

# SZKOŁA GŁÓWNA SŁUŻBY POŻARNICZEJ The Main School of Fire Service

# POLISH CONTRIBUTION TO DISASTER RISK REDUCTION AND CRISIS COMMUNICATION

According to the act "The law on Higher Education" The Main School of Fire Service (SGSP) is a technical university of national public services supervised by the Minister of Interior and Administration that educates fire-officers of the State Fire Service, public servants of other services and forces supervised by the Minister of Interior and Administration as well as civilians.

Journal of Laws N° 164, item 1365 of July 27,2005 (with later amendments)

Statute of the Main School of Fire Service

#### Types of studies:

- full-time studies
- part-time studies
- first cycle studies (engineering degree)
- second cycle studies (master's degree)
- postgraduate studies
- specialized courses
- "uniformed" studies
- "civilian" studies

#### Areas of studies and research:

- Protection of population
- European mechanisms of civil protection
- Crisis management
- Risk analysis in different aspects of vital activity
- Fire protection
- Firefighting and rescue operations
- Civil protection
- Fire engineering

#### **Fire Safety Engineering Faculty**

- Rescue Operations Department
- Fire-fighting TechniquesDepartment
- Safety Construction Department
- Fire Development andExtinguishing Department
- Department of Exact Science

#### **Civil Safety Engineering Faculty**

- Safety Analyses and Prognosis
   Department
- Safety Management and
   Programming Department
- Safety Policy Institute
- Law and Organisation Institute
- Safety Research Department

### International cooperation

- Technical University (Ostrawa, Czech Republic)
- ✓ Vilnius Gediminas Technical University (Vilnius, Lithuania)
- ✓ L'Ecole Nationale Superieurs des Officiers de Sapeurs-Pompiers ENSOSP(Aix-en-Provence, France)
- Technical University (Zwolen, Slovakia)
- Academy of Fire Safety named after Chernobyl Heroes (Cherkasy, Ukraine)
- National University of Life Safety in Lviv (Lviv, Ukraine)
- Estonian Academy of Security Sciences (Tallinn, Estonia)
- ✓ Lund University, Fire Safety Faculty (Lund, Sweden)
- Hamburg Fire Department (Hamburg, Germany)
- Fire Departments in the United States of America
- ✓ Police Academy in Bucharest (Bucharest, Romania)

#### Projects directed at EaP countries assistance:

"Pandemic, crisis, disaster — It's high time to work together!!! Ukraine integrated into European and global system of civil protection — special trainings and workshops for administrative and rescue staff"

#### **Activities:**

- International Rescue Workshop Pionki 2010
- Train the Trainers Course
- Exercises during Community Mechanism Induction (CMI) Course in Hamburg
- Exercises during Operational Management (OPM) Course in Neuhausen and Revinge
- Partial participating in High Level Coordination Refresher (HLCR) Course
- Multimedia training in the Centre of Safety Education at The Main School of Fire Service

#### Main goals:

- Preparation of Ukrainian representatives from crisis management and administrative sector for the integration into
  existing international systems of civil protection and rescue assistance
- Learning about European Civil Protection Mechanism and humanitarian aid
- Exchanging experience about national and international rescue operations



Konkurs Pomoc zagraniczna 2010







#### **EU CARPATHEX 2011**

The project EU CARPATHEX is a full scale exercise focused on CBRN threats organized by Poland as Coordinating Beneficiary in cooperation with Czech Republic, Hungary as Associated Beneficiaries and Ukraine, one of the host country for European Football Championships in 2012.

### Objectives:

- To train to be able to respond to CBRN incident in connection with the high visibility event (HVE) like EURO 2012;
- To carry out major emergency simulation exercise, in the context of the European Civil Protection Community Mechanism, making it possible to respond to a natural or man made disasters and fight their consequences.



# Scientific research and projects financed from national resources

- Numerous scientific grants funded by the Ministry of National Education
- Project co-financed from the Polish Development Assistance
   Programme (Ministry of Foreign Affairs)
- Projects co-financed from the Foundation for German-Polish Co-operation (FGPC)

#### **Tempus Phare Program**

- Establishment of the Civil Safety Faculty in SGSP
- Establishment of the International Co-operation Office in SGSP

#### Fifth Framework Programme for Research, Technology Development and Demonstration

Forest Fire Risk and Hazard Assessment: A Holistic Approach

#### **INTERREG IIIB - Baltic Sea Region**

Eurobaltic Civil Protection Project II

#### The Financial Instrument of EU Civil Protection

- EVA European Virtual Academy
- European Virtual Academy for Civil Protection (EVA4CP)
- Planning, conducting and evaluating two High Level Coordination (HLC) courses
- Planning, conducting and evaluating two High Level Coordination (HLC) and two High Level Coordination Refresher (HLCR) courses.

#### **Seventh Framework Programme for Research and Technological Development**

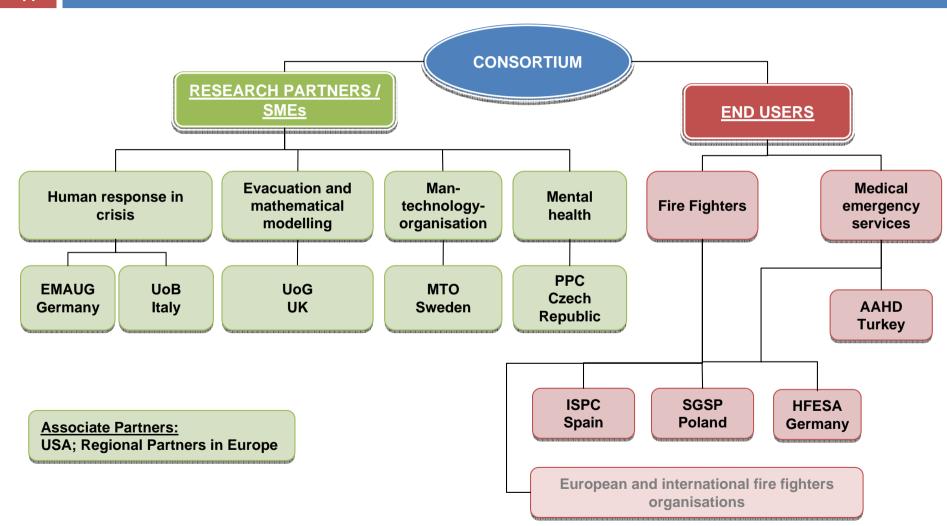
- PRACTICE
- Human behaviour in crisis situations: A cross-cultural investigation in order to tailor security-related communication – BeSeCu

# Does Culture have a strong impact on evacuation response?

- How will people from different cultures/societies respond to the call to evacuate and behave during an evacuation?
- Most data and experiments conducted in this area focus on UK/USA/Canadian/Australian subjects. Can be argued to be quite 'similar' societies with 'similar' cultures.
- Common perception is that differences in culture (both the social and fire cultures) will influence response behaviours and response times.
- If this is so, this may have a profound impact on:
  - how we plan procedures for large scale evacuation
  - how we model human behaviour
  - how applicable our models are to different societies, and
  - the nature of the datasets we use to quantify human behaviour

# BeSeCu The Consortium





# BeSeCu Approaches



The BeSeCu project will carry out the following research studies:

#### FIELD STUDY:

A cross-cultural survey of individual experiences will be conducted to identify determinants of interindividual differences in people who have experienced crisis situations and first responders.

The analysis will triangulate findings obtained with objective measures, subjective experiences and behavioural observations.

# EXPERIMENTAL TRIALS:

Experimental trials will be carried out in countries simulating real time evacuation scenarios in standardized settings including objective measures (e.g. response time) as outcomes as well as video-tape analysis.

### BeSeCu Evacuation Trials

Ed Galea et al., Fire Safety Engineering Group, University of Greenwich





#### The Libraries

Ostrava



**Izmir** 

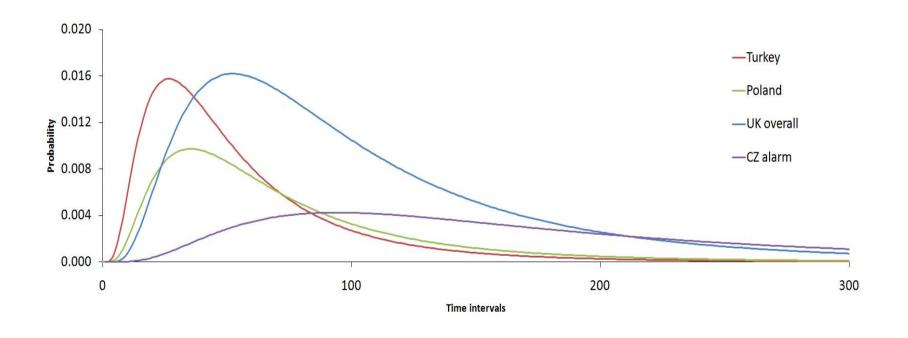


Warsaw



Greenwich

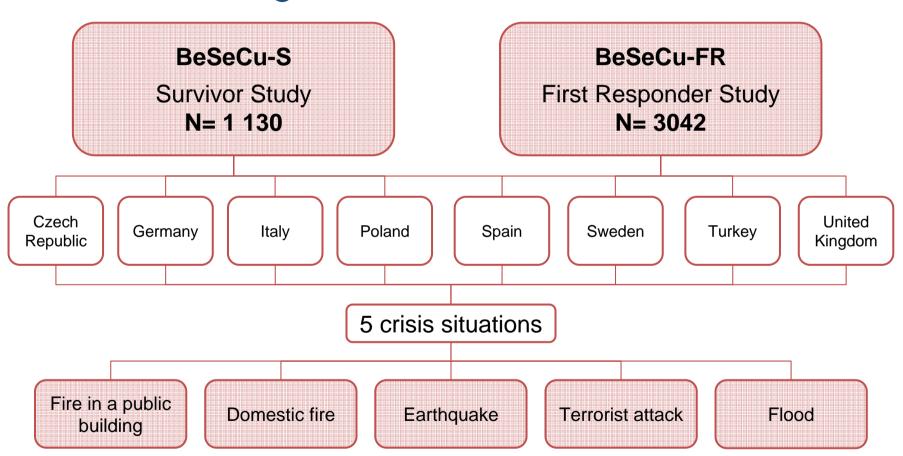
### **Cross Trial Comparisons of Response Time Distributions**



# Largest international field study in survivors



## and fire fighters



# BeSeCu Field Study Examples of Disasters investigated



#### Fire

- Domestic Fire all countries
- Public Fire all countries

#### Terrorist attacks

- train bombings in Madrid 2004
- subway bombings in London 2005
- bombing in Istanbul 2008

#### Earthquakes

- Marmara earthquake in Turkey 1999
- Karakoçan earthquake in Turkey 2010
- L'Aquila earthquake in Italy 2009

#### Floods

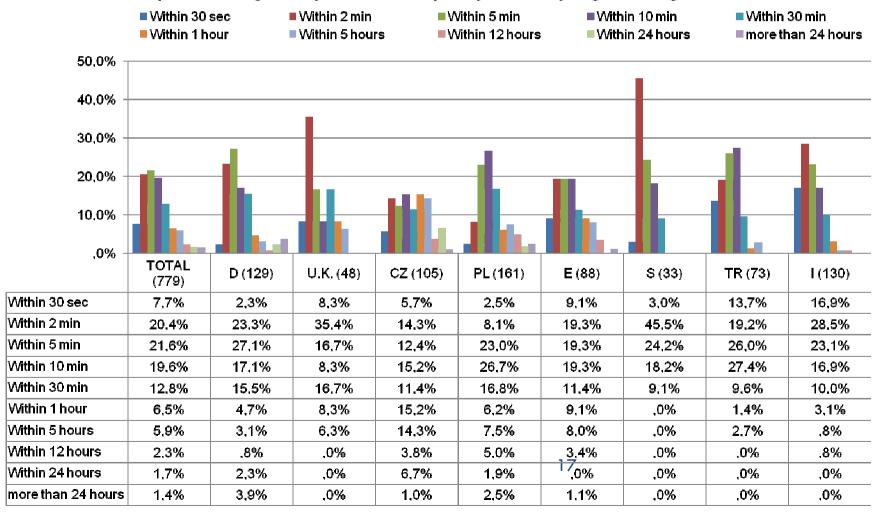
- Elbe flood in Czech Republic and Germany 2002
- Oder flood in Czech Republic, Germany and Poland 2010

#### SUDDEN ONSET DISASTER

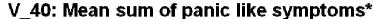
SLOW ONSET DISASTER

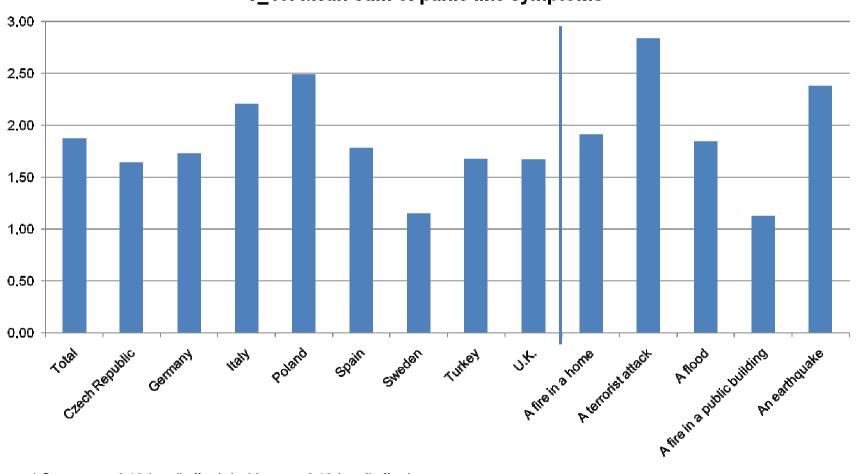
### BeSeCu Field Study: Example of findings Survivor - Specific Incident — Evacuation

v\_45: Approximately how long did it take you to start evacuating/be rescued? That is, from the point of being initially alerted to the point you actively began leaving the location.



# BeSeCu Field Study Survivor - Specific Incident — Realization





<sup>\*</sup> Country:  $\eta$  = 0,18 (small effect); Incident:  $\eta$  = 0,19 (small effect)



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