



FINAL PROGRAM FOR TIEMS 2013 ANNUAL CONFERENCE

Velaux, France 1 – 4 October 2013

under high patronage of French Government





Organisers







Sponsors



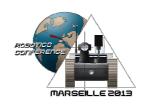












Schedule of the 1 st Conference Day / Tuesday, October 1, 2013 – Pre-seminar, visits		
09:00 – 10:00	BDRFD School: presentation of the week schedule Amphitheatre	
10:30	Visit of Bouches-du-Rhone Fire Department (SDIS 13) HQ in Marseilles, focus on forest fires, floods and EMS crisis management. In addition, presentation of advanced technologies and UGV+ UAV use.	
12:00	Lunch at SDIS13 HQ	
14:00	Visit to the regional (southern of France) Civil protection HQ in Aix en Provence, dedicated to Forest Fires, floods and EMS crisis management. In addition, presentation of the national water bombers Aircraft management	

Schedule of the 2 nd Conference Day / Wednesday, October 2, 2013 – Pre-seminar, demos			
09:00	Presentation and drill of Hazmat team of Bouches-du-Rhone Fire department (BDRFD), including UGVs use. Topic: "Simulating a terrorist hidden lab. accident" Head of drill: Lieutenant-colonel Vincent HONORÉ BDRFD School training facility		
12:00	Lunch at BDRFD School		
14:00 - 17:00	Visit to the BDRFD School with demonstration of simulation tools during a training session, involving 12 trainees in the same virtual environment. Head of drill: Captain Sebastien LAHAYE	Parallel medical Session: "Organization, rescue and medical support in French fire services" Chair: Med. Col. Philippe AGOPIAN (France):	
		Laurence AUTES: "Medical support for fire service missions" Philippe AGOPIAN:	
	Grand Puech # 207	"R&D in French fire service: case study of bushfire clother"	
19:00	Icebreaker evening at Hotel Roi René, Aix-en-Provence		

Dress code: casual French fire service: tenue nº43 French interarmes: D



	Schedule of 3 rd Conference Day / Thursday, October 3, 2013 - Conference academic day	
08:00	Welcome Address by Mr. Vincent BERTON, chief of staff of regional Prefect, state representative.	Amphitheatre
	Welcome Address Colonel Gérard PATIMO, SDIS 13 Deputy Fire Chief Officer.	
	Opening Speech K. Harald DRAGER, TIEMS President (Norway): Conference Chairn	nan
08:50	Session 1: "Cybernetics and Crisis Management a New Paradigm?" Co-Chairs: Catherine FARGEON and Ji (Jack) Zhang	Amphitheatre
	Catherine FARGEON, French Defence Office (France), Keynote speech: "Advanced Artificial Intelligence Dedicated to UGVs Development"	
	Charles KELLY (USA):	
	"Robotics and Humanitarian Interventions: Challenges of Challenging Environments"	
	Philippe CHROBOCINSKI (France): "The Use of UGVs in Earthquake Response Operations"	
	Patrick PERAS and Stephane MOZZICONACCI (France)	
	"Eca robotics, projects for future, overview on a six years R&D end users project"	
10:15	CASSIDIAN Coffee break in the showroom	
10:45	Session 2 : "Needs, Constraints and Capabilities," Co-Chairs: Jean-Paul MONET and Stela Petrescu	Amphitheatre
	Jean-Paul MONET, Sdis 13 (France), Keynote Speech: "Needs and Constraints for Civil protection Robotic Solutions"	,
	Roberto SETOLA (Italy):	
	"Indoor Localization and Connectivity Maintenance in Rescue" Vincent Schoepff (France):	
	"About Embedded Sensors on Robotic Platforms, Technical Features"	
	Roland LENAIN (France):	
	"High Speed and Safe Mobile Robot Control in Unstructured Environments"	
	Gordan PEŠIĆ (Croatia): "Multifunctional Robotic System for CBRNE Application	
12:30	ECA Robotics Lunch at BDRFD School	

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13:45	Session 3 : "Lessons Learned and Ongoing Projects" Co-Chairs: Dirk SCHULTZ and Snjezana Knezic Amphitheatre		
	Dirk SCHULTZ, Fraunhofer FKIE (Germany), Keynote Speech: "About CBRNE land robotic research and development at Fraunhofer FKIE".		
	Vincent HONORE, Stephane MOZZICONACCI, (Fra		
	"Robots Cooperation Managing Radioactive Source Recovery" Mike Berry EDIS (USA):		
	"iRobot at Fukushima accident"		
	Thomas ERIKSSON (Sweden): "FUMO™ - the Fire-fighting Robot"		
	Nacer KOUIDER M'SIRDI (France): "Driving Simulator of All-Terrain Vehicles using SCANeR-Studio"		
15:30	DOK-ING Coffee break in the showroom		
15:45	TIEMS Annual General Meeting		
	Session 4 & 5: "Disaster Management: Response and Resilience" Chair: Audrey HEFFRON CASSERLEIGH Amphitheatre		
17:00	Audrey HEFFRON CASSERLEIGH, Florida University (USA), Keynote Speech: "Using Psychosocial Attributes in Terrorist Profiling to Identifying Potential Security Threats"		
19:00	Session 4: Co-Chairs: Audrey HEFFRON CASSERLEIGH and Guosheng QU	Session 5: Co-Chairs: Ranko BRITVIC and Shakir KATEA	
	Nina FROLOVA, Jean Bonnin, Valery Larionov,	Sainte Croix # 204 Mann FANG (China):	
	and Aleksander Ugarov (Russia): "Uncertainties Of Earthquake Loss Estimation At	"Comparative Study on Beijing Residents' Risk Perception on Incidents of Pandemic Influenza,	
	Global Scale In Emergency Mode" Guosheng QU (China):	Subway Terrorist Scenario and Torrential Rain" Ranko BRITVIC and Ana Mikacic (Croatia):	
	"Capacity Building for National-wide Search and Rescue Team and Preparedness of Earthquake Catastrophe"	"IF REACT – Innovative First Responder Ensembles Against CBRN Terrorism"	
	Haiying WANG, Guosheng Qu, Gang Sun and Chun Ouyang (China): "Phases of Earthquake Emergency Response Period"	Meen CHHETRI (Nepal): "Significance of Cooperation and Coordination in International Disaster Management System"	
	Norio MAKI (Japan): "How Resilient is Japan? - Response and Recovery Lessons from the 1995 Kobe and 2011 Tohoku Disasters"	Takahiro ONO (Japan): "Business Continuity Planning Status of the Private Sector and DRR Capacity of the Public Sector in the Asia Pacific Region"	
	TIEMS Gala Dinner at		
20:00	Cercle Mixte de Garnison MARSEILLE, with Awards and Presentation of TIEMS 2014 in Niigata, Japan by Norio Maki		

Dress code: formal
French fire service: tenue nº21, soirée en civil
French interarmes: B2, soirée en civil



Schedule of the 4 th Conference Day / Friday, October 4, 2013 - Conference demo day				
08:30	Press meeting	Press meeting Longjean # 235		
09:00	Demonstration of Robots at fire school training facility	Session 6 : Security and Safety Technologies Co-Chairs: Jaroslav PEJCOCH and Young-Jai LEE Amphitheatre		
9:00	iRobot	Yasutake SAYANAGI (Japan): "Study with the In-Datacenter Backup Office for Banks" Jaroslav PEJCOCH (Czech Republic): "The Vulnerability and Resiliency in our Globalized and Virtualized World"		
9:30	Nexter	Ji (Jack) ZHANG (China): "IOT Technology and its Application in the Crisis Pre-alert Management"		
10:00	ECA	Young-Jai LEE (Korea): "Developing a Platform for Disaster Risk Reduction Technology Dealings"		
10:30	CASSIDIAN Coffee break in the sh	CASSIDIAN Coffee break in the showroom		
11:00	Demonstration of Robots at fire school training facility	Session 7: Security and Safety Technologies Co-Chairs: Neil DUFTY and Susan SMITH Amphitheatre		
		Susan MADISON SMITH and Theresa Hunter (USA): "Training & Preparedness: Preparing Healthcare Facilities to Effectively Respond to a Disaster"		
11:00	Tecdron	Frank HOEN (Netherlands): "Child Alerts; Mobilizing the Masses with Zero Marketing Budget - AMBER Alert Europe: a Crowd-sourcing Case Study"		
11:30	Telerob	Neil DUFTY (Australia): "Recent Research in Community Disaster Education and its Implications for Emergency Management"		
12:00	DOK-ING	Mi-yun PARK, Mi-na Kim, Jong-bok Park and Yee- sub Oh (Korea): "The Development of Safety Standard in Law System using the Accident Cause-result Relational Approach Method"		
12:30	Lunch			

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14:00	Session 8 & 9: Preparedness, ICT and new Crisis Management		
14:00	Gilles HELSCHGER, TOTAL Petrochemicals, HSEQ manager (France) Keynote Speech: "A TOTAL Approach to Crisis: About an Industrial Common ICT Tool for Crisis Management".		
	Session 8: Co-Chairs: Gilles HELSCHGER and Mohammed SHUAIB	Session 9: Co-Chairs: Nina FROLOVA and Samantha UENO	
	Amphitheatre	Sainte Croix # 204	
	Mohamed SEDIRI, Nada Matta, Sophie Loriette and Alain Hugerot (France): "Decision Support Through the Experience Feedback of Crisis Management"	C. DI MAURO, S. Bologna, M. Buldrini, A. Lazari, C. Leone, V. Rosato, L. Tirone and P.Trucco (Italy): "TIEMS Italian Chapter – National Emergency Management Experience and Future Challenges"	
	Snjezana KNEZIC (Croatia): "Development of a Sustainable Flood Disaster Management Plan for Trans-boundary River Basins"	Dan Manastireanu and Stela PETRESCU (Romania): "Medical Management in Disasters"	
	Chris KYDD (France): "Industry Autonomous Robots for Gas and Oil Sites Challenge"	Susan MADISON SMITH and Theresa Hunter (USA): "Preventing or Responding to Violent Attacks in Schools: Education, Training and Facility Improvement Strategies"	
15:30	Coffee break in the showroom		
16:15	Summing up, Conclusions and Closure Declaration Co-Chairs: K. Harald DRAGER and Guosheng QU Amphitheatre		

POSTERS			
1.	Samantha UENO	UAV's for Hazard Monitoring and Disaster Recovery Earth Observation Data	UK/ Japan
2.	Kenji WATANABE	Conceptual Design of Supply Chain Management Coding Scheme for Foods and" Beverages in large-area Disasters based on PPP (Public-Private Partnership)"	Japan
3.	Stephane NORMAND	UGV Sispeo project, a French R&D consortium	France
4.	4. Gilles FOURNIER AIRBEAM : AIRborne Information for Emergency Situal Awareness and Monitoring "UGV Sispeo project, a French R&D consortium		France
5.	Gilles AGOPIAN	Gilles AGOPIAN About SMARTFIRE, FP7 project about Clever PPE France	
6.	Eric RODRIGUEZ	About AMBUCOM, FP7 project on communicating ambulances	France

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	EXHIBITORS & SPONSORS			
#	Company	Company Profile		
1	ECA www.eca-robotics.com ECA www.eca-robotics.com	ECA Robotics is specialized in the design and manufacture of Autonomous and Remote Controlled Unmanned Vehicles: <u>Unmanned Surface Vehicles</u> (USV), <u>Autonomous Underwater Vehicles</u> (AUV) and <u>Unmanned Ground Vehicles</u> (UGV). Our customers are the Defence industry (Navy and Land Forces) as well as civil industries (Oil & Gas, Nuclear, Fire brigades and Security). Our mission is to excel in robotics for our Defence & Civil customers, helping them to save lives and to execute their business with serenity, now and in the future.		
	GOLD SPONSOR	ECA Robotics designs and delivers state of the art robotic and intelligent solutions. Established in 1936 as a R&D and patent deposit company, we designed the first Unmanned Underwater Mine Disposal Vehicle with integrated Real Time and Artificial Intelligence on board in 1960. Since then we designed and produced more than 800 robots. The protection of lives is the major underlying goal for the development of new robotic systems, be it in the context of conflicts, terrorist threats, nuclear power industry or deep offshore. ECA Robotics offers a range of products and services for: Detection, inspection, destruction of mines Inspection systems for nuclear power		
		 plants Control & Command Systems Ground / land robots for Anti – terrorist missions, hazmat etc. 		

CASSIDIAN

http://www.cassidian.com/en GB/



SPONSOR

Our customers across the globe are seeking access to the latest available technologies to meet their challenges and ultimately secure future successes. We provide sustainable system solutions and value-added services, permanently integrating innovation and excellence into our offerings.

Our Mission:

"We support the people whose mission is to protect the World."

About Cassidian

Cassidian, an EADS company, is a worldwide leader in global security solutions and systems, providing Lead Systems Integration and value-added products and services to civil and military customers around the globe: air systems (aircraft and unmanned aerial systems), land, naval and joint systems, intelligence and surveillance, cyber security, secure communications, test systems, missiles, services and support solutions.

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DOK-ING

http://dok-ing.hr/



SPONSOR

HUMANITARIAN DEMINING

Our solutions cope with dangerous process of clearing landmines and other remnants of war

UNDERGROUND MINING

Constant technological and technical advancements in mining drive our innovative solutions

COUNTER IED

Remotely controlled vehicles approved to be effective Counter IED solution

AUTOMOTIVE

Innovative and advanced technologies imprinted in unique electric car driving experience

FIREFIGHTING

Widespread application of our solution include a number of hazardous industries

MYHMI

Your solution for the embedded tomorrow

Nexter Robotics http://www.nexter-group.fr



http://www.nexter-group.fr/en/videos-news

Nexter Robotics is a wholly owned subsidiary by Nexter Systems, fully dedicated to Unmanned Ground Systems (all sizes up to several tons) and UAV up to 25 kg for military and civilian security applications. Its efforts focus on robustness and reliability of platforms, as well as development of semi-autonomous capabilities to improve ease of use in stressful conditions on the field. Its robots can be equipped with most of standard sensors (day cameras, infrared cameras, CBRN detectors, etc.) and can be controlled from any type of existing computer (PC, Tablet, smart phone, etc.).

The company has the full spectrum of skills and capabilities required to design and make electronic, mechanical and software sub-systems involved in its robotic products. This gives the possibility to implement short loops with users, in order to adapt standard robots and/or make dedicated payloads compliant with their current needs.

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TELEEROB

<u>http://www.army-technology.com/contractors/mines/telerob/</u>



"To develop machines, equipment and systems that protect or replace human beings in situations where their presence would be either impossible of place them at great risk." – this is both the motto and the motivation of Telerob, a world-leading company specialized in EOD-robots and entire IEDD system solutions.

Telerob develops, manufactures and delivers a wide range of highly sophisticated systems and devices to customers in more than 60 countries around the world. Telerob's key business areas are:

- Remote-controlled EOD robots (tEODor and teleMAX)
- Completely equipped EOD/IEDD vehicles (TEL600)
- Special non-magnetic tools (NOMATOOLS)

Telerob products are designed and manufactured according to the highest quality standards of the defense and nuclear power industries. Telerob is certified to DIN ISO 9001 and acknowledged NATO supplier (NATO Supplier Code C5152) and development partner.

IROBOT

http://www.irobot.com/en/us/learn/defense.aspx



iRobot designs and builds robots that make a difference.

iRobot was founded in 1990 by Massachusetts Institute of Technology roboticists with the vision of making practical robots a reality.

In 2012, iRobot generated \$436 million in revenue and employed more than 500 of the robot industry's top professionals, including mechanical, electrical and software engineers and related support staff. iRobot stock trades on the NASDAQ stock market under the ticker symbol IRBT.

iRobot's corporate headquarters are located in Bedford, Mass. The company also has offices in California, the United Kingdom, China and Hong Kong.

iRobot's combat-proven robots protect those in harm's way and save lives every day. The robots perform multiple missions for troops and public safety professionals, enhancing situational awareness, reducing risk and increasing mission success. More than 5,000 have been delivered to military and civil defense forces worldwide.

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TECDRON

http://tecdron.com/accueil/?lang=en



TECDRON is a company that manufactures

remote-controlled or autonomous robots, ground and aquatic drones and manufactures accessories for robotic use :

(arm 6/8 axis, machinery for the manufacture of drones, motorized turrets for cameras...). We also provide robotic machinery and mecatronic systems on request for all kind of customers.. With our Cam workshop we can manufacture quickly whatever you need in the most robust materials. Our design office allows us to draw your future projects in 2D and 3D. Finaly, our laboratory is fully equipped to test all software, electronic and mechanical products. Our workshop equipment: 2 CNC Milling (3 and 4 axis),1 CNC Lathe (5 axis). Several ground and aquatic robots are currently available. They can be enhanced on request: materials, kind of control, photo and video equipments, sensors, dimensions, battery life and many others. An autonomous mode is also available, you can program a robot to drive along a path and come back to recharge its batteries when it is necessary.

You can also tell us how you want the robot to behave, our engineer will give you the solution that suits you

best.

This company have three very different departments:

Development / R&D. robots and drones are designed in this department

Manufacturing of robots for safety/security/defence
Manufacturing of industrial robots.

FORSEE

<u>http://www.forseepower.com/Wordpress/?lang=en</u>



Modeled for a market which is constantly evolving, keen to offering innovative solutions to its customers, **FORSEE** was established in 2011 (created by the merger and acquisition of several companies) and has made the **integration and assembly of industrial batteries its core business**. It focuses its activity on growing and innovative markets such as:

- Professional portable equipment,
- Electric transport
- Energy storage

FORSEE has unrivalled technical expertise and industrial resources, whether in electrochemical analysis, developing electronic systems for load management, the modeling and design of battery packs, or product industrialization. **As a system integrator**, FORSEE's business is to apply and combine the following skills to support its customers' equipment:

- Batteries (design and assembly of a group of accumulators)
- Battery Management System and electronic system for communication with support equipment
- Chargers

FORSEE designs, manufactures and assembles personalized solutions adapted to different business sectors and applications:

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PROLEXIA

http://www.prolexia.fr/index.php?L=1



<u>PROLEXIA Provides services around the</u> following activities:

Virtual Reality Application development, Virtual Prototyping, modeling and simulation tool development, 2D et 3D tools development and advanced technology consulting.

HELIOS

http://www.rs-helios.com/plus/list.php?tid=8



Since the founding of Haidexin in August 2000, the power vehicles have been widely used in the electricity, communication, oil field, seaport, mining and military industries in China. They have played an especially important role by supplying power at major events such as the Fujian Typhoon Saomai in 2006, the southern ice damage of 2008, the Wenchuan earthquake, Beijing Olympic Games, the 60th national day military parade of The People's Republic of China in 2009, and the earthquake in Yushu, Qinghai. Meanwhile, in the field of construction and production, they provided temporary power stations with one or more generators in parallel to solve power supply problems at large scale national construction projects.

The company has more than 30 patent technologies in aspects of function and appearance of power vehicles through careful implementation of ISO9000 and 3C national compulsory product attestation. Due to its professional strength, the company was invited in 2008 to become the drafting unit for industrial technical standards of mobile emergency power vehicles by the National Automobile Standardization Technical Committee. Haidexin was appointed.