International Conference
Climate Change Impacts and Adaptation: Reducing Water-related Risks in Europe

Using research findings in disaster risk reduction policies

Administration of the Republic of Slovenia for Civil Protection and Disaster Relief

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ADMINISTRATION FOR CIVIL PROTECTION AND DISASTER RELIEF

NATURAL AND MAN-MADE DISASTERS in SLOVENIA

- earthquakes
- floods
- fires
- landslides, avalanches
- hail, storms
- sleet, frost
- road, railway and aircraft accidents
- industrial and other accidents involving hazardous material
- epidemics

Karst – fires 2003

SYSTEM OF PROTECTION AGAINST NATURAL AND OTHER DISASTERS

The system is intended to protect people, animals, cultural heritage and the environment from natural and other disasters.

RESEARCH AND DEVELOPMENT PROJECTS

AIM

- to transfer the knowledge, technologies and experience from research institutions into practice to reduce disasters or mitigate their consequences

LEGAL BACKGROUND

- Act on Protection against Natural and other Disasters (Article 40)
- Resolution on the National programme of Protection against natural and other disasters for the period between 2009-2015 (defined medium-term priority programmes; Special emphasis on the applicability of research results)

FINANCES

NATIONAL SOURCES

- the national research programme Knowledge for Security and Peace 2002–2010
- the technological programme Technology for Security and Peace 2006–2012
- fire tax funds
- Budget of the Administration for Civil Protection and Disaster Relief and
- funds from other ministries

EU LEVEL

- EU Member State in 2004
- Gaining the experience (participation in programmes within Framework Programme 6 and FP7; Civil Protection Financial Instrument, other)

IMPLEMENTED PROJECTS

NATIONAL LEVEL from 1992

- More than 120 development and research projects on protection against natural and other disasters
- More than 20 projects on protection against fire

EU PROJECTS (from 2004)

- Participation in 18 different EU projects
  - partner
  - observer
  - participation in advisory boards

TRANSFER OF RESEARCH FINDINGS INTO PRACTICE – EXAMPLE 1

VIDEO SURVEILLANCE KARST

BACKGROUND

- Karst area prone to fires
- AIM: develop pilot system for video surveillance of Karst area
- two year research projects (VideoKarst 1 in 2005/2006 and VideoKarst 2-3 in 2007/2008)
- FINACES: around 700.000 EUR
- AIMS OF THE PROJECT
  - in cooperation with users analyze needs and identify solutions
  - design and develop a monitoring stations prototype with video surveillance system and establish a pilot/testing capability
  - analyse the results
  - propose changes and recommendations for further development

IMPLEMENTATION OF RESEARCH FINDINGS

- The system Video surveillance Karst started in 2006
- 14 cameras covers 5,878 km2 (each camera around 12 km) of Karst area

- Four surveillance centres: Regional notification centre Koper, Postojna and Nova Gorica; Fire station Sežana
- additionally Notification Centre of the Republic of Slovenia

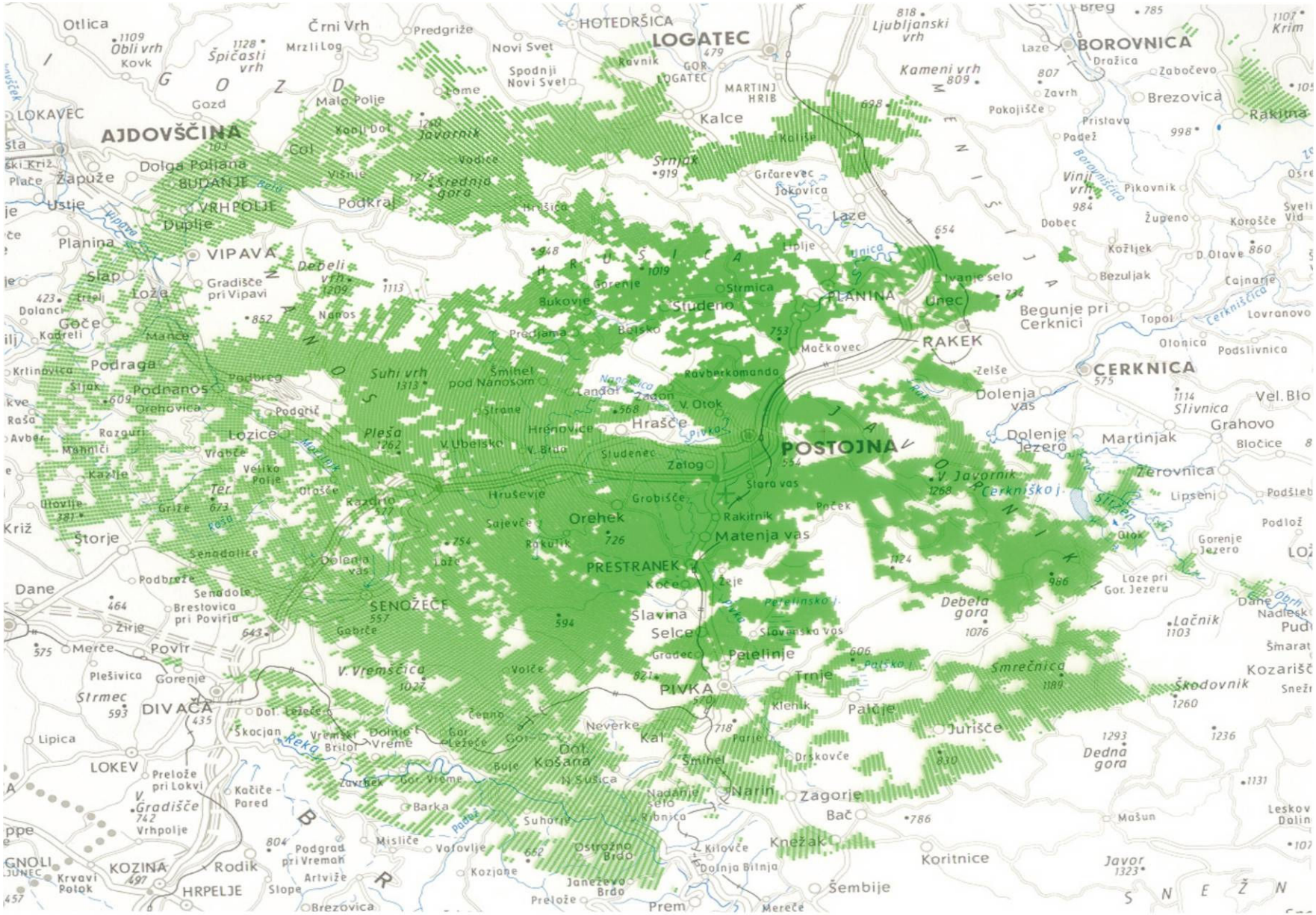
GOOD PRACTICE

- end users participated in the project form the beginning
- continuation of research (the second two year project solved all still opened questions form the first project)

FUTURE DEVELOPMENT

- to cover more area (North Primorska)
- broaden the concept – include also surveillance of the sea

VIEW FROM LOCATION PEČNA REBER



VIDNO POLJE KAMERE “ PEČNA REBER” (radij 10 km)

MULTIDISCIPLINARY SPATIAL INFORMATION DATA BASES FOR FORECASTING AND DAMAGE EVALUATION OF SEVER NATURAL EVENTS - **EXAMPLE 2**

BACKGROUND

- In recent decades sever weather events have significant impact on agriculture and its production
- Project started in 2007

AIM

- to design a model to predict and assess implications of drought
- assessment was based on soil properties, plant-water requirements and different agro-meteorological parameters

RESULT

- development a system which through the web based portal visualises digital map information of current threat in real-time

IMPLEMENTATION

- web application was developed
- by the end of 2010 should be used by several users: Ministry of Agriculture, our Administration, Municipalities etc. (advising to farmers; confirmation of damage assessment …)

FUTURE DEVELOPMENT

- Include also other corps

EU PROJECTS

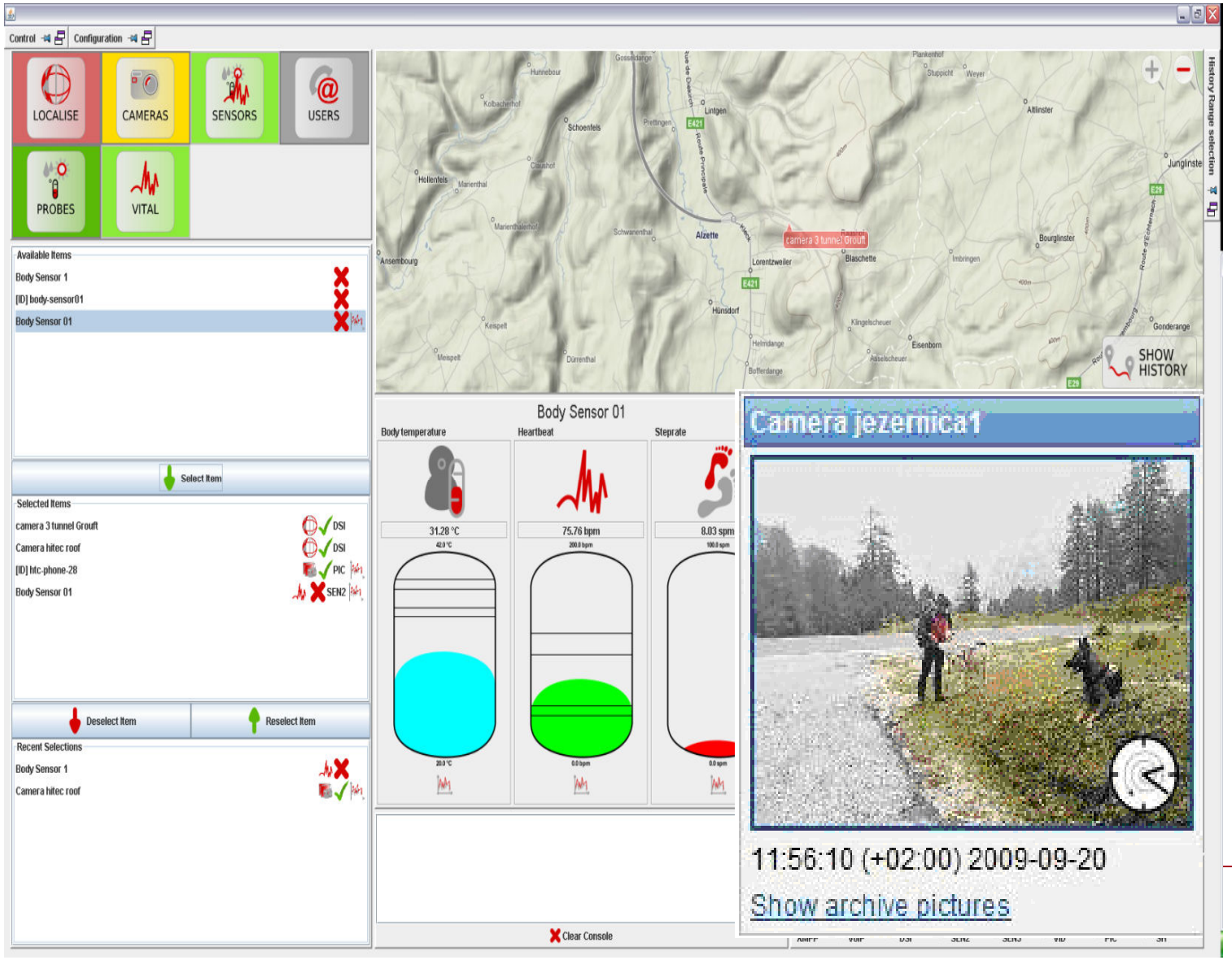
U-2010 (http://www.u-2010.net)

- FP6 project, 2006-2009
- Role of ACPDR: end users, test bed (no project budget)
- Objective: to provide the most capable means of communication and the most effective access to information to everybody required to act in case of accident, incident, catastrophe or crisis, while using existing or future telecommunication infrastructures
- ACPDR – one of 16 partners, with no project budget
- Final result: a prototype solution for mountain rescue scenario: voice, data and video transfer (GSM, UMTS, WiFi, satellite), tracking in 3D GIS (GPS) and bidirectional satellite communication with access to the internet

IMPLEMENTATION

- the prototype is being tested by mountain rescuers
- findings form the project are the basis for another project (EFESTO)

Picture on the MR's mobile client: sensors values (body temperature, heart beat, foot pressure – middle of the screen), status of communications (left, up), tracking in 3D GIS and picture from the area of an accident



GOOD PRACTICES

- The promotion of research and development has to have a **legal and political imperative**, with legislation providing a framework for its growth
- **Cooperation** with **other ministries** necessary (disaster risk reduction is interministerial)
- Finances are provided with **national programmes**
- **Cooperation** among **governmental agencies, researchers** and **end users** (in our case this are often rescue and relief forces, NGOs, etc) already in developing the idea of the project
- Importance of good ideas
- **Continuation** of research (one project usually can not solve all the dilemmas or open unplanned ones (e.g. EU project U-2010 in followed by EFESTO in 2010)
- At the end of research **involvement of broader public** – to gain possible end-users (after every research project a public presentation is organized)

FUTURE DEVELOPMENT

- Continue with good practice (problems: finances)
- Special emphasis on the applicability of research results
- More emphasis on EU projects (on national, local levels and in civil society)
  - Problems: familiarization with the EU procedures, English language, lack of human resources

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