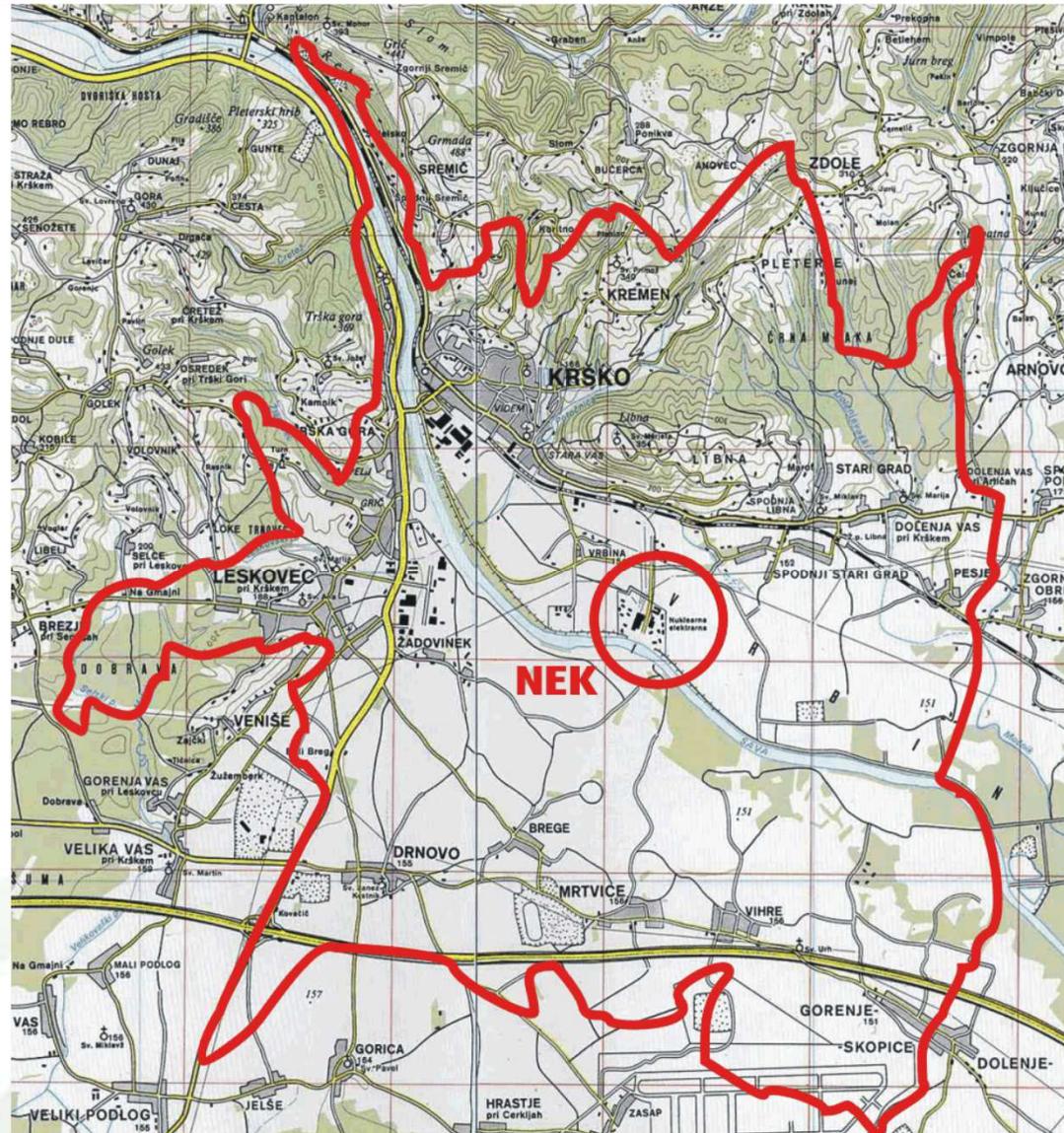




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Precautionary action zone (PAZ; 3 km)

- Sheltering
- Preventive evacuation
- Iodine prophylaxis





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Number of residents inside threatened zones (source: URSZR, 2016)

	Area around Krško NPP	Number of inhabitants
1.	PAZ (3 km)	11.400
2.	UPZ (3-10 km, all sectors)	27.657
	$\Sigma =$	39.057



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Evacuation

- planned by pre-defined directions to pre-defined locations,
- the accommodation of evacuees in the receiving regions out of the 25 km zone (5),
- the use of own vehicles is planned, except for those who do not have these option (organized transport by the CP headquarters for Posavje),
- schools, kindergartens, General Hospital, elderly homes, organize transport by themselves



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Functions of the CP

- the operational management of the CP forces, the directing and coordination of the CP forces
- reporting to the Commander of CP of RS,
- implementation of protection measures by the CP Commander: evacuation, sheltering, radiological protection measures, reception and care of evacuated inhabitants, iodine prophylaxis,
- the planning of evacuation preparations and the evacuation of the inhabitants,
- Coordinated informing of inhabitants of Posavje,
- Cooperation and coordination with CP Commanders of other municipalities and regions.



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Project Preparedness for Evacuation in Case of a Nuclear Accident

PFE

- Participants:
 - Municipality of Krško (Slo) – coordinator
 - City of Zagreb (Hr) – partner in project
 - Municipality of Cernavoda (Rom) – partner in project
- Duration time 1. 1. 2012 - 31. 12. 2013
- Main results of the project:
 - Public opinion research gave very precious results
 - Seminars on Traffic regulation in case of evacuation and public information
 - A need for permanent traffic signs for evacuation routes was detected
 - Exercise on evacuation was held in Krško and Zagreb



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Exercise „EVACUATION 2013“

- Held on 2 locations in Krško and Šentjernej
- Bus accident with injured passengers/evacuees in contaminated area and decontamination of evacuees and vehicles
- 350 participants
 - Firefighters Association Krško
 - Police units
 - Emergency Medical Service Krško
 - Fire Fighters Brigade Krško and Novo mesto
 - Voluntary Firefighters from Dolenjska region
 - Emergency medical units from neighbour municipalities
 - CBRN (chemical biological radiological nuclear) decontamination unit
 - CP Headquarter
 - Slovenian Army with decontamination unit
 - First medical aid units
 - Red Cross
 - 96 volunteers took part as a evacuees



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Exercise „MOTEL PLITVICE 2013“

- Held on location on Highwaystation by Zagreb
- The exercise demonstrated joint action of all agencies in case of radiological emergency events, while the Zagreb Red Cross presented its role when it comes to admission, registration and supplying the evacuated population
- Participants
 - Zagreb Police Department
 - Zagreb Fire Department
 - Emergency Medical Service of the City of Zagreb
 - Red Cross of the City of Zagreb
 - Emergency management Office of the City of Zagreb
 - National protection and Rescue Directorate
 - The State office for radiological and nuclear Safety



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Thank you for your attention

more information on
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