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#### **Table Of Contents**

PAGE	LEAD AUTHOR	TITLE
II		TABLE OF CONTENTS
VI		HOSTS WELCOME TO THE CONFERENCE
VIII		FOREWORD FROM TIEMS PRESIDENT
IX		EDITORS INTRODUCTION TO THE

**PROCEEDINGS** 

REFERE	REFEREED CONFERENCE PAPERS		
1	COMMUNITY RE	ESILIENCE & VULNERABILITIES	
2	SRI GOWRI SANKER	DAMAGE DUE TO TSUNAMI AND DISASTER RESILIENT HOUSE CONSTRUCTION ACTIVITIES IN SRI LANKA	
13	KAJAL SINGH	DISASTER MANAGEMENT IN INDIA - TIME TO FOCUS ON PREVENTING THE NEXT DISASTER	
22	GIS EMERGENCY MANAGEMENT		
23	MEHMET ZEKI COŞKUN	DEVELOPING A MANAGEMENT MODEL AND DATA COLLECTION FOR EMERGENCY INCIDENTS USING MOBIL-GIS	
31	LUC. THÉVENAZ	MONITORING OF LARGE STRUCTURES FOR SAFETY ISSUES USING BRILLOUIN DISTRIBUTED SENSING	
43	TURAN ERDEN	SEARCHING THE NEW LOCATIONS AND DETERMINING THE LATEST STATUS OF FIRE STATIONS WITH GIS IN ISTANBUL	
52	MEEAD SABERI	INTELLIGENT GIS BASED EMERGENCY VEHICLE MANAGEMENT	
57	WEB TECHNOLO	OGIES IN EMERGENCY MANAGEMENT	
58	SUNG JOONG LEE	THE KEY RISK INDICATORS OF WEB SITE SECURITY	
65	JOZEF HERETIK	DISTANT WIRELESS TRANSMISSION OF PICTURE AND SOUND - NEW AID IN CRISIS MANAGEMENT	
68	ULRICH RAAPE	WEBSERVICE INTEROPERABILITY FOR EMERGENCY MANAGEMENT DECISION SUPPORT	
77	CHRISTOPHER D. HEKIMIAN	INTERNET PUTS EMERGENCY PREPAREDNESS WITHIN REACH OF SCHOOLS	

84	CONSEQUENCE	MODELLING AND DECISION SUPPORT
85	ALAN JONES	RESPONDING TO BIO-TERRORISM WITH THE
0.5	TILITIV JOINES	AID OF HAZARD MODELLING
96		A PRELIMINARY STUDY ON QUICK
	QU GUOSHENG	ESTIMATING MODEL OF EARTHQUAKE
70	QC GCOSHEITG	CATASTROPHE -AN EXAMPLE OF PAKISTAN
		EARTHQUAKE
102	MUHAMMED	DEVELOPING AN EARTHQUAKE LOSS
102	ŞAHIN	ESTIMATION PROGRAM FOR TURKEY
107	FIRE FIGHTING	
		TEST AND EVALUATION ON THE FIRE
108	TAE SHIK LEE	EXTINGUISHING USING THE REINFORCED
		EXTINGUISHING AGENCY
		INSTANTANEOUS LIQUID RELEASE FROM
115	NILS	RAILTANKER: THE INFLUENCE OF NOISE
110	ROSMULLER	SHIELDS ON POOL SHAPE AND POOL
		SURFACE
123	NILS	COOLING A RAILTANKER BEHIND A NOISE
120	ROSMULLER	SHIELD
132	INFORMATION	& COMMUNICATIONS
	DELIA	COMPARISON OF EMERGENCY SCENARIOS
133	BERROUARD	FOR FUTURE PUBLIC SAFETY
	BERGGERRE	COMMUNICATIONS
		EUROPEAN HARMONIZATION IN PUBLIC
142	ADRIAN	SAFETY COMMUNICATION AND
	BOUKALOV	INFORMATION SYSTEMS - THE NARTUS
		PROJECT
150	NATURAL DISAS	STER – IMPACTS & RESPONSES
		THE PRELIMINARY DESIGN AND
151	LI YIGANG	IMPLEMENTATION OF A GLOBAL
		EARTHQUAKE DISASTER ALERT SYSTEM
160	MUHAMMED	TURKEY DISASTER INFORMATION SYSTEM:
	ŞAHIN	A CASE STUDY FOR ISTANBUL
	ACHIZANI	RAPID ASSESSMENT OF THE DELIVERY OF
167	ASHKAN	MENTAL HEALTH SERVICES TO HEALTHY
	MOWLA	SURVIVORS OF THE EARTHQUAKE IN BAM,
	IXANI	IRAN
175	IVAN	WEATHER AND ITS CONSEQUENCES TO
	OBRUSNIK  CDITICAL INFD	EMERGENCIES ASTRUCTURE CRISIS / EMERGENCY
185	MANAGEMENT	ASTRUCTURE CRISIS / ENTERGENCY
186		A TOOL TO FORMALISE AND TEST ATTACK
	CLAUDIO	SCENARIOS OF SOFTWARE INTENSIVE
	BALDUCELLI	CRITICAL INFRASTRUCTURES
100	MADTIN ENDIC	A STEP FORWARD IN THE MODERN
198	MARTIN ENDIG	EUROPEAN CRISIS MANAGEMENT SUPPORT

206	JOSIP KASUM	SECURITY OF NON-CONVENTION SHIPS AND NAUTICAL TOURISM PORTS
		STUDY OF EFFECTIVE FACTORS IN
212	SAEED	PERFORMANCE OF URBAN
	GIVEHCHI	TRANSPORTATION NETWORK DURING
	OI / BITOIN	EMERGENCY CONDITION
219	BUSINESS CONT	INUITY AND ORGANISATIONAL SAFETY
		THE ROLE OF GOVERNMENT TO SUPPORT
220	WE WILL GOOK	PRIVATE SECTOR'S PRE-DISASTER
220	WE KUM-SOOK	ACTIVITIES IN KOREA: NATURAL DISASTER
		MITIGATION AND PREPAREDNESS
227	KERSTIN	MONITORING AND INFLUENCING SAFETY
227	ERIKSSON	THROUGH SAFETY CULTURE
235	TSUNAMI 2004 –	IMPROVING EMERGENCY MANAGEMENT
		EFFECT OF M 9.0 26/12 ON SRI LANKA:
	CDI COWDI	SOCIO-ECONOMIC IMPACT EVALUATION OF
236	SRI GOWRI SANKER	SRI LANKA'S TSUNAMI DISASTER AND
	SANKER	CRITICAL REVIEW OF THE NEEDED
		COUNTERMEASURES.
244	IMPROVING EM	ERGENCY MANAGEMENT PRACTICE
245	CHRISTIAN	THEORETICAL APPROACHES TO
245	UHR	EMERGENCY RESPONSE MANAGEMENT
		THE LESSONS LEARNED FROM THE
253	KISUNG BANG	EVALUATION OF EMERGENCY
233	KISUNU DANU	MANAGEMENT FOR LOCAL GOVERNMENTS
		IN KOREA
		INTEGRATION OF UBUNTU WITH THE
258	JAMES HAGEN	DESIGN AND PRACTICE OF EMERGENCY
		MANAGEMENT TRAINING PRINCIPLES
264	RISK ASSESSME	NT AND PROFESSIONAL PRACTICE
		QUANTITATIVE HAZARD ANALYSIS OF
265	YOUNG-JAI LEE	INFORMATION SYSTEMS USING
		PROBABILISTIC RISK ANALYSIS METHOD
276	VALERY D.	COAL MINE RISKS MANAGEMENT SYSTEM
	AYUROV	PATTERNS
284	RUDOLF	"DOMINAFTER PROJECT
	URBAN	DEVELOPING EMERGENCY MANAGEMENT
	OILD/III	OPERATION INTEROPERABILITY"
290	DISASTER PRED	ICTION / ESTIMATION
291	YUKIO	EFFORTS OF EARTHQUAKE DISASTER
	FUJINAWA	MITIGATION USING INFORMATION BEFORE
	TUJINAWA	S-WAVE ARRIVAL
301	K.T. CHANG	PREDICTING THE FAILURE OF SLOPE USING
301	K.I. CHANG	THE TRS SENSOR

306	HUMANITARIAN	RESPONSES TO EMERGENCIES
307	KHALID HASNAIN QURESHI	PAKISTAN'S EARTHQUAKE – THE LASTING IMPACT
316	KRISTIN S. SCHARFFSCHER	"LISTEN TO THE WOMEN" - LINKING RELIEF AGENCIES AND LOCAL CAPACITIES IN COMPLEX EMERGENCY OPERATIONS
327	BJØRN IVAR KRUKE	HUMANITARIAN EMERGENCY MANAGEMENT: SECTOR CHARACTERISTICS AND THE POTENTIAL FOR COORDINATION
342	NON REVIEWED	PAPERS
343	DUKE JEONG	DEVELOPMENT OF DISASTER WARNING SYSTEM USING DMB (DIGITAL MULTIMEDIA BROADCASTING)
349	DUKE JEONG	A RESEARCH ON FOR DISASTER DAMAGE PREDICTION MODEL BY DATA MINING TECHNIQUE

355	AUTHORS INDEX
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## Welcome from the Host of the 2006 TIEMS Conference

I sincerely welcome every participant, attending the 13th TIEMS Annual Conference in Seoul from 25 countries and hope each can share in the professional knowledge of TIEMS participants, who are not only from far located countries as Africa but also China, Japan, Nepal, Pakistan, India, Sri Lanka, and many more. In addition, I would like to express my thanks to the keynote speakers, who play major roles in their fields of emergency management.

My thanks are also given to the Korean co-hosts for the Conference, such as the Korea BCP Association and Electronic Times, with the governmental support of the National Emergency Management Agency (NEMA) of Korea. Furthermore, I appreciate the authorities of business enterprises, including IT and construction business, who by exhibiting advanced technologies and other products and supporting the event financially, have helped to ensure the successful progress of the Conference.

Over the past few years, we have seen a series of disasters in all corners of the world. These have included both natural disasters such as the South East Asian Tsunami, Indian Earthquake, Hurricane Katrina, and several major flooding and wildfire events. There have also been a number of man-made disasters including the London Bombings, and the accidental release of chemicals from a factory in China leaving millions without the most basic commodity of drinking water. These disasters as well as the continued threat of terrorism and the new, evolving and growing threats to our safety such as bird flu and climate change to name but a few also remind us all of the need for a globally co-ordinated and integrated approach to emergency management.

Transport, communications and power supply networks have also demonstrated their criticality and vulnerability and fighting the consequences of such vulnerability requires preplanned resource allocation on a large scale, based on robust emergency management strategies. With respect to the global consequences of these and many other new threats, a global approach to the understanding, mitigation and response is required. New and existing technological advances are capable of helping, but may also be a cause of risks themselves.

This conference on the advances in the global emergency management and the support they offer, it is hoped will encourage beneficial discussion to shape the future of emergency management, and ensure that the world is prepared for these threats and resilience is developed in the following areas:

- Global approach to new threats, such as contagious diseases, terrorism and critical infrastructures. These threats have to be identified, their transmission mechanisms have to be modelled and defence strategies developed and prepared
- Developing new methods, knowledge and organisations in order to better understand their nature by scientific research and major event investigation. Training needs in order to enhance skills and practices for professionals and volunteers are identified, improving the resilience after major events
- Cooperation and communication across scientific disciplines and practitioners in order to
  effectively deal with these threats in practice. This challenge covers engineering design
  and social sciences, various world regions, stakeholders participation before, during and
  after major events on a collaborative and knowledge based approach

• Application of technologies to support knowledge management, monitoring, notification and decision support in emergencies.

With this in mind, I re-emphasize that international experts from all over the world will gather together, discuss a variety of issues, and share their own experience and knowledge with others.

I strongly hope that each delegate of the conference will enjoy the wide and varied programme that has been put together including the several tours of Korea and welcoming reception, the Korean ceremony of the National Disaster Prevention Day and much more, and thus, will remember this event as an unforgettable one.

Dr. Young jai Lee,
TIEMS Vice President and Conference host

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8th May 2006 – South Korea

## Foreword from the TIEMS President

The power of Mother Nature and the damage that it can cause has been demonstrated to us again in the last year with hurricane Katrina, and the earthquake in Pakistan. And it is these catastrophes along with other terrorist atrocities of the past years that unfortunately serve to illustrate the importance and increased need for global cooperation in emergency management. TIEMS are therefore continuing our global focus, and the society has made measurable developments in the last year towards our goals and will continue with the help of our members and supporters to create stronger links and networks for information sharing on emergency management worldwide.

Our annual conference in Seoul, Korea, is such an opportunity to create these links and is more important than ever with nearly 60 international papers for presentation at the conference, (the ones published in these proceedings, those delivered in due time for printing). Overall the papers, it is felt give a broad international view of emergency management in an international perspective, and with these proceedings TIEMS like to stimulate a continuous international dialogue and debate on the many varied elements of the profession and its practice.

The number of participants this year is expected to be close to 600 from more than 20 countries, and representing a variety of emergency management areas, clearly illustrating a good international foundation for TIEMS, and that the program is of wide interest. We feel that such open international gatherings like this, give an excellent opportunity for exchange of ideas and discussions on ways and means to make the world safer, and hope will lead to increased international cooperation in this highly non-border problem area.

TIEMS is an international non political and not for profit society and subsequently has limited financial resources. TIEMS 2006 would therefore not have been possible in the form it is presented without the financial support and help of the participants and sponsors and we are thankful to you all.

Special thanks go to Young-Jai Lee, Kyoo-Man Ha and Alan Jones, who have all worked closely with the proceedings and all details of the arrangements and Ulrich Raape, who has been responsible for the TIEMS WEB-site, and many elements to improve our services to participants of the conference. Following the conference the proceedings will also be published on the TIEMS web site, www.tiems.org

Finally special thanks go to Korean NEMA, Korea Business Continuity Planning Association and the TIEMS Korean Chapter, who have all supported the conference forming a local organising committee, preparing all the practical arrangements. HANATOUR Service Inc. has also assisted by arranging travel and accommodation for participants and tour events during the conference, which they have made an excellent job of making the conference a professional event.

Organising of the conference has been hectic at times, but seeing the fruitful result of the work, is very satisfying, and we hope that you will all enjoy your time in Seoul.

K. Harald Drager TIEMS President <a href="mailto:khdrager@online.no">khdrager@online.no</a> 30<sup>th</sup> April 2006 – Oslo

# **Editors Introduction to the Conference Proceedings**

With each year that goes by, we face new challenges and emergencies, which seem to push the boundaries of which we work one step further, and demand new solutions to ensure they are dealt with as quickly and efficiently as possible. This peer-reviewed collection of papers provides details of many of the emergencies that have faced the world in the past year and also those developments, which have been made to manage them. Rather than simply expressing heroic tales they provide a forum for critical evaluation of responses and reporting of new approaches to encourage debate and further develop the profession of emergency management.

The papers as always convey what has become a hallmark of the TIEMS conference over the years, to provide an interchange between theory and practice with papers from practitioners, researchers, industry and policy makers, which we hope will provide the reader with a balanced and objective view.

One important element underpinning many of the papers is that of the importance of disaster prevention, which is particularly pertinent as this year's conference coincides with the Korean National Disaster Prevention Day. Many of the papers appear to express strong opinion for increased focus on prevention, and although it is recognised that we will almost certainly never be able to prevent all emergencies occurring by building more resilient communities we will endeavour to reduce the critical impacts.

A further key theme which seem to be brought to the fore in many of the papers is that of the importance of disaster prediction, an important lesson which the world learnt from the Tsunami of 2004. Many go on to discuss new developments in this area and others examining the best ways of conveying this information to populations likely to be impacted.

Finally I would like to take this opportunity to thank the paper review committee for their time and support in reviewing the papers for these proceeding, though I am sure they will all agree with me that it has been a pleasure and has provided an insight into many new and developing areas.

Alan Jones
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10<sup>th</sup> May 2006 – United Kingdom