# 9TH ISDP-AMS JOINT CONFERENCE

## Cyber Security:

Identifying Threats and Charting a Common Defense

| MAY 24 | LOCATION | HILTON SLUSSEN HOTEL- ROOM "PLATON" |
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| | ADDRESS | GULDGRÄND 8, 104 65- STOCKHOLM, SWEDEN |

Institute for Security & Development Policy

# Schedule

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| **08:15 – 08:30** | Registration |

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| **08:30 – 09:00** | Opening session |

**Hosts**

**Dr. Niklas Swantröm, 施万通**
*Director of the Institute of Security and Development Policy (ISDP)*

**Maj. Gen. Liu Renxian, 刘仁献 少将**
*Deputy Director of Department of Operational Theories and Doctrines, Academy of Military Science, PLA*

**Keynote Speaker**

**Dr. Erik Wennerström**
*Director-General Swedish National Council for Crime Prevention (Brå)*

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| **09:00 – 10:40** | Session 1: Cyber Defense and Military Operations |

**Speakers**

**Wg. Cdr. Gareth Mount:**
"UK Military Doctrine: the Challenge Presented by Cyber"
*Officer at Development, Concepts and Doctrine Centre, Ministry of Defence, Royal Air Force (U.K.)*

**Sr. Col. Lu Zhian, 逯志安 大校:**
"The Influence of Cyberspace Operations on Future Warfare"
*Research Fellow in the Department of Operation Theory and Doctrine Research, Academy of Military Science (AMS), PLA*

**Dr. Walid Al-Saqaf:**
"Towards a Better Understanding of Cyber Security Threats and Possible Actions"
*Postdoctoral Researcher at the Department of Media Studies, Stockholm University*

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| **10:50 – 12:30** | Session 2: Terrorism and Irregular Combatants |

**Speakers**

**Dr. Michael Barak:**
"Al-Qaeda and ISIS - Case Studies in what is and what should be done"
*Senior Researcher at the Institute for Counter-Terrorism; Lecturer at Lauder School of Government Diplomacy and Strategy, Interdisciplinary Center, Herzliya*

**Maj. Lin Han, 林涵 少校:**
"The Challenges and Strategic Options of National Cyber Security"
*Assistant Researcher at the Department of Military Political Work of the Academy of Military Sciences (AMS), PLA*

| 12:30-13:30 | Lunch break |
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| 13:30 – 15:10 | Session 3: Private Sector and Critical Infrastructures |
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**Speakers**

**Mr. Rami Efrati:**
"Cyber in Private Sector and Critical Infrastructures-Present Status and Future Trends"
*Founder and President of Firmitas Cyber Solutions*

**Dr. Zhang Ming, 张明 博士:**
"China's Practices and Challenges on Critical Information Infrastructures Protection (CIIP)"
Associate research professor at China Institute of Contemporary International Relations (CICIR)

**Prof. Katrin Merike Nyman-Metcalf:**
"Privatisation of Liability"
P*rofessor and Head of the Chair of Law and Technology at Tallinn University of Technology;*
*Head of Research at the Estonian e-Governance Academy*

| 15:20 – 17:00 | Session 4: Policy and International Cooperation |
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**Speakers**

**Col. Chen Ting, 陈婷 上校:**
"Rule of International Law on Cyberspace: China's Positions and Prospects"
*Associate Research Fellow at Academy of Military Science (AMS), PLA*

**Maj. Gunnar Wenngren:**
"Personal and/or Organizational Responsibility for Information Security"
*Independent Consultant on Information Security; Former Researcher at Swedish Defence*
*Research Agency (FOI) and Swedish Defence Material Administration (FMV)*

| 17:00 – 17:20 | Closing session |
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# Sessions

| Session 1 | Cyber Defense and Military Operations |
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China, the United States and Russia are just a few of the increasing number of countries that have established dedicated commands for cyber defense operations. Alternately regarded as strategic necessity and potential source of international insecurity, these developments are followed with both interest and concern by military planners and security analysts worldwide. This session asks how do we conceptualize the 'information war', and what dimensions should we distinguish? Where does cyber warfare fit in the wider scope of military operations? What offensive and defensive capacities can militarized cyber units project?

| Session 2 | Terrorism and Irregular Combatants |
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As zone of conflict, cyberspace represents a low-cost, highly profitable environment, where perpetrators are less likely to be held responsible for their actions. Irregular combatants, such as transnational criminal networks and terrorist organizations have seized upon this opportunity to develop new methods of recruitment, logistics and attack. However, definitions of threats, actors and objectives are complex. In this session we will set out to uncover the latest trends in irregular cyberwar and cyberterrorism. We ask what technological capacities can criminal and terrorist organizations draw upon? What strategies do security services have to prepare against these threats?

| Session 3 | Private Sector and Critical Infrastructures |
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The security of digital infrastructures is of vital importance for the functioning of businesses and national economies. However, confidential information such as industrial and customer data have high economic and strategic value for illicit organizations. Consequently, systems lacking the necessary security mechanisms are often the target of massive security breaches. How are transnational cyber threats reconciled with national jurisdiction? How can policymakers provide adequate support to protect potential private sector targets? What mandate should businesses have to develop powerful non-state cyber security capabilities? How do public authorities best mobilize private cyber security expertise, without sacrificing legitimacy?

| Session 4 | Policy and International Cooperation |
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Over the course of 2015, China's bilateral diplomatic efforts with countries such as the United States, the United Kingdom and Germany have resulted in landmark cyber agreements. However, cyberspace is subject to fast-paced change and transnationally-based threats. This raises the inevitable question: how do we develop the right collaborative tools and institutions for cyber defense? What skills and frameworks should policymakers develop to meet the challenge of cyber security? What are possible solutions to cyber threats through collaboration across political, legal, security, and private sectors?

# Hosts

## Sweden

### Dr. Niklas Swanström, 施万通

Dr. Niklas Swanström is Director of the Institute for Security and Development Policy, and one of its co-founders. He is a Research Fellow at the Johns Hopkins University's Paul H. Nitze School of Advanced International Studies, and Non-resident Professor at Sichuan University. Dr. Swanström has authored, co-authored or edited a number of books, including: Eurasia's ascent in Energy and geopolitics and Sino-Japanese Relations: The need for Conflict Prevention and Management,
Dr. Swanström holds a Ph.D. in Peace and Conflict Studies from Uppsala University. He also holds a Licentiate degree from the Department of Peace and Conflict research that examined the Chinese foreign policy towards Southeast Asia.

## China

### Major General Liu Renxian, 刘仁献 少将

Maj. Gen. Liu Renxian is the Deputy Director of Department of Operational Theories and Doctrines, Academy of Military Science, PLA. He was born on Nov. 16th 1962 in Henan Province, and joined the army in 1980. He earned his master degree of law in China University of Political Science and Law and gained his His Ph.D from Beijing Normal University. Since joining the PLA in 1980, he had served in succession as an enlisted platoon leader, political instructor in company, secretary in political HQ, judge and President of Military Court, PLA. His main research fields included combat training, revising combat doctrines, non-war military operations, editorial working of Military Journals, in addition to research work.

# Keynote Speaker

## Sweden

### Dr. Erik Wennerström

Dr. Erik O. Wennerström, LL.D., LL.M., is Director-General in charge of the Swedish National Council for Crime Prevention (Brottsförebyggande rådet - Brå) - an agency under the Ministry of Justice, acting as a centre for research and development within the judicial system. He has previously served as Principal Legal Adviser in International Law with the Ministry for Foreign Affairs of Sweden. His academic affiliation is primarily with the University of Uppsala, Sweden. He has a background with the Swedish Ministry for Justice, the European Commission and the Folke Bernadotte Academy of Sweden, and has been an adviser to countries seeking membership of the European Union. Between 2013 and 2015 he was Chairman of the Swedish Government Inquiry on Cyber Security.

# Speakers (alphabetical order)

| China | Colonel Chen Ting, 陈婷 上校 |
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Chen Ting is an associate research fellow of Academy of Military Science (AMS), PLA. She works in the Department of Foreign Military and as deputy editor-in-chief of World Military Review where she is in charge of designing and editing key columns. She was enlisted as a postgraduate by Shanghai Branch, Nanjing Politics College in 2000 and was conferred a Master's Degree from AMS in 2003. In 2011 she gained a Ph.D Degree in legal science from Tsinghua University Law School. Her current research focus is on cyberspace security.

| United Kingdom | Wg. Cdr. Gareth Mount |
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Wing Commander Mount joined the RAF in 1991 and has served at a number of locations in the UK and overseas. He has served at the UK's Permanent Joint Headquarters on two occasions, pricipally as a targeteer, including during the extremely busy period in the build up to operations in Iraq (2003). Operational deployments include working with NATO in Afghanistan at Regional Command South (2009) and multiple deployments to the Middle East working alongside the United States – the most recent being with US Central Command in Jordan as the UK liasison officer to a small deployed HQ supporting Operation INHERENT RESOLVE (the Coalition effort against Daesh). Wg Cdr Mount has completed the UK's Advanced Command and Staff cse, at the Joint Service Command and Staff College, and holds a Masters Degree in Defence Studies from King's College London.

| Sweden | Major Gunnar Wenngren |
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Major Gunnar Wenngren joined the Royal Swedish Air Force in 1962, where he attained the rank of major, and where he continues to hold the title to this day. Following from his successful military experience, Major Wenngren has spent over a decade working as a computer security manager at Linköping University. This was followed by a role as researcher at FOI, the Swedish Defence Research, where Major Wenngren conducted extensive research on Swedish and global cyber security. Major Wenngren has also had vocational experience as a consultant with FMV, the Swedish Defence Materiel Administration.

| Estonia | **Professor Katrin Merike Nyman-Metcalf** |
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Professor Katrin Nyman-Metcalf is Head of the Chair of Law and Technology at Tallinn University of Technology and Head of Research at the Estonian e-Governance Academy. She is furthermore active as an international consultant, working globally primarily in the area of communications law in the wide sense, including ICT regulation, privacy and data protection, media law, e-governance and various cyber issues. Her PhD (Uppsala University, Sweden, 1999) is on the law of outer space and Katrin represents Estonia in the International Relations Committee of the European Space Agency.
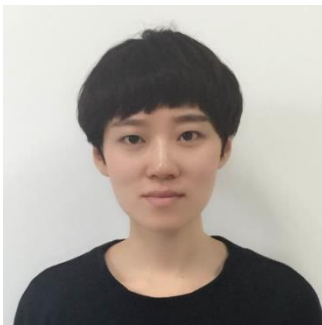
| China | **Major Colonel Lin Han, 林涵 少校** |
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Major Colonel Lin Han, is an assistant researcher at the Department of Military Political Work of the Academy of Military Sciences, PLA. She holds a Master's Degree from the National University of Defense Technology, where she graduated in 2011.

| China | **Senior Colonel Lu Zhian, 逯志安 大校** |
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Lu Zhian, a research fellow in Department of Operation Theory and Doctrine Research, Academy of Military Science. He is in charge of the Center on Cyberspace Security Research. He has the rank of Senior Colonel and he is still in active duty. He has dual master degrees: the first one being on Joint Campaigns, attained at the Academy of Military Sciences, PLA. The second is on military strategy, from the Rajaratnam School of International Relations, Nanyang Technology University, Singapore. Lu Zhian conducts in the study of cyberspace security, whereby his areas of focus are cyberspace security, cyberspace operations, as well as cyberspace defense and related issues.
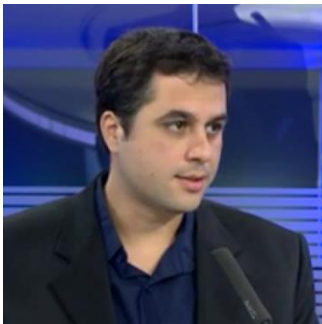
| Israel | **Dr. Michael Barak** |
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Dr. Michael Barak is senior researcher at the Institute for Counter-Terrorism and a lecturer at Lauder School of Government Diplomacy and Strategy, Interdisciplinary Center, Herzliya. He is Team Leader of the Global Jihad & Jihadi Websites Monitoring Group and Team Research Manager of the ICT Cyber-Desk. Dr. Michael serves as senior researcher of the Social Media Networks in the Arab World research board at The Moshe Dayan Center for Middle Eastern and African Studies (MDS) in Tel Aviv University (TAU). Dr. Barak holds a Ph.D. in Middle Eastern Studies from TAU and specializes in Salafi and Sufi organizations, Global Jihad, Cyber-Terror and Modern Egypt.

| Israel | Mr. Rami Efrati |
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Founder & President of Firmitas Cyber Solutions: a company focusing on providing a unique technological approach for the security of mission-critical infrastructure. An expert in Cyber Technology Strategic Methods, Mr. Efrati is the former Head the Civilian Division of the Israel National Cyber Bureau in the Prime Minister's Office. Col. (Res.) Efrati served in the Israel Defense Forces for over 28 years, commanding prestigious positions in Military Intelligence and receiving the Creative Thinking Award from the Director of Military Intelligence. Mr. Efrati also has 18 years of civilian experience and has been involved in entrepreneurial activities with both start-up and established companies in the Cyber-Security, High Tech and Bio-Technology sectors. He is advisory board member of Securonix, an industry-leading platform for security analytics. Additionally, Mr. Efrati is a Senior Cyber Fellow in Yuval Ne'eman Workshop for Science, Technology and Security in Tel-Aviv University, and Associate in the International Institute for Counter-Terrorism (ICT).

| Sweden / Yemen | Dr. Walid Al-Saqaf |
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Dr. Walid Al-Saqaf is a Swedish/Yemeni postdoctoral researcher at the Department of Media Studies, Stockholm University, with a specialisation in ICTs, democratisation and Internet studies. He has a B.Sc. in computer engineering and a PhD in media and communication. His work and research revolve around Internet openness, surveillance, Internet and human rights, cyber security, censorship, and big data. He a member of the board of trustees of the Internet Society (ISOC), a global organisation based in the United States that provides leadership in Internet-related standards, education, access, and policy while also actively promoting the maintenance of an open, resilient and secure Internet that is accessible to all people around the world.

| China | Dr. Zhang Ming, 张明 博士 |
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Zhang Ming is associate research professor at China Institutes of Contemporary International Relations (CICIR). His field of research focuses on cybersecurity, cyber strategy & policy, and social crisis management. Prior to his current position, he served as assistant research professor at the Institute of Information and Social Development, CICIR. From 2009 to 2015, Zhang attended nine rounds of CICIR-CSIS Cybersecurity Track 2 Dialogue held in Beijing and Washington, DC, as a cybersecurity expert. Zhang holds a PhD in International Relations from CICIR, and a law degree from China Foreign Affairs University.