Decision Support System for Security-Related Emergency

- *Bekir Sıtkı CANDOĞAN*

- *Interior Expert*

- *b.sitki.candogan@icisleri.gov.tr*

- *Security and Emergency Coordination Center*

- *Turkish Ministry of Interior*

- Role: *WP leader*

- Proposal activity: *SU-DRS01-2019*

1

Proposal idea/content

- *There is **no one organazition** which is **responsible for** security and emergency issues (Police, Gendarmerie, Coast Guard, DEMA, Health Care, Red Crescent, Fire Fighting, etc.).*

- *Every **security** and **emergency** issue including natural or man-made disaster, crime and terrorism threat has **different conditions** and needs **coordination of different agencies**.*

- *There are some DSSs for **disaster-related emergency**, but there is no DSS for **security-related emergency.***

- ***Timely** and **effective response** to security-related emergency is of **vital** importance.*

- *Both well-working **communication** and **decision support system** are necessary to use **time** and **resources** efficiently in order to reduce the loss of human life and environmental, economic and material damage.*

- *We would like to generate an integrated **Decision Support System** for security-related emergency, included all actors.*

2

Proposal idea/content

- ***Main objective of the project*** *is to design a DSS for cooperation and collaboration among security-related emergency stakeholders and to develop leading guidelines on multi-agency engagement for security-related emergency challenges at local and national levels in order to make society more secure.*

- ***During the project****, firstly it will be determined current situation, competencies, deficiencies and responsibilites of related agengies at local level and national levels and then will be developed different scenerios and response plans in various of emergencies at different levels and finally will be designed a DSS and leeading guidelines. The action will start from the local level and move towards the national level.*

- ***As a result of the project,*** *all countries and agencies will have checked their current situation and security-related emergency will be have managed more effectively and efficiently with the support of DSS. All related agencies will be more ready before, during and after emergency-related security by a consolidated approach and will have good practices and learnings from different agencies and cultures.*

3

Project participants

- *We can support a consortium as an **enterprise** and/or to be a **bridge** between to the relevant **first responders** and **practitioners** at **national** or **provincial** levels in Turkey. The coordinator should be a national agency or an academic instituon.*

- *It will be good to form consortium involving **different actors**, including first responders (national, regional, local, and city), academics, CSOs and SMEs from **different countries** in order to provide **different ways of thinking** and **different approaches**.*

- *Looking for partners with the following expertise/technology/ application field:*
  - *Crisis management*
  - *Emergency management*
  - *Law enforcement*
  - *Security Manegement*
  - *IT for decision making*
  - *Augmented reality solution*
  - *Artificial intelligence experts*
  - *Excellence in simulation*

4

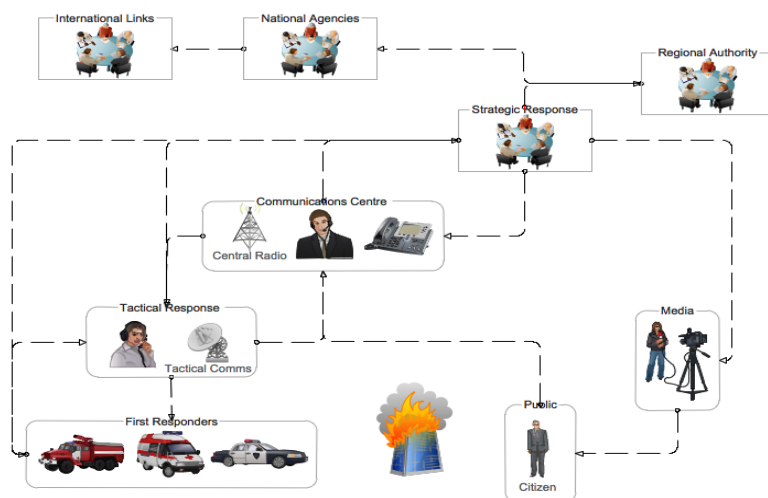# Human & Organisational Performance in Emergencies (HOPE)

- *Derek Ross*

- *derek.ross@tcd.ie*

- *Centre for Innovative Human Systems, Trinity College Dublin*

- Role: *Proposal coordinator, WP leader*

- Proposal activity: *SU-DRS01-2019*

Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

1

HOPE proposal idea/content

- *Coordinated Human and Organisational Systems Perspective*
  - *Relational; Organising; Structures; Software*
- *Socio-technical Concept of Operations*
- *Human, operational and organisational recommendations for enhanced responder, citizen and societal resilience framework*

Derek Ross   derek.ross@tcd.ie

Project participants

- Proposed coordinator: *CIHS, Trinity College Dublin*
- Partners / Other participants:
  - End-user network (Fire Brigades, Health Services, Civil Protection, Utilities, etc.) Irish, European & USA
  - *Academic; Statutory; Voluntary; NGO; SME*
- Looking for partners with the following expertise/ technology/ application field:
  - *Technological capabilities*
  - *End-users*
  - *SME*

Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

3

Empowering Citizens' Disaster Resilience in Societies (ECDR)

- *DR Jyrki SUOMALA*

- *Jyrki.suomala@laurea.fi*

- *Laurea University of Applied Sciences*

- Role: *Proposal coordinator*   **Elisa Norvanto**

- Proposal activity: SU-DRS01-2018-2019-2020: Human factors, and social, societal, and organisational aspects for disaster-resilient societies

1

Inquiries: Jyrki SUOMALA, jyrki.suomala@laurea.fi
Elisa NORVANTO, elisa.norvanto@laurea.fi

IDEA OF EDCR

How to behave during disaster ?

By applying Decision Science research ECDR increases understanding on human factors during natural and manmade disasters.

More risk-awarness

More applications of social media and crowdsourcing methods during disasters

Project participants

- Proposed coordinator: *Laurea UAS, Finland*
- Partners / Other participants: *University of Turku, Metropolia UAS, Finnish MoI*
- *Stakeholders: City of Mikkeli, Häme Region, The Finnish National Rescue Association, City of Berlin, The Federal Department of Defence, Civil Protection and Sport (DDPS)*
- **Looking for partners with the following expertise/ technology/ application field:**
  - *First responder agencies*
  - *Experience in disaster relief during earthquakes, e.g. Italy or Greece*
  - *Communication and stakeholder engagement experts in the field of civil-public engagement*
  - *Technological solution providers (e.g. Social Media, communication platforms)*
  - *Experience in simulation training environments, from planning and implementing civil protection exercises*
  - *Data mining, Social Media & other Crowdsourcing-tools & methodologies*
  - *Sociologists, Anthropologists, Decision and Behavioural Scientists (e.g. stressful situations, group behaviour)*
- ***Looking for stakeholders and end-users:***
  - National and local safety and security actors (e.g. rescues services, police forces, municipalities, central government actors, schools and education institutes, voluntary organizations and other involved in communities' emergency preparedness and disaster relief)

3

Inquiries: Jyrki SUOMALA, jyrki.suomala@laurea.fi
Elisa NORVANTO, elisa.norvanto@laurea.fi

TWINRISK

- *Erkin TEKIN*

  Disaster and Emergency Planner for Preparedness, Response, and Recovery

- *erkin.tekin@afad.gov.tr*

- *Samsun AFAD*

- *Role: WP leader, S/T provider*

- *Proposal Activity: SU-DRS01-2019 :Human factors, and social, societal, and organizational aspects for disaster-resilient societies*

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Proposal idea/content

- **Technology:**
  - *Cloud computing*
  - *Virtual modeling*
  - *Augmented Reality*

- **Framework:**
  - *Understanding Risk*
  - *Facing Risk (Virtual)*

- **Target Principles:**
  - *Strong social consciousness*
  - *Shared perception of social organization*
  - *Access to resources*
  - *Providing privacy of personal information*

TWINRISK

- **Envisioned results** *gained by* **Citizen-oriented** *approach for* **"Risk awareness researches"** *:*
  - **Simulating** *numerous disaster exercises on* **Digital Twins**
  - **Blending** *no-name datas of the citizens*
  - **Exploring** *the priorities and behaviors of the community during the disasters*
  - **Reporting** *the vulnerabilities of the victims/society facing disasters*
  - **Providing** *pre-disaster communication between first responders and the victims and citizens*

2

Project participants

- ***Contribution Proposals***
  - **Disaster and Emergency Management** *perspective*
  - *Detailed Technical/ social/societal* **microzonation** *studies*
  - **End-user** *experience and* **Citizen-oriented** *approach*

- ***Looking for partners*** *with the following example,*
  - *Cloud computing*
  - *App development*
  - *Augmented Reality* **technologies** *and* **Academia**

- ***Project Experience***
  - *Early-warning system by remote-sensing technologies*
  - *Integrated disaster management system*
  - *Seismic Microzonation*

TAMPSAMSUN

SAMSUN GIS

SU-DRS01-2019
Resilience and Adaptation to Natural Risk and Disasters – Equiping Society with Knowledge and Technology

- *Prof. William Hynes*
- *William.hynes@futureanalytics.ie*
- *Future Analytics Consulting Ltd., Dublin, Ireland.*
- Role: *Proposal Coodinator*

- Proposal activity: DRS01-2019: Human factors, and social, societal, and organisational aspects for disaster-resilient societies

A Cyclical Approach to the Development of Well Informed Tools and Technologies

- *Development of methods, tools and technologies to assess impact of existing disaster manangement technologies and detection systems.*
- *FAC's expertise in Coordination, Urban and Spatial Planning and Strategy, as well as Stakeholder Engagement, will be used to identify what are the tipping points within disperate societies required to develop resilient communities.*
  - *Reserach and analysis of extising practices and tools.*
  - *Wide stakeholder consultation regarding the effecitveness of existing research, methods, and related technologies.*
  - *Modelling the cost of potential damage to critical infrastrtucture based on previous secnarios, and contemporay climate and risk conditions.*
  - *Development of methods to measure the impact of current technologies and pontential gaps – informed by stakeholder consultation and model projections.*
  - *Indentification of 'Resilience Trigger Points'.*
  - *Education, Awareness, and Advocacy – Societal responsibility to take on cultural changes in order to reach 'Resilience Trigger Points'.*

Project participants

- Proposed coordinator: *Future Analaytics Consulting Ltd.*
- Partners / Other participants: University from Ireland with expertise in spatial and resilient planning and strategy.
- Looking for partners with the following expertise/ technology/ application field:
  - EU wide academic researchers
  - Engineering
  - Risk Management Specialists
  - Energy and Infrastructure Specialists
  - Municipal/Local and Regional Authorities
  - Representatives from key citizen groups

3

Maintaining Food Safety and Security During The Disasters

- *Sibel TOPCU*
- *sibel.topcu@kizilay.org.tr*
- *Turkish Red Crescent*
- *Food Safety and Security During The Disaster*
  SU-DRS01-2018-2019-2020

1

Maintaining Food Safety and Security During   The Disasters

- Active use of soup kitchens in disaster periods.

- Automation system to be created; Available soup kitchens managed by the branches and the other will be opened soup
kitchens physical, administrative, financial and operational data within the scope of quality management and food security (land, building,
vehicle, personnel, cost, donation/ resource, kind of food, repast, material, menu, calorification , food purchases of beneficiaries ,
conformity) recording and analyzing on the system , monitoring and reporting.

- Soup Kitchen related data in a short time, accurate and timely reporting to be interested in reaching without the waste of resources,

- Ensuring the traceability and accountability of soup kitchen processes ,

- Status of beneficiaries benefit from the services to ensure monitoring and control over the system (turnstiles or smartcards)

- To make needs and cost analysis more effective

2

Maintaining Food Safety and Security During   The Disasters

- Looking for partners with the following expertise/ technology/ application field:
    - *Food Security and Safety*
    - *Automation System Technology*
    - *Disaster Management Technologies*

3

International Certification of Qualifications in Emergency and Disaster Management –
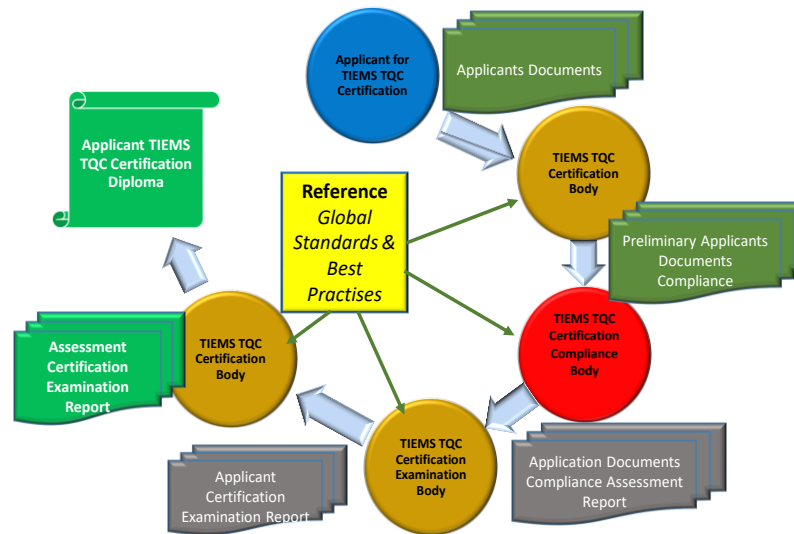## *TIEMS TQC Certification*

- *K. Harald Drager, TIEMS President*
- *khdrager@online.no*
- *The International Emergency Management Society - TIEMS*
- Project *Coordinator – TIEMS*
- Proposal activity: SU-DRS01

1

Proposal idea/content

- *Develop a Reference of Global Standards & Best Practices*

- *Establish a Network of Educational Institutions providing Courses and Training Material (TIENE) together with TIEMS*

- *Build an International Certification Body for Evaluating, Examining and issue Certification to the Candidates*

TIEMS TQC Certification Document Flow

Project participants

- Proposed coordinator: *TIEMS*
- Partners / Other participants: *This is an invitation to Universities and Training Institutions, with courses and/or training and/or Bachelor/Master programs in Emergency Management and Disaster Response Topics, as well as Standard and Certification Authorities & others involved in the topic*
- Looking for partners with the following expertise/ technology/ application field:
  - *Education and/or Training Expertise in the Emergency Management and Disaster Response*
  - *Standardization and Certification Authorities*
  - *Others involved in Emergency Management and Disaster Response*

3

MEDIA CAMPAIGNS FOR DISASTER PUBLIC AWARENESS

- *PRESENTER : FERIYA AKCAY*

- *feriya.ozturk@kizilay.org.tr*

- *TURKISH RED CRESCENT ASSOCIATION / Disaster Management Directorate*

- Disaster Preparation and Planning Specialist

- Proposal activity: *Human factors, and social, societal, and organisational aspects for disaster-resilient societies*

- SU-DRS01-2018-2019-2020

1

LARGE-SCALED MEDIA CAMPAIGNS FOR DISASTER RESILIENT SOCIETIES

- **broadcasts of «public service announcements and instructive videos» ➔ building the resilience of society and citizens**

- ***Objectives*:**
  - *Design and induce behavioural changes for citizens individually and collectively for mitigating risks, preparing for, reacting to, overcoming, and learning from disasters and emergencies*
  - *Implementation of novel communication and large- scaled broadcast technologies and media tools*
  - *To build a culture of risks and and disaster prevention awareness*
  - *Dissemination of these media tools internationally on (incrementally different languages)*
    - ***TV and radio broadcasting***
      - ***Public service announcements and instructive videos***
- ***Expected Results:***
  - *Mitigating the impacts of disasters and emergencies*
  - Achieving disaster-resilient societies that cope with disasters

2

Project participants:

- Looking for partners/other participants with the following expertise/ technology/ application field:

  - *Media and Communication Research Institutes*
  - *Media and Communication Training Centers / Universities*
  - *Media & Video Production Companies*
    - *Small or Medium Size Enterprises / Private for Profit Organizations*
  - *Broadcast Media Organs (local, regional, domestic and foreign TV & Radio Channels)*
    - *Small or Medium Size Enterprises / Private for Profit Organizations*
  - *Dissemination & Broadcast*

3