CRITIS'07

2nd International Workshop on Critical Information Infrastructures Security

October 3-5, 2007, Benalmadena-Costa (Malaga), Spain
*(Including **ITCIP'07**, Information Technology for Critical Infrastructure Protection)*

Workshop Program

WEDNESDAY, OCTOBER 3	
14:00 - 14:30	Registration
14:30 - 14:45	Welcome
14:45 - 15:35	Invited Talk: **"Critical Information and Critical Infrastructures. How Do They Relate?"** *Adrian Gheorghe, Old Dominion University, US.*
	Session 1: R&D Agenda
15:35 - 16:00	**Towards a European Research Agenda for CIIP: Results from the CI2RCO Project** *Uwe Bendisch[1], Sandro Bologna[2], Gwendal Le Grand[3], Eric Luiijf[4]* [1] FhG SIT, Germany [2] ENEA, Italy [3] ENST, France [4] TNO Defence, Security and Safety, Netherlands
16:00 - 16:25	**ICT Vulnerabilities of the power grid: towards a road map for future research** *Alberto Stefanini[1], Gerard Doorman[2], Nouredine Hadjsaid[3]* [1] Joint Research Centre of the European Commission - Institute for the Protection and Security of the Citizen, Italy [2] Norwegian University of Science and Technology, Norway [3] Institut National Polytechnique de Grenoble, France
16:25 - 16:50	Coffe Break
	Session 2: Communication Risk & Assurance I
16:50-17:15	**An Analysis of Cyclical Interdependencies in Critical Infrastructures** *Nils Kalstad Svendsen[1], Stephen Wolthusen[2]* [1] Gjøvik University College, Norway [2] University of London, UK
17:15-17:40	**A Framework for 3D Geospatial Buffering of Events of Interest in Critical Infrastructures** *Nils Kalstad Svendsen[1], Stephen Wolthusen[2]* [1] Gjøvik University College, Norway [2] University of London, UK
17:40-18:05	**Designing Information System Risk Management Framework Based on the Past Major Failures in the Japanese Financial Industry** *Kenji Watanabe, Takashi Moriyasu* Nagaoka University of Technology, Japan
18:05-18:30	**Advanced Reaction using Risk Assessment in Intrusion Detection Systems** *Wael Kanoun, Nora Cuppens, Frédéric Cuppens* ENST Bretagne, France

	THURSDAY, OCTOBER 4
09:00-09:50	Invited Talk: **"The tangled webs of Critical Information Infrastructures"** *Paulo Veríssimo, Universidade de Lisboa, Portugal*
	Session 3: Communication Risk & Assurance II
09:50-10:15	**Managing Critical Infrastructures through Virtual Network Communities** *Fabrizio Baiardi, Gaspare Sala, Daniele Sgandurra* Universita' di Pisa, Italy
10:15-10:40	**The structure of the sense of security, Anshin** *Yuko Murayama[1], Natsuko Hikage[1], Yasuhiro Fujiwara[1], Carl Hauser[2]* [1] Iwate Prefectural University, Japan [2] Washington State University, USA
10:40-11:05	**Agents security against malicious host applied to IDS** *Rafael Páez, Joan Tomàs-Buliart, Jordi Forné, Miguel Soriano* Technical University of Catalonia, Spain
11:05-11:30	Coffe Break
	Session 4: Code of Practice and Metrics
11:30-11:55	**Representing the CRUTIAL project domain by means of UML diagrams** *Davide Cerotti[1], Daniele Codetta-Raiteri[2], Susanna Donatelli[3], Giovanna Dondossola[4], Fabrizio Garrone[4]* [1] Università del Piemonte Orientale, Italy [2] Consorzio Nazionale Interuniversitario per le Telecomunicazioni, Italy [3] Università di Torino, Italy [4] CESI Ricerca, Italy
11:55-12:20	**Expert System CRIPS: Support of Situation Assessment and Decision Making** *Hermann Dellwing, Walter Schmitz* IABG mbH, Germany
12:20-12:45	**Using Dependent CORAS Diagrams to Analyse Mutual Dependency** *Heidi E. I. Dahl, Iselin Engan, Ketil Stølen* SINTEF ICT, Cooperative and Trusted Systems, Norway
12:45-13:10	**A Methodology to Estimate Input-output Inoperability Model Parameters** *Roberto Setola, Stefano De Porcellinis* Universita' CAMPUS Bio-Medico, Italy
13:10-14:50	Lunch

14:50-15:40	Invited Talk: **"Critical Infrastructure Interdependency Modeling and Simulation: Current Practices and Challenges"** *Donald Dudenhoeffer, Idaho National Labs, USA.*
	Session 5: Information Sharing and Exchange
15:40-16:05	**Efficient Access Control for Secure XML Query Processing in Data Stream** *Dong Chan An, Seog Park* Sogang University, South Korea
16:05-16:30	**An Approach to Trust Management Challenges for Critical Infrastructures** *Ioanna Dionysiou[1], Deborah Frincke[2], Carl Hauser[3], Dave Bakken[3]* [1] Intercollege, Cyprus [2] PNNL, USA [3] Washington State University, USA
16:30-16:55	Coffee-Break
	Session 6: Continuity of Services and Resiliency
16:55-17:20	**Detecting DNS Amplification Attacks** *Georgios Kambourakis, Tassos Moschos, Dimitris Geneiatakis, Stefanos Gritzalis* University of the Aegean, Greece
17:20-17:45	**LoRDAS: A Low-Rate DoS Attack against Application Servers** *Gabriel Maciá-Fernández, Jesús E. Díaz-Verdejo, Pedro García-Teodoro, Francisco de Toro-Negro* University of Granada, Spain
17:45-18:10	**Intra-AS overlay dedicated to communication resilience** *Simon Delamare, Gwendal Le Grand* GET/Télécom Paris, France
18:10-18:35	**A proposal for the definition of operational plans to provide dependability and security** *Daniel Martínez, Gabriel López, Manuel Gil, Antonio F. Gómez-Skarmeta* University of Murcia, Spain
20:30	GALA DINNER

FRIDAY, OCTOBER 5	
09:00-09:50	Invited Talk: **"Emerging Technology Challenges in the Protection of Critical Information Infrastructures"** *Jacques Bus, European Commission, INFSO Unit "Security".*
	Session 7: SCADA and Embedded Security
09:50-10:15	**Application of Kohonen Maps to Improve Security Tests on Automation Devices** *Joao Paulo S. Medeiros, Allison C. Cunha, Agostinho M. Brito Jr., Paulo S. Motta Pires* Universidade Federal do Rio Grande do Norte, Brazil
10:15-10:40	**Ideal Based Cyber Security Technical Metrics for Control Systems** *Wayne Boyer, Miles McQueen* Department of Homeland Security, CSSP Idaho National Laboratory, USA

10:40-11:05	**Designing critical infrastructure cyber security segmentation architecture by balancing security with reliability and availability** *Kegan Kawano* Industrial Defender, UK
11:05-11:30	Coffe Break
	Session 8: Threats and Attacks Modeling
11:30-11:55	**A General Model and Guidelines for Attack Manifestation Generation** *Ulf Larson, Dennis Nilsson, Erland Jonsson* Chalmers University of Technology, Sweden
11:55-12:20	**A survey on detection techniques to prevent cross-site scripting attacks on current web applications** *Joaquin Garcia-Alfaro* Universitat Oberta de Catalunya, Spain
12:20-12:45	**Attack Modeling of SIP-oriented SPIT** *John Mallios, Stelios Dritsas, Bill Tsoumas, Dimitris Gritzalis* Athens University of Economics and Business, Greece
12:45-13:10	**A Malware Detector Placement Game for Intrusion Detection** *Stephan Schmidt[1], Tansu Alpcan[2], Sahin Albayrak[1], Tamer Basar[3], Achim Müller[2]* [1] DAI-Labor, Technische Universität Berlin, Germany [2] Telekom Laboratories, Germany [3] Decision and Control Laboratory, University of Illinois, USA
13:10-14:50	Lunch
14:50-16:05	Panel: **"Resilient Critical Information Infrastructures: a myth or a realistic target?"** Chaired by: *Jacques Bus, European Commission, INFSO Unit "Security".* Panelists: *Mike Corcoran (CPNI, UK), Antonio Diu (AIA, Spain), Claudia Eckert (Fraunhofer SIT, Germany), Saifur Rahman (Virginia Tech, USA), Marc Tritschler (KEMA, UK).*
16:05-16:30	Coffe-Break
	Session 9: Information Exchange and Modelling
16:30-16:55	**Modeling and Simulating Information Security Management** *Jose M. Sarriegi[1], Javier Santos[1], Jose M. Torres[1], David Imizcoz[2], Elyoenai Egozcue[2], Daniel Liberal[2]* [1] Tecnun (University of Navarra), Spain [2] s21sec, Spain
16:55-17:20	**Design of a platform for information exchange on protection of critical infrastructures** *Carlo Ferigato, Marcelo Masera* Joint Research Centre - European Commission, Italy
17:20-17:45	**Towards a Standardised Cross-Sector Information Exchange on Present Risk Factors** *Felix Flentge[1], Césaire Beyel[2], Erich Rome[2]* [1] Darmstadt University of Technology, Germany [2] Fraunhofer-Institute Intelligent Analysis and Information Systems, Germany
18:10	Farewell