

International seminars and conferences

Events' Reports.

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TIEMS Virtual Annual Forum 2019, Goyang, 12-15 Nov. 2019



TIEMS
The International Emergency Management Society

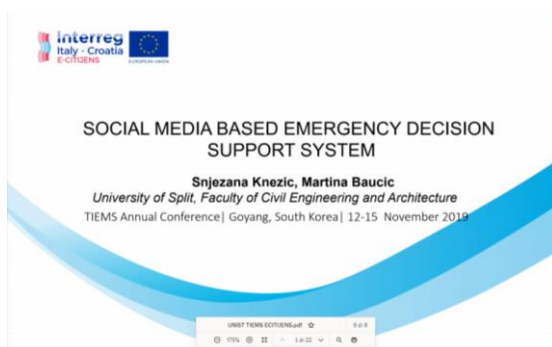
Martina BAUCIC, Faculty of Civil Engineering, Architecture and Geodesy, University of Split (PP3), presented the E-CITIJENS project and a related paper. The Conference took place in Goyang (South Korea) from 12 to 15 November 2019 and was an outstanding context for presenting the E-CITIJENS project and particularly the social media aspect within EDSS platform. The International Emergency Management Society (TIEMS) is a global forum for education, training and certification in emergency and disaster management. Founded in Washington, USA in 1993, its aim is to stimulate the exchange of information on the use of innovative methods and technologies within emergency and disaster management to improve society's ability to avoid, mitigate, respond to, and recover from natural and technological disasters.

The TIEMS activities include an Annual Forum, which is actively participated as it is usually combined with the TIEMS Annual Assembly. The 2019 Conference was attended by more than 100 international experts (users, planners, researchers, industry, managers, response personnel, practitioners, social scientists, and other interested parties within emergency and disaster management) from 15 countries. It was organised in a comprehensive program comprised of important presentations of papers on international emergency management issues. Prof. Knezic and Baucic contributed to the technical session n. 3 of Day 2 (13 Nov.) between 4pm and 6pm, local time. Prof. Knezic was also co-chair of the session, which saw the

participation of 6 speakers. **Mr. CHANG Woo Lee** presented a practical use of geospatial data for extreme-temperature disaster response, followed by Prof. Knezic and Baucic, who gave a presentation of the role of social-media in emergency decision and the EDSS that the E-CITIJENS project was at that time beginning to create. **Mr. NAMGYUN Kim** followed with a presentation about the development of a decision tree for response forest fire through the comparative case analysis of large wildfires. **Mr. TRAN Quoc Tin** introduced machine learning as an innovative approach to the management

of natural risks. Lastly, **Mr. VU Tuan Tran** closed the session by presenting a conceptual framework for intelligent natural disaster management system.

Within the online TIEMS Annual Forum 2019, **Prof. Snjezana KNEZIC** and **Prof.**



The E-CITIJENS project was also promoted through the July 2019 TIEMS Newsletter, which can be consulted at the following link http://www.tiems.info/images/pdfs/TIEMS_2019_Newsletter_July.pdf at page 35. The Newsletter is published since 2014 and is acknowledged across the emergency/disaster management community worldwide.

Proceedings of the TIEMS Annual Conference, 12-15 November 2019, Goyang, Korea

SOCIAL MEDIA BASED EMERGENCY DECISION SUPPORT SYSTEM

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Abstract

One of the most challenging parts in disaster and emergency management is the inclusion of citizens through social media. The key issue is the trustworthiness of the information posted by citizens and how to efficiently integrate them into the emergency operations. Apparently, the communication has to be two-way, from civil protection service to citizens and vice versa, fostering citizens to be as responsible as possible when tweet about emergency situations. This paper brings the idea which is being developed within Interreg project E-CITIJENS where citizens will be directly involved in awareness raising activities and in virtual communities on risk management. The proposed decision support system aims at enhancing the capacity of Italian and Croatian Civil Protection systems to reduce natural and man-made risks by means of advanced “social media based” emergency management tools. The solution in the project will still rely on human judgment and gathered posts from social media will be checked by emergency operators. The valid tweets will be used by commanders during the decision-making operations.

Keywords: emergency, disaster management, social media, citizens

Introduction

The use of social media in emergency management is ever challenging topic from the first appearance of such platforms in early 2000s. By introduction of smartphones it became even more actual since

REMTECH, CLIMTECH section, Ferrara (IT), 22 Sept. 2021

On 22 September 2021 between 14:30 and 16:30 Rome time, **Mr. Antonio CARDILLO**, Officer at the Civil Protection Department Molise Region (LP), presented the E-CITIJENS project in the framework of the [REMTECH Expo](#). REMTECH Expo is an



REMTECH EXPO
International event on Remediation, Coasts, Floods, Climate, Seismic risk, Regeneration, Industry
20-24 SEPTEMBER 2021
blended edition

environmental technological hub, specialized in the issues of rehabilitation, regeneration and sustainable development of territories. The hub sees among its supporting institutions the Italian Ministry of Foreign Affairs, the Italian Ministry for Environment, the Italian Trade Agency, the Italian Institute for Environmental Protection and Research, The Emilia-Romagna Region, among others. Each year a Fair is organised, which collects attention and participation from thousand visitors, hundreds of companies and experts.

The Remtech Expo is the only permanent international event taking place in Italy, with a specialization in the protection and sustainable development of territories - rehabilitation (reclamation, circular economy), natural risks (coasts, instability, climate, seismic), regeneration (ports, cities, cultural heritage, industry). The aim of the Conference is to share information on knowledge, innovation and case histories, to encourage the development of remediation processes and the application of new and sustainable technologies and bring together experts, problem owners and suppliers of available services and technologies.

In [2021](#), the Expo took place between 20th and 24th September with a blended format. Mr. Cardillo was hosted at the afternoon ClimTech session of 22nd September. The session was moderated by **Prof. Massimiliano FAZZINI** (University of Chieti), **Prof. Carlo BISCI** (University of Camerino) and **Mr. Endro MARTINI** (Italy Water Forum). Presentations were made by several climate experts: **Mr. Andrea GIULIACCI** (climate expert) illustrated environmental education projects for youth. After him, **Mr. Antonio CARDILLO** presented the EDSS platform and



explained how it creates events scenario thanks to the acquisition and integration of different types of data, including those voluntarily provided by citizens through their social media profiles. Presentations continued with **Mr. Pierluigi RANDI** (MeteoPRO) illustrating the role of technicians, observation networks and remote sensing in providing information about extreme weather conditions. **Mr. Guido GRAZIANI** (Condifesa Bologna Ferrara) made a presentation about the impact of climate change on agriculture and, as last speaker of the session, **Mr. Teodoro GEORGIADIS** (CNR – IBE) illustrate the World Meteorological

Organisation (WMO)'s guide to climatological practices suggesting the usefulness of knowledge integration.

FireSpill “Disaster Management” International Conference, Split (HR), 21-22 Oct. 2021

As part of the dissemination activities, **Mr. Ognjen ČAVAR**, Project Manager at Split and Dalmatia County (PP1) and **Prof. Martina BAUCIC** from the Faculty of Civil Engineering, Architecture and Geodesy, University of Split (PP3), presented the E-CITIJENS project during the "Disaster Management" International Conference organised by the Split and Dalmatia County under the [FIRESPLILL](#) Interreg Italy-Croatia project. The two-day international hybrid conference was held at Hotel Atrium in Split and brought together 75 participants among representatives of regional and local authorities (Istria County, Vukovar-Srijem County, Dubrovnik-Neretva County, Osijek-Baranja County, Grad Solin etc.), development agencies (ARPA FVG, RERA SD etc.), the scientific community, institutions and rescue services (Alpine Rescue Service Split) from both Croatia and Italy.

The E-CITIJENS project was presented on 22 October, along with other European Territorial Cooperation projects focusing on climate changes adaptation and disaster risk prevention. The other presented projects were: the Interreg Italy-Croatia PMO Gate Project presented by **Ms. Ivica ŠITUM** from PI RERA S.D; the Interreg Italy-Croatia STREAM Project presented by **Ms. Ana MARIČIĆ** from ZADRA NOVA, and the Interreg ADRION TransCPEarlyWarning Project presented by **Mr. Ivan BUGARIN**, PI RERA S.D.



TIEMS Virtual Annual Forum 2021, in Paris, 6-10 Dec. 2021

The 2021 TIEMS Annual Hybrid Forum took place between 6th and 10th December and was organised in Paris (FR) and had as main topic new emergency management in a resilience era facing health, climate and energy challenges. The online conference was well attended all through the whole week, with close to 1000 attendees from more than 70 countries.



Prof. **Martina BAUCIC** from the Faculty of Civil Engineering, Architecture and Geodesy, University of Split (PP3) contributed to session 5 “Decision Support” of the Conference on Tuesday 7 December at 14:25. The session, moderated by **Mr. Roman TANDLICH**, opened with a Keynote speech by **Mr.**



Jeffrey STERN, Superintendent, Emergency Management Institute, [FEMA](#). Dr. Stern served for more than three decades as an emergency manager, first responder, agency executive, adviser, and consultant. He presented how the US Federal Government addresses health, climate and energy challenges through the FEMA’s Emergency Management Institute.

In this context, Prof. Baucic presented the E-CITIJENS project’s results in the creation of the EDSS, illustrating the platform’s functioning with a focus on events’ detection and geo-localisation as well as to its social media component, including the semantic analysis of social media posts and explaining how the project tried to overcome sources of semantic heterogeneity by defining a set of scores to be attributed to identified terminology in social media posts, across to three addressed target risks (earthquakes, floods and fires).



The following speakers in the session were **Ms. Shayla CLARKE** and **Ms. David WILLIAMS**, who presented aspects of limited English proficiency in preparedness fieldwork.

All sessions were recorded and are available at: <https://tiems.info/index.php/tiems-2020-virtual-annual-conference-videos>.

CISAP 10, Florence (IT), 8-11 May 2022



The International Conference on Safety & Environment in Process & Power Industry was held between 8 and 11 May 2022. The event was organized the Italian Association of Chemical

Engineering ([AIDIC](#)) and was a successful forum on process safety, risk assessment and management. The very rich Conference [technical program](#) was structured in parallel sessions, which were held over three days. Prof. Giacomo ANTONIONI and Prof. Valentina DI TALIA from the University of Bologna (PP5) presented a paper during the session called “Multi-risk assessment, resilience and regulatory issues” on 10 May, between 9:20 and 10:40. The paper is titled “The Integration of Social Media Data in Emergency Management: an innovative Decision Support System”. Professor Antonioni chaired the session, which saw contributions of several academic researchers. Following a list of the addressed topics:

- resilience assessment of chemical process systems under uncertain disruptions based on catastrophe theory and dynamic bayesian network
- investigation on effective fighting technology for lib fire
- a quantitative framework for resilience assessment of complex engineered systems under uncertainty
- the integration of social media data in emergency management: an innovative decision support system.



ASITA 2022, Genoa (IT), 20-24 June 2022



The National Conference of Geomatics and Geographical Information was organised in Genoa (IT) by the Italian Federation of Scientific Associations for Spatial and Environmental Information ([ASITA](#)). The ASITA [Conference](#) is an opportunity for researchers, operators, teachers, professionals, public and private users, organizations and companies operating in the various sectors of surveying, management and representation of territorial and environmental data to meet. Its scientific objective is to encourage discussion and in-depth analysis of specific topics while promoting a multidisciplinary and integrated vision of the Geomatics sector.

The 2022 ASITA Conference focused on “Geomatics for the Green and Digital Transition”. In this context, **Mr. Antonio CARDILLO**, Officer at the Civil Protection Department Molise Region (LP), presented the E-CITIJENS project on 22 September between 14:30 and 16:30 within the framework of the session on “[Geodata and models for urban and regional planning](#)”, moderated by the Prof. **Antonio GANGA**, University of Sassari. In this session Ms. **Valentina ADINOLFI** and colleagues from the University of Salerno

presented a model for measuring green performance for urban planning of settlements. **Mr. Robert LAURINI**, Knowledge Systems Institute (USA) and University of Lyon (France) explained how semantic and geometric interoperability in the geographical knowledge base can help a better urban and regional planning. **Prof. Matteo SCAMPORRINO** and colleagues from the Florence University illustrated how big data and remote surveys are changing analysis of sustainable mobility in a GIS environment. Prof. **Eva Savina MALINVERNI** and colleagues from the Polytechnic University of Marche, illustrated the mission of the [GAP Geomatic](#): Geomatic Application and Processing.





Regione Molise
IV Dipartimento Governo del Territorio
Servizio di Protezione Civile



COMUNICATO STAMPA

Presentazione della piattaforma EDSS realizzata dalla Regione Molise nell'ambito del progetto E-Citijens alla Conferenza Nazionale della Geomatica e dell'Informazione geografica

Genova, 22 giugno 2022

ASITA è la confederazione nazionale delle organizzazioni che si occupano di geomatica ed informazioni geografiche.

Quest'anno la Conferenza ASITA 2022 si tiene a Genova dal 20 al 24 giugno, con la partecipazione di professionisti, docenti, personale tecnico di enti territoriali e tutti coloro che operano nei diversi campi della Geomatica, confrontandosi nel tentativo di delinearne le cosiddette "best practices" utili ad un efficace trasferimento tecnologico, oggi più che mai necessario.

ASITA 2022 a Genova è una grande occasione per evidenziare il contributo che la Geomatica può fornire al territorio, alle sue strutture e alle infrastrutture in contesti che migrano dall'ambiente marino, ai paesaggi costieri fino all'entroterra e alle aree urbane, sullo sfondo del Piano Nazionale di Ripresa e Resilienza.

In questa cornice è stata presentata oggi, 22 giugno 2022, la piattaforma EDSS sviluppata dalla Regione Molise nell'ambito del progetto E-Citijens dall'ing. Antonio Cardillo, progettista della EDSS platform e funzionario del Servizio di Protezione Civile Regionale. La piattaforma EDSS è una piattaforma informatica di supporto alle decisioni che consente di creare lo scenario d'evento in caso di disastro naturale, anche attraverso una componente di intelligenza artificiale ed è basata sia su informazioni provenienti da fonti istituzionali, ma anche dai social media, per cui il cittadino social diventa un sensore mobile in caso di evento calamitoso. La piattaforma EDSS con la creazione degli scenari di evento, supporta gli operatori delle sale operative ad attivare risorse adeguate all'evento stesso.

Tra le azioni sviluppate, e che stanno rappresentando best practices in campo nazionale ed internazionale è di sicuro l'attività sviluppata in accordo con l'Ufficio Scolastico Regionale del Molise sulle strategie comunicative a supporto delle decisioni in emergenza (EDSS), attraverso la costituzione la rete degli "Ambasciatori della sicurezza". Il protocollo fra i due Enti mira ad enfatizzare l'uso consapevole dei social fra adolescenti, aderendo di fatto al Sendai Framework del 2016 delle Nazioni Unite (UNHRR), che ha sdoganato i social ritenendoli utili fonti d'informazione in caso di emergenza.

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