

**EVACUATION IN THE CASE OF
NUCLEAR DISASTER:
RESEARCH FINDINGS ON
PLANNING AND COMMUNICATION**

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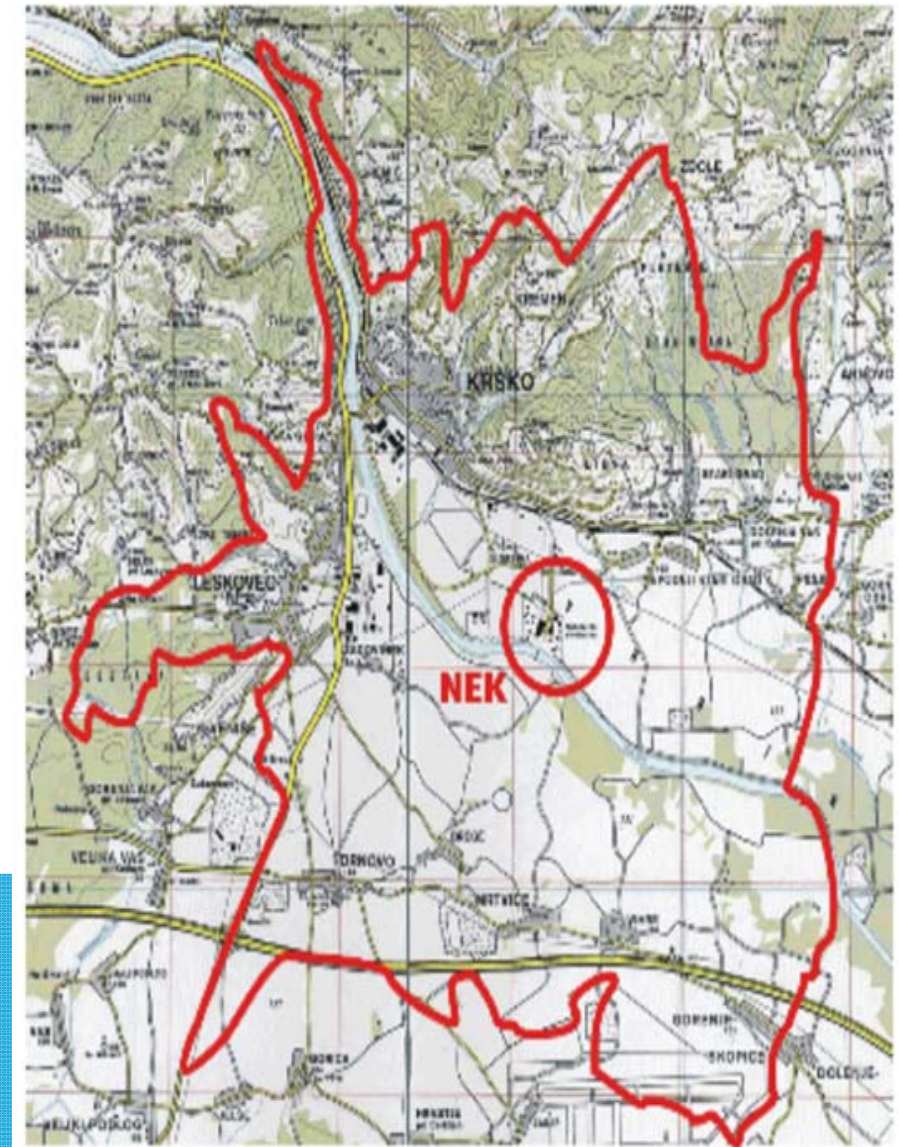
RESEARCH PROJECT: PREPAREDNESS FOR THE EVACUATION IN CASE OF NUCLEAR ACCIDENT

2 MAIN GOALS:

- TO ANALYSE LOCAL, REGIONAL AND NATIONAL ACTION PLANS IN CASE OF NUCLEAR ACCIDENT IN SLOVENIA
- TO ANALYSE PREPAREDNESS OF LOCAL POPULATION AND INSTITUTIONS FOR EVACUATION IN CASE OF NUCLEAR ACCIDENT IN NUCLEAR POWER PLANT KRŠKO, WITH THE USE OF OPINION SURVEY AND INTERVIEWS
- Research project done by Defence Research Centr Faculty of Social Sciences University of Ljubljana
- Marjan Malešič, Marko Polič, Iztok Prezelj, Jelena Juvan, Samo Uhan, Boštjan Bajec
- Ordered and financed by Krško municipality, as part of a larger international project, financed by Financial instrument of the EU civil protection.



- Local population living within 3-km-zone around NPP Krško. (N=502): simple random sampling
 - 52% female and 48% male
 - Methods: personal interviews with standardized questionnaire
 - Twelve qualitative interviews with leading personnel in companies and institutions in the Krško municipality
- In October 2012



THREAT PERCEPTION OF A NUCLEAR DISASTER AT THE KRŠKO NPP

	not at all threatening (%)	low risk (%)	medium risk (%)	high risk (%)	not know, missing (%)
Earthquake	13,1	32,9	37,6	12,0	4,4
Flood	56,8	23,1	12,5	6,2	1,4
nuclear disaster at the Krško NPP	19,3	28,9	17,7	28,9	5,2
Drought	12,5	23,5	34,9	28,1	1,0
storm with hail and strong winds	6,4	21,1	41,2	30,1	1,2
Other	0,2	-	0,8	1,0	98,0

EVALUATING THE PROBABILITY OF A SERIOUS NUCLEAR ACCIDENT AT THE KRŠKO NPP

Evaluating the probability of a serious nuclear accident at the Krško NPP:

not at all possible	9,8 %
Unlikely	52,6 %
Likely	24,5 %
highly probable	6,0 %
do not know	7,2 %

KNOWLEDGE OF MEASURES

	not familiar at all (%)	Only slightly familiar (%)	partially familiar (%)	completely familiar (%)	do not know, can't evaluate (%)
Sheltering	16,0	18,0	41,5	24,0	0,6
ingestion of potassium iodide tablets	28,5	22,2	26,5	19,2	3,6
Evacuation	18,2	17,2	35,1	27,9	1,6
temporary accommodation outside the threatened zone	29,6	16,4	29,8	22,2	2,0

PREPAREDNESS TO EVACUATE

Keeping the leaflet at home:

yes

36,3 %

no

45,6 %

do not know

18,1 %

In case of evacuation people would use:

their own means of transport	79,8 %
train	1,2 %
bus	2,2 %
by foot	4,8 %
do not know	12,0 %

LOCATIONS OF THE RECEPTION CENTRES AND EVACUATION ROUTES.

Locations of the reception centres:

55,4 % answered „do not know”

Rest of them (44,6%) have chosen one of the offered locations.

Additional 15,7 % have given a wrong answer, which means **71,7%** were not familiar with the locations of their reception centre.

51,2 % were not familiar with their evacuation route.

Among those who claimed to know their evacuation route, additional 24,6 % stated the wrong answer. So, **75,8%** of the population were not familiar with their evacuation route.

POSSIBLE REACTIONS TO THE ANNOUNCEMENT OF AN EVACUATION:

verification of the accuracy of information and instructions	46,2 %
gathering of family members first and then evacuating	76,9 %
waiting for neighbours and then evacuating together	17,9 %
alerting relatives and friends	44,8 %
taking care of pets and property and then evacuating	37,1 %
other	0,8 %
immediate evacuation	10,4%
would not evacuate	2,4%

CONCLUSIONS:

- **Communication with people in the potentially affected area on the possibilities of a nuclear emergency and evacuation is vital and needs to be addressed as a priority**
 - **People in the affected area have poor knowledge of escape routes and places of reception, so it is necessary to improve this**
 - **Evacuation of children from primary and secondary schools and kindergartens is the most critical point of the whole evacuation.**
 - **Caring facility for the elderly proved to be impossible to evacuate**
 - **Research has shown shortcomings in the organization of travel and return people to their homes**
 - **Fatalistic view of several competent people that in case of a severe nuclear accident nothing can be done, because the consequences are too serious and they are located too close to the power plant to be evacuated in time..**
 - **Important positive notes: people's trust in the responsible institutions.**
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