

Monday, 31.05.2010 | 15:00 – 16:30

Plenary 2 b (MON 5.2): Critical Infrastructures in changing times

Critical infrastructure buildings, components and services, such as amongst others energy, water and food supply, sanitation, hospitals, schools, transportation by land, air and water, IT and communication technologies are essential assets for societies and economies to function. The critical infrastructures often play a crucial role within governments, the public and private sector and for society as a whole. To assure the expected level of functioning of critical infrastructures is vital for societies, to design and implement robust systems, components and services therefore key to reduce risks and to be prepared for disasters.

How can critical infrastructure buildings, components, systems and services be analysed and assessed in a comprehensive way to reduce their vulnerability and to improve their resilience to disastrous impacts? What is the role of the private sector within the context of critical infrastructures? What are potential future challenges of the international community with respect to globalisation, to climate change, terrorism, fragile states, cyber war, etc..?

The experts will elaborate on lessons learnt from former accidents and disasters, challenges and good practices. Additionally, the session should provide recommendations on how to tackle the increasing complexity of critical infrastructures due to their technical, geographical and organisational interdependencies.

Moderator:

Pickl Stefan



Prof. and Chair for Operations Research COMTESSA, Department of Computer Science, University Bundeswehr UBW Munich, Munich, Germany

Prof. Dr. Stefan Pickl studied mathematics, electrical engineering, pedagogy and philosophy at TU Darmstadt and EPFL Lausanne 1987-93. Dipl.-Ing. '93, Doctorate 1998 with award. Assistant Professor at Cologne University (Dr. habil. 2005; *venia legendi* "Mathematics"). Chair for Operations Research at UBW Munich since 2005.

Visiting Professor at University of New Mexico (USA), University Graz (Austria), Naval Postgraduate School Monterey, University of California at Berkeley.

Visiting scientist at SANDIA, Los Alamos National Lab, Santa Fe Institute for Complex Systems and MIT. Associated with Centre for the Advanced Study of Algorithms (CASA, USA), with Center for Network Innovation and Experimentation (CENETIX, USA).

Vice-chair of EURO working group "Experimental Economics", chair of advisory board of the German Society for Operations Research (GOR), advisory board of the German Society for Disaster and Emergency Management. International Research Programs, 80 publications, international Best-Paper-Awards '03, '05, '07.

Foundation of COMTESSA (Competence Center for Operations Research, Management of Intelligent Engineered Secure Systems & Algorithms) and the Academy for Highly Gifted Pupils in Munich.

Panellists:

Halbheer, Roger



Chief Security Advisor Microsoft Europe, Middle East, and Africa (EMEA,) Microsoft, Zurich, Switzerland

Roger Halbheer joined Microsoft as Chief Security Advisor of Microsoft Switzerland in 2001 and was promoted to the role of Chief Security Advisor for Microsoft Europe, the Middle East and Africa (EMEA) in February 2007. Roger leads a team of national Chief Security Advisors across EMEA who work with organizations in the commercial and public sectors on information technology issues and strategies. He is a trusted advisor to C-level executives, governments and law enforcement agencies and has established relationships with security communities and government agencies across the region. A Swiss national, Roger holds a Master of Computer Science degree from the Federal Institute of Technology in Zurich and is a Certified Information System Security Professional (CISSP).

Hämmerli, Bernhard M.



Prof. , University of Lucerne and University of Gjovic, Luzern, Switzerland

Dr. Bernhard Hämmerli is professor for Networking and Information Security. His main interest in research is information security and critical information infrastructure protection CIIP.

He has participated in three EU FP CIIP research program the last on is Protection and Trust in Financial Infrastructures www.parsifal-project.eu. He is editor of the European CIIP Newsletter called ECN www.irriis.eu. In associations he serves as president of the Swiss Informatics Society and is chair of scientific an international affairs in the Swiss Information Security Society ISSS. In 2007 he was assigned as seconded national expert from Switzerland to Joint Research Centre of the European Commission. He is now chairing the CIP task force at the centre for European Policy Studies CEPS in Brussels. In consulting his corporation Acris offers service in the same field.

Niebergall Hans J.



Attorney, Chairman Seafarers Cooperative Strategy for Safer Ports, Waterways, and Coastal Security, Hamburg, Germany

Hans Joachim Niebergall graduated at Wilhelms University in Münster, Germany in 1974. He made his advanced law degree at the court in Hamburg, Germany in 1977.

In 1974 he founded the Volkshochschule (University Extension), a German NGO and was Director until 1980. From 1976 to 1982 he was also the Majority leader of the CDU (Christian Democratic Union) in the local parliament. He was International Business Consultant in New York from 1987 to 1995 and moved then to San Francisco, where he was elected as executive Vice President of the German - American Chamber of commerce in San Francisco.

In 2002 he founded the European American Trade Association a business and legal consultant service to corporate, community and consular corps clients with special emphasis on international relations. He still works as an attorney at law.

Hans J. Niebergall is a result-focused professional with wide-ranging expertise in law, business development, marketing, sales, sponsorship, fundraising, networking and consulting.

Rahman, Saifur



Joseph R. Loring Professor, Virginia Tech, Alexandria, USA

Dr. Saifur Rahman is the Joseph R. Loring professor of electrical and computer engineering and the founding director of the Advanced Research Institute at Virginia Tech, USA. He is a Fellow of the IEEE, and a distinguished lecturer. He is the editor-in-chief of the IEEE Transactions on Sustainable Energy. He has served as a program director at the US National Science Foundation. He worked as a research scientist at the Tokyo Electric Power Company, Japan and at the Brookhaven National Laboratory in New York. He has consulted for the World Bank, the Asian Development Bank and the United Nations Development Program.

Schierholz, Ragnar



Principal Scientist ABB, Baden, Switzerland

Dr. Ragnar Schierholz works as a Principal Scientist at ABB Corporate Research. He is the Research Area Coordinator for the area of Secure Remote Operations and Services in ABB's Industrial Software Systems research program. He is a contributor to various standardization bodies on cybersecurity of industrial control systems, e.g. ISA or IEC and a recognized member of the international industrial control system security community. He holds a PhD in Information Systems from the University of St.Gallen, a Master's degree in Computer Science from Western Michigan University and a Master's degree in Information Systems from the University of Paderborn. He is a member of the IEEE Computer Society and the IEEE Control System Society as well as the ACM.



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