



ENERGIAKLUB
CLIMATE POLICY INSTITUTE
APPLIED COMMUNICATIONS

DISASTER RISK ASSESSMENT IN THE DANUBE MACRO-REGION

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- Frequency and severity of weather anomalies/natural hazards are changing
- Costs of disaster preparedness, response, recovery and mitigation has been steadily rising → increasing burden to DM
- DRR → effective climate adaptation concept/tool



BACKGROUND & RATIONALE

- So





GEOGRAPHICAL SCOPE OF THE PROJECT



SEERISK

Lead Partner:
National
Directorate
General for
Disaster
Management,
Ministry of the
Interior
(Hungary)



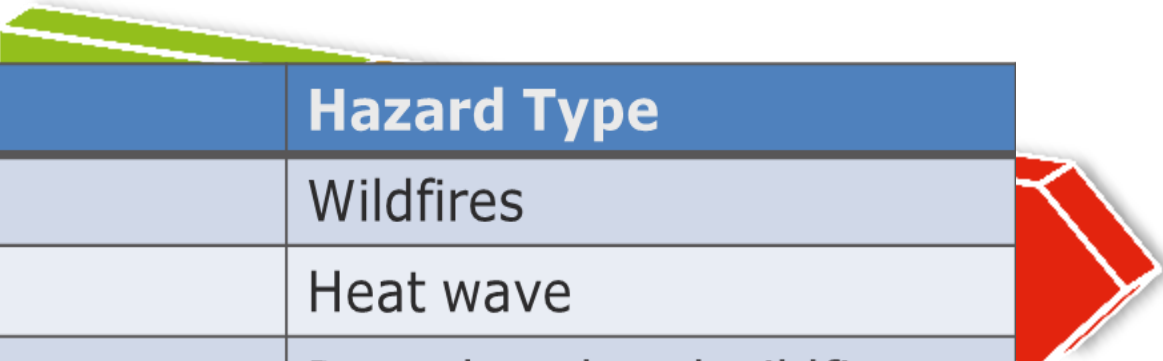
- Develop a common disaster risk assessment method for the region in case of disasters intensified/created by climate change
- Raising local communities' climate change and risk awareness and enhancing their preparedness



*Aiming for a comprehensive RA &
DRR common toolkit*



1. THE COMMON DISASTER RISK ASSESSMENT METHODOLOGY



Pilot Area	Hazard Type
BULGARIA	Wildfires
ROMANIA	Heat wave
SERBIA	Drought related wildfires
HUNGARY	Thunderstorms
SLOVAKIA	Floods
BOSNIA & HERZEGOVINA	Floods



2. RISK SCENARIOS

- Important part of the Risk Identification stage
- Risk scenarios are a plausible description of how the future may develop in case of a disaster event. (EC RA and mapping guidelines, 2010)

TEMPLATE FOR DEVELOPING RISK SCENARIO

The scenarios will serve as a basis for disaster management field simulation exercises so the textual description of each step should be concise and straight to the point. Therefore keeping paragraphs as short as possible is very important.

1. Hazard characteristics

Step 1.1 Identifying the hazard to be analysed

Type of hazard:

Drought.

Regarding to climate change scenario increase of temperature and decrease of precipitation are expected in the future so causing factors will be accentuated

Step 1.2 Specifying and describing the causing factor of the event

Natural causing factor(s) of the disaster events:

Prolonged period of precipitation shortage (intensity is defined by SPI). In combination with low ground water reserves and high temperatures drought can be intensified.

Step 1.3 Defining likelihood

Likelihood of the worst case disaster event based on the risk matrix:

According to the risk matrix for the Kanjiža municipality the worst case scenario is likely to happen once per 100 or more years.

Step 1.4 Defining intensity

Intensity of the disaster event based on the risk matrix:

According to the risk matrix for the Kanjiža municipality the worst case scenario is situation in which value of SPI is less or equal than -2.326.

Step 1.5 Define extent

Define the area that will be affected (administrative unit, catchment, or in Km²)

By definition drought affects large area. Consequently, affected area in any case would be the whole administrative unit of Kanjiža municipality (399 km²).

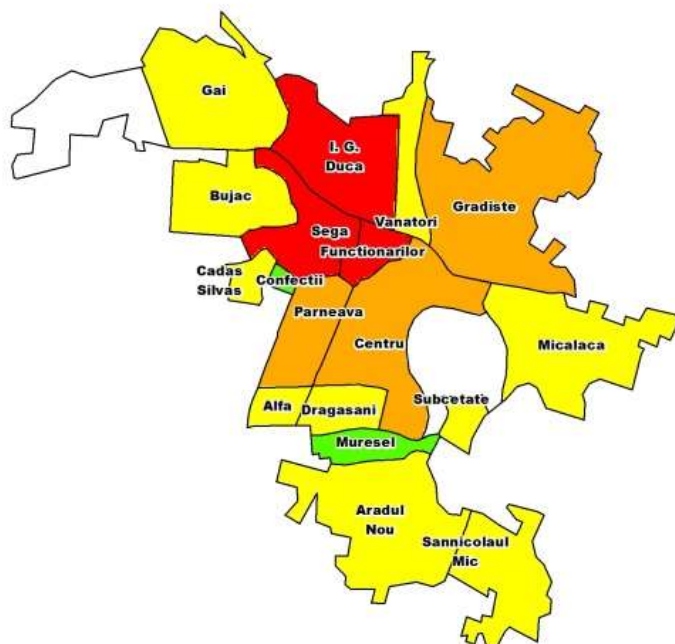
2. Context of the incident: disaster circumstance and vulnerability details

Step 2.1 Defining and delineating the location and the size of the area¹

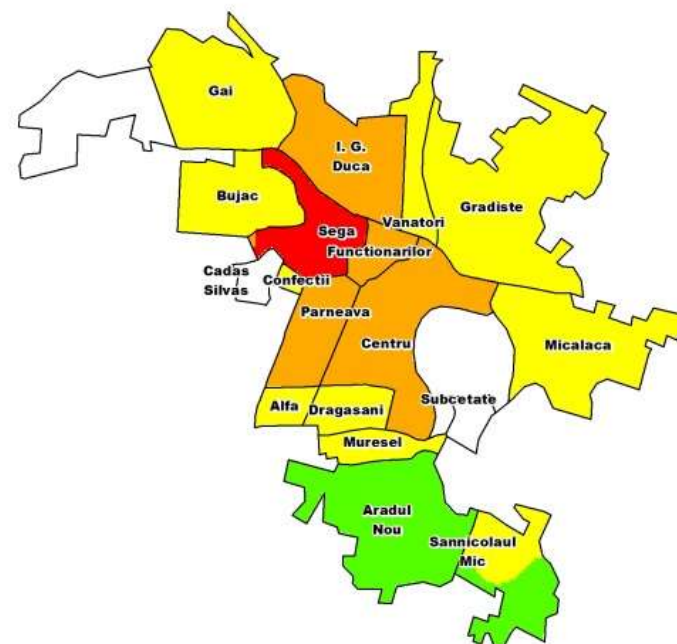
Risk assessment of heat wave in city of Arad, Romania

Step 3: Risk maps

Daytime



Nighttime



LEGEND

⊕ Districts

Risk level

- Very high
- High
- Medium
- Low
- Insignificant

0 2.5 5 km





3.2 WEB MAP APPLICATIONS



<http://www.seeriskproject.eu/seerisk/#main>

4. CCA and RA Guideline

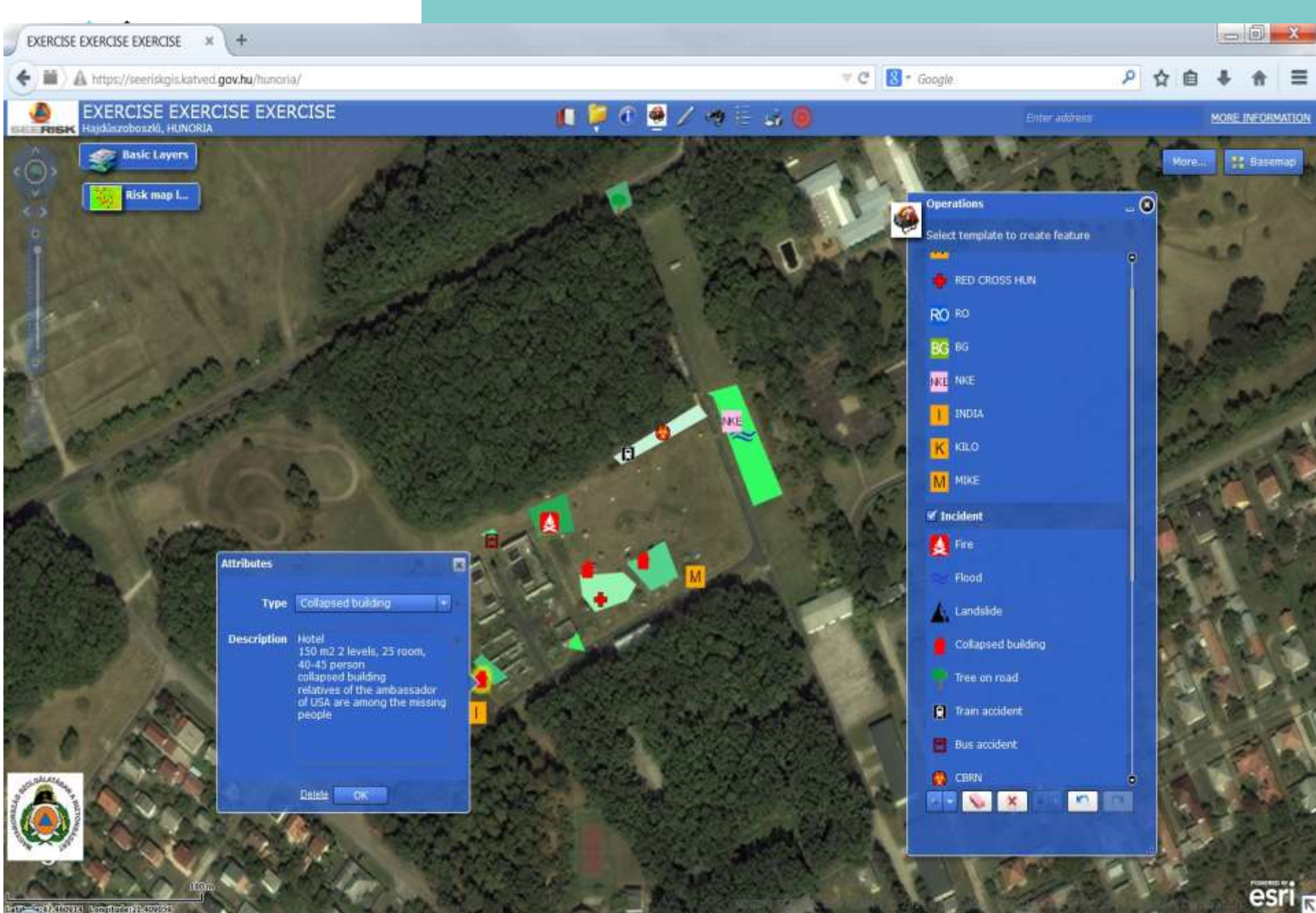
- Summarizes SEERISK project results
- Formulates specific CA recommendations for municipalities



GUIDELINE

ON CLIMATE CHANGE ADAPTATION
AND RISK ASSESSMENT
IN THE DANUBE MACRO - REGION

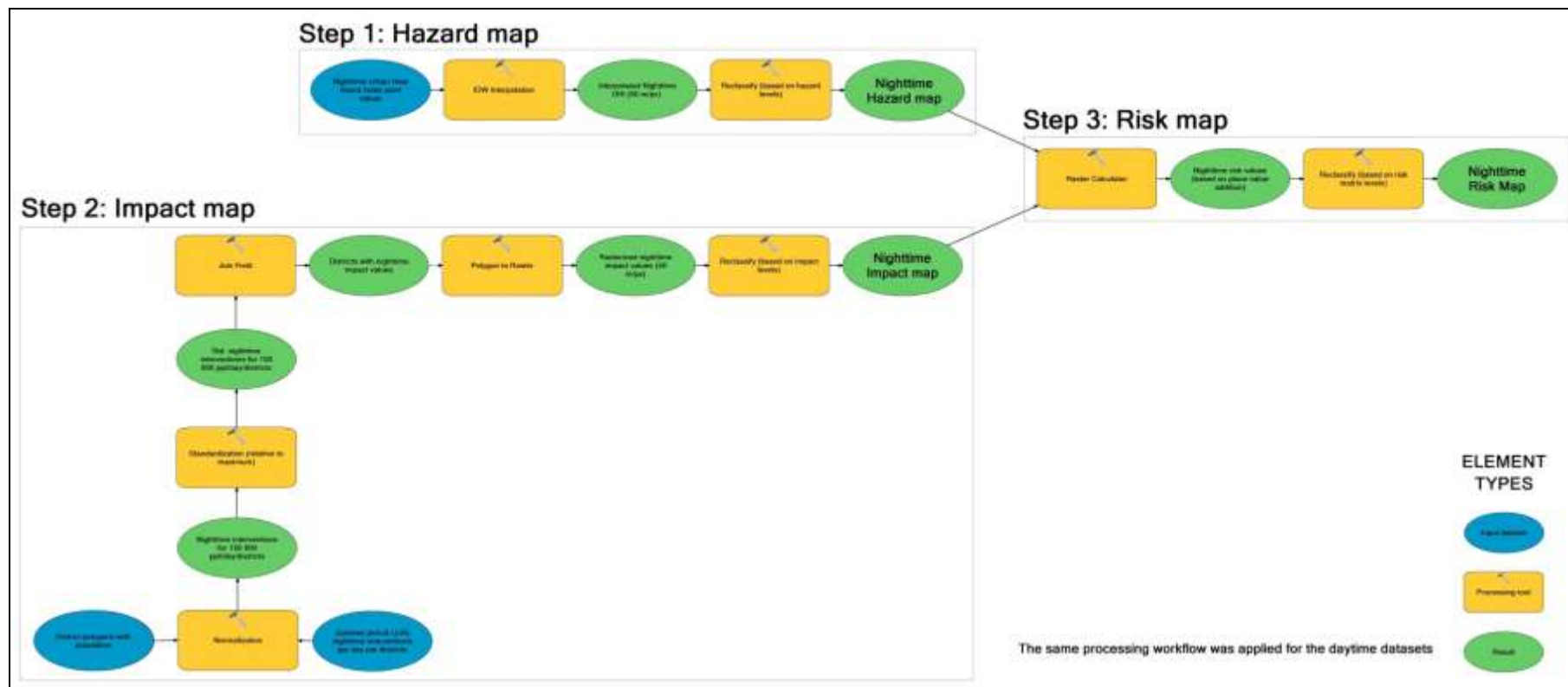
Jointly for our common future





8. GIS BEST PRACTICES

- Technical Guide for Risk Mapping



Example model of workflow process of risk mapping



9. COMMON EMERGENCY COMMUNICATION STRATEGY

- Providing a set of communication practices, channels, methods and tools to conduct effective communication before/during disasters
- It contains parts of prevention, or pro-active communication strategies



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THANK YOU FOR YOUR ATTENTION!

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