

CITISTRA

**CITizen measurements as complementary radiation monitoring
STRategy in threats due to armed conflict or natural disasters**



CITISTRA project goals

- reaction to current geopolitical situation in Europe
- feasibility of employment of citizen measurements using experimental study in three countries – Czech Republic, Slovak Republic and Poland
- citizen measurement data quality, training, support
- ethics, social aspects

Participating institutions:



National Radiation
Protection Institute



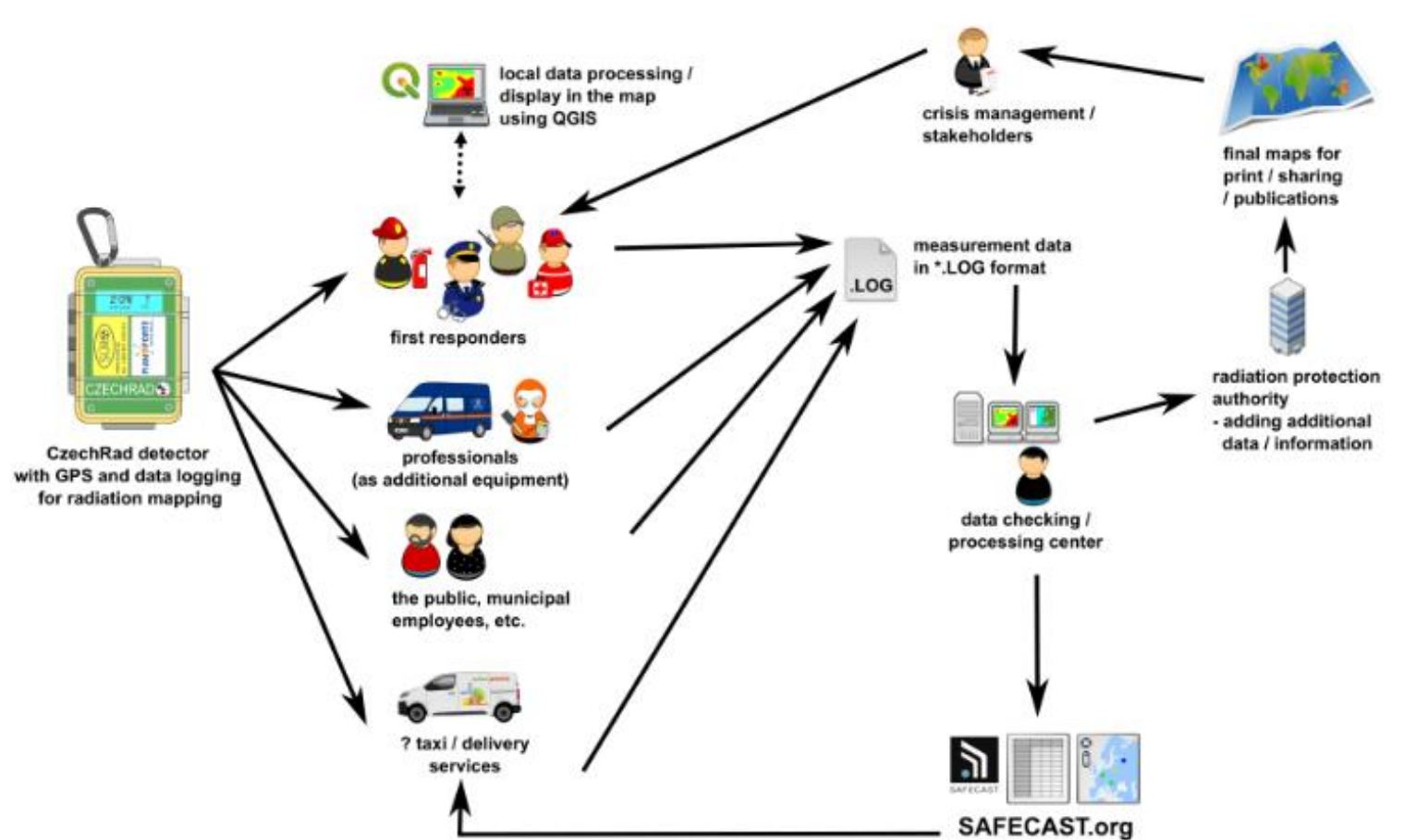
SLOVAK
MEDICAL
UNIVERSITY



THE HENRYK NIEWODNICZAŃSKI
INSTITUTE OF NUCLEAR PHYSICS
POLISH ACADEMY OF SCIENCES

CITISTRA and CzechRad detector

- implementation of the CzechRad detector with GPS
- 200 detectors → Poland
- 100 detectors → Slovakia
- (*Czechia already has 200 detectors)
- use of existing and proven applications - QGIS and RadiationToolbox plugin, SAFECAST.org online apps (Safecast Map and API)



CITISTRA - 1st year

- CzechRad detector production (300 pcs) in Czechia
- sociological research (1st round) / selection of potentially suitable users / groups of users
- preparatory workshops
- creating support materials (graphics, web, GIS data etc.)
- preparation / arrangement of infrastructure needed for sharing, storing (+ backup), processing and evaluating measured data

CITISTRA - 2nd/3rd year

- distribution of CzechRad detectors to CZ / SK / PL users
- training of device users, performing field measurements
- field data processing / verification / map visualizations
- sharing all measured data with the public
- user support (technical issues, real/false “hot spots”, education)
- sociological research (2nd round) - evaluation of the experience
- measurements of food, feedstock or objects of daily use monitoring
- measurements of thyroid glands (patients after radioiodine application)

Project structure and time schedule

	2024												2025												2026												
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
WP1: Citizen science (SZU - SURO, IFJ)												D1.1																									D1.2
Task 1.1. Target citizen groups						M1																															
Task 1.2. Distribution and training of detector users																																					
Task 1.3. Evaluation of gained experience																																					
WP2: CzechRad detector (SURO - SZU, IFJ)																																					D2.1
Task 2.1 Detector assembly and response																																					
Task 2.2 Data providing and sharing																																					
WP3 - Analysis of monitoring scenarios (IFJ - SURO, SZU)																																					D3.1
Task 3.1 Legal frame analysis																																					D3.2
Task 3.2. Thyroid glands						M2																															
Task 3.3. Food, feedstock, objects of daily use						M3																															
WP4: Project management (SURO - IFJ, SZU)																																					

- M1 Definition and agreement with selected citizen groups
- M2 Strategy for thyroid gland monitoring using citizen measurements
- M3 Strategy for food, feedstock or objects of daily use monitoring using citizen measurements

- D1.1 Public report - Sociological survey to define trusted public group
- D1.2 Public report - Experiences of detector users
- D2.1 Public report and publication - CzechRad detector parameters, acquisition and use of data
- D3.1 Public report and publication - Social and legal issues of citizen radiation measurements
- D3.2 Public report and publication - Possibilities of citizen measurements in monitoring of thyroid glands, food, feedstock and personal objects

CITISTRA - results

- publicly available radiation measurement data for further use in future (scientific projects / analyses / evaluations, student works ...)
- public reports from the evaluation of sociological surveys, evaluating the experience of device users
- possibilities of citizen measurements in monitoring of thyroid glands, food, feedstock and personal objects - reports and strategies

**Thank you for
your attention**

