

CRITICAL ENERGY INFRASTRUCTURE PROTECTION

PROGRAM



29 February - 1 March 2016

Hotel Esplanade, Zagreb, Croatia

Co-organizers of the

1st Zagreb Security Forum:



Croatian Defense Academy "dr. Franjo Tuđman", Zagreb, Croatia



Bar-Ilan University, Ramat-Gan, Israel



International Intelligence History Association, Germany



Research Institute for European and American Studies, Athens, Greece



Office for Emergency Crisis Management, Zagreb, Croatia

ADRIATIC

SECURITY SOLUTIONS Ltd. HR-10000 ZAGREB, RADNIČKA CESTA 39



Under the auspices of the President of the Republic of Croatia **H.E. mrs. Kolinda Grabar-Kitarović**

Members of the Organizing committee of the

1st Zagreb Security Forum:

- Gordan Akrap, PhD, St. George Association, Zagreb.
- dipl. ing. **Velimir Ostoić**, Adriatic Security Solutions d.o.o., Zagreb
- Prof.dr. Miroslav Tuđman, president of St. George Association; professor at Faculty of Humanities and Social Science, University of Zagreb, Croatia
- Prof.dr. Shlomo Shpiro, Head of the Political Studies Department, Bar-Ilan University, Ramat Gan, Israel
- Prof.dr. John M. Nomikos, Research Institute for Euopean and American Studies, Athens, Greece
- Andre Ranson, general (ret), Paris, France
- Anna Abelmann, International Intelligence History Association, Ruhr University Bochum, Germany



St. George Association is a non-profit and nongovernmental organization with aim to encourage, assist, develop and

promote research in the field of personal, corporate,nationalandinternationalsecurity.St. George Association encourages:

- Professional and scientific promotion and improvement of activity in the above mentioned areas,

- Work on professional and scientific studies of international relations and national development strategies,

- Connection of professional associations and professional development of its members, as well as students and young experts to study areas of the above mentioned areas,

- Cooperation with other similar associations and organizations abroad, and all organizations that support the work of the Association.

St. George Association publishes a magazine *National Security and the Future* (www.nsf-journal.hr and http://hrcak.srce.hr/nsf) with a scientific and expert articles, organizes conferences, lectures, seminars, discussions and other expert meetings from the field of personal, corporate, national, and international security.

About Forum 2016

Dear guests, welcome to the 1st Zagreb Security Forum.

Critical energy infrastructure is the backbone of free and unhindered life and work, of the free movement of people, goods and ideas. If the IT infrastructure constitutes the foundation of all other critical infrastructure, energy infrastructure is a condition sine qua non for effective existence and use of all other infrastructures. In recent years, the level of threat to critical energy infrastructures has expended exponentially. These include threats emanating both from state and non-state actors, cyber warfare, physical terrorist attacks, sabotage, or critical failures due to other conflict-related events. Also, it is necessary not to forget natural disasters as a source of possible significant

negative impact to the energy infrastructure.

The purpose of the Forum is to bring together proven experts from several different, but interconnected, fields, to discuss with policy makers and security officials how best to deal with these emerging threats in their regional and European context. The Forum is aimed at sharing best practice, case study analysis, policy options debate and the creation of a regional network of experts and officials in South Eastern Europe for critical energy infrastructure security. Expert knowledge, based on practical experience and the development of defensive strategies and policies, needs to be shared in order to be effective and useful for different countries. We want to enable a close knowledge-sharing process so that each

segment could be, in an appropriate way, be involved in the effective protection of national energy infrastructures and with orientation to preventive actions. At the Forum we aathered proven experts in the domain of government institutions dealing with preventive actions, experts from the private sector who are working on security of the energy related projects and infrastructure, scientists who can indicate the forms of possible threats, and the companies that are planning, designing, building, maintaining and managing energy infrastructures and energy transport. Since energy infrastructures of different countries in the region are so interconnected, so should the response be. In fact, today we cannot speak of 'national infrastructure' anymore but of regional energy infrastructures. With multidisciplinary approaches of experts with different experiences and from different but interconnected countries, will be very helpful for future planning and developing the security of energy infrastructure, on land or under the sea, gas or oil pipelines, electric power lines or ships.

Gordan Akrap, PhD



THE CAPITAL OF CROATIA

http://www.infozagreb.hr/&lang=en

Day 1: Monday 29th of February

13:45 Arrival and Registration

14:15 Opening Ceremony

Gordan Akrap, St. George Association, Zagreb

Shlomo Shpiro, Bar Ilan University, Israel

Guests of Honor:

Marko Jurčić, Economic adviser to the President of the Republic of Croatia

General Slavko Baric, commander of Croatian Defense Academy

14:30-16:00 Panel I: Energy security as Strategic Tool and Strategic Interest

Chair: Gordan Akrap, St. George Association, Zagreb

Erica Keen Thomas: United States Energy Security Policy

Shlomo Shpiro: Crisis Communication, Social Resilience and the Protection of Critical Infrastructure

Gintaras Bagdonas: NATO role in Energy Security: The Perspective of Energy Security Centre of Excellence

16:00-16:30 Coffee Break

16:30-18:00 Panel II: Protection of Critical Energy Infrastructure – How Can it be Improved

Chair: Nenad Debrecin, University of Zagreb

Ioannis Anastasakis: The Protection of National Critical Infrastructure - The Case of Greece

Chikara Hashimoto: National Critical Infrastructure Protection in the United Arab Emirates

Pavle Kalinic: Critical infrastructure protection in the Zagreb city region

19:30Reception for conference participantsDverce Palace, Katarinin trg 6

Day 2: Tuesday, 1st of March

09:00-10:30 Panel III: South-Eastern Europe and the Eastern Mediterranean – Different Energy Strategies, Similar Threats

Chair: Pavle Kalinic, Office for Emergency Crisis Management, Zagreb

Antonia Dimou: East Mediterranean Energy Cooperation and Security Challenges

Darko Trifunović: Russian energy policy in South-Eastern Europe

John M Nomikos: Intelligence Requirements for Energy Security in Greece

10:30-11:00 Coffee Break

11.00-11:30 Key note speaker:

Danny Lacker: Emergency preparedness and security of Israel's water infrastructure

11:30-13:00 Panel IV: Securing Electric Energy Production and Distribution

Chair: Shlomo SHPIRO, Bar Ilan University, Ramat Gan, Israel

Efraim Lapid: Coping with terror – The Israeli experience

Davor Šinka, Slavko Krajcar, Tomislav Bajs: Assessing Terrorist Threats for Energy Infrastructure by Combining Historical Data and Expert Judgments

H.Sagrak, G.Marković, S. Vidović: Generic Control System Architecture for Critical Infrastructure Protection: Example of Energy Sector

13.00-15.00 Lunch

15:00-16:30 Panel V: New Threats and Best Practice Solutions for Energy Production Security

Chair: John Nomikos, RIEAS, Greece

Dejan Škanata, Nenad Debrecin: Safety and security in nuclear power sector

Anna Abelmann: Securing Castor Transports and Nuclear Energy Materials – The Case of Germany

Velimir Ostoić, Damir Kovač: Protection of Oil Pipeline facilities - Practical experiences from Croatia

16:30-17:00 Closing remarks and end of the Forum

Shlomo Shpiro, Bar Ilan University, Israel

Miroslav Tudjman, University of Zagreb

Organizer of the Forum will print the book with lectures that will be distributed to all Forum speakers and companies that participate in. JADRANSKI NAFTOVOD dioničko društvo (JANAF Plc.) with its registered office in Zagreb, manages an oil pipeline system, designed and built in the period from 1974 to 1979 as a modern, efficacious and cost-efficient crude oil transportation system for both local and foreign users. Along with crude oil transportation, other major activities of JANAF Plc. include also storage of crude oil and petroleum products, as well as reloading of liquid cargoes. The Company's mission is to ensure a reliable and high-quality system for crude oil transport and storage of crude oil and petroleum products, applying the world's highest technological standards and taking care of preservation and protection of the environment, health, safety and development of its employees.

The JANAF system was built as an international crude oil transportation system from the Omišalj Port and Terminal to both local and foreign refineries in Eastern and Central Europe. The pipeline designed capacity amounts to 34 million tons of crude oil annually (MTA), while the installed capacity is 20 MTA.The total capacity of tanks for crude oil storage amounts to 1,54 million m3, and 202.000 m3 for storage of petroleum products respectively.

By introducing the SCADA system, modernizing the electric power supply system, GIS and information and communication system, together with conducting continuous pipeline inspections and repairs and maintaining the system at high technical and technological level, safe and secure transport of crude oil is enabled, as well as storage of crude oil and petroleum products, which provides regular and reliable supply to clients.

ADRIATIC

SECURITY SOLUTIONS Ltd. HR-10000 ZAGREB, RADNIČKA CESTA 39

Adriatic Security Solutions Ltd–offers services in the areas of Physical Protection Systems and Intelligent Transportation Systems.

The company and employees are certified by:

- the Ministry of Interior with the Security Service Provision license in accordance to Croatia's Privacy Security Act
- the Office of the National Security Council (National Security Authority)with the Facility Security Clearance Certificate (NATO/EU SECRET Clearance)

Adriatic Security Solutionsstaff are members of numerous scientific and professional associations (ASIS, HCZ, ITS HR, HZDP, UHMS, etc.).

Our leading experts engaged in project realization have accumulated significant experience and personal references in complex project management. Thereby we are prepared to offer services on the following areas:

- project management,
- consulting, development of threat assessments and risk analysis,
- security systems design, project revision, development of tender documentation,
- facility security plan development, procedure & protocol development,
- conducting technical supervision of security systems implementation and maintenance process,
- administer independent supervision services in the security area upon special user requirements (analysis and expert second opinion presentation of investment projects / realized security systems upon insurance and reinsurance, ascertain damage inducement of

equipment and accessories, internal controlling and supervision of physical and technical security, etc.),

- SSVT (Security Systems Verification Test) functional system verification, technical controlling and expert analysis of implemented security systems (penetration tests, integrity and functional security systems ascertain tests, etc.),
- organizing expert seminars (education and improving) for security personnel,
- other security field services (critical infrastructure protection, government & public facilities, etc.).

Personal references and acquired experience provided us realization of numerous projects through adaption, integration and testing in areas of technical security systems and telecommunication for clients as: Siemens COM, Cisco Systems, INA, JANAF, HEP, several banks, museums and galleries, numerous other facilities.

The main determinant of our appearance are high value professional service, experience in application of optimized technical solutions in accordance with the latest, up-to-date achievements and European regulations.

Velimir Ostoić – CEO

AHEP

The company Hrvatska elektroprivreda, which was established in 1990 under this name, is a successor of electric

power organizations that have been dealing with electricity generation, transmission and distribution in Croatia for more than one century. In 2002 it was transformed into HEP Group, i.e. a group of associated organizations owned solely by the state. In the last several decades the company has been engaged in heat energy supply to customers, gas distribution and supply as well as in projects of energy efficiency.

Hrvatska elektroprivreda d.d. (HEP d.d.) is a parent company of HEP Group with headquarters in Zagreb. HEP d.d., the founder and the sole owner of the majority of HEP Group's companies, performs corporate functions and directs, coordinates and monitors generation and network activities as well as other activities in dependent companies, in order to optimize business processes. HEP Group does business in all Croatia, and apart from that on the markets of Serbia, Slovenia, Bosnia and Herzegovina, Hungary and Kosovo by means of daughter companies and HEP-Trade. In Bosnia and Herzegovina there is the pumping station Buško blato, a daughter company of HEP-Generation. HEP is a co-owner of the Nuclear power plant Krško in Slovenia, an associated company outside HEP Group, where it shares ownership with the company Gen Energija.

HEP Group has around 10 thousand employees; it generates the annual revenue of around 13 billion kuna and has more than 2 million buyers, which makes it one of the biggest companies in Croatia and the biggest company owned by the state. Therefore, HEP Group's business is of strategic importance for the Republic of Croatia.

HEP Group's mission, a secure and high-quality energy supply of buyers, along with a high level of social responsibility is based on a century-long history. However, achieved business trends imply the fulfillment of company's vision, which is a Croatian energy leader with an increasing share on the regional market of electricity generation, supply and trade, offering a secure and high-quality service based on the principles of ecologically-acceptable generation, energy efficiency and sustainable business.

InfoDom is focused on the modernization

and development of business infrastructure and ICT solutions related to the transformation of the public sector and increase the competitiveness of the private sector in the EU countries and developing countries.

INFODOM

InfoDom is strategically engaged in five areas: 1. Modernization of the public sector and the networked public administration,

2. Business excellence, regulatory compliance and networked economy,

- 3. Integrated Regional Development,
- 4. Business excellence and profitability of state enterprises,
- 5. Digital Society.

In the development of complex systems for all market segments InfoDom includes global reference models of these market segments, references and applies regulatory frameworks and uses benchmarking techniques and best practices portals as sources of knowledge.

Through certified business partner status, InfoDom Group works with the world's leading technological principals: - IBM,

- Microsoft,
- Oracle, and
- Partners in the "Open Technologies".

InfoDom Group employs over 100 experts and has companies in Zagreb, Brussels, Sarajevo, Podgorica and Belgrade, and a network of partner companies in countries where there is no own company.



Tehnozavod-Marušić has been designing, producing, installing and maintaining security, safety and audio/video systems for more than four decades. We have equipped more than **18 000 facilities**, and they are the best guarantee of our experience and quality. Tehnozavod employs **80 people** of which **20 engineers** with years of experience.

We offer full engineering service. From first agreements with the user, over designing, getting and producing devices, to installment and maintenance: you can rely on our expert team and our 50-year long experience.

Tehnozavod-Marušić provides expert services in following market segments:

- 1. **Security** CCTV, intrusion detection, access control
- 2. **Safety** fire detection, gas detection and PA/EVAC systems
- 3. **Audio/Video** public address, sound reinforcement, video systems, conference systems, cinema solutions