

DRAFT AGENDA

NATO SPS CLUSTER WORKSHOP ON KEY PRIORITY AREA ADVANCED TECHNOLOGIES

Leuven, Belgium

17 September 2019

09:30 – 10:00	Registration
Session 1: Introductory remarks Moderator: Claudio Palestini, NATO	
10:00 – 10:30	Opening Addresses Dr. Antonio Missiroli Assistant Secretary General, Emerging Security Challenges Division, NATO Prof. Sofie Pollin KU Leuven, Belgium
10:30 – 10:50	The Science for Peace and Security Programme Dr. Deniz Beten Senior SPS and Partnership Cooperation Advisor, Emerging Security Challenges Division, NATO
10:50 – 11:10	Coffee Break
Session 2: Communication Systems Moderators: Sofie Pollin, KU Leuven – Claudio Palestini, NATO	
11:10 – 11:30	G5461 - Large Scale Collaborative Detection and Location of Threats in the Electromagnetic Space (SOCRATES) Dr. Domenico Giustiniano, IMDEA Networks Institute, Spain Dr. Vincent Lenders, Electrosense, Switzerland Prof. Sofie Pollin, KU Leuven, Belgium
11:30 – 11:50	G5482 - Public Safety CommUNication in ConTEXT Related to Terror Attacks (Counter-Terror) Dr. Muhammad Mahtab Alam, Tallinn University of Technology, Estonia Dr. Rizwan Ahmad, School of Electrical Engineering and Computer Science, National University of Sciences and Technology (NUST), Pakistan Dr. Maurizio Magarini, Politecnico di Milano, Italy
11:50 – 12:10	G5269 - Flash Crowds Management via Virtualized Network Resources (FALCON) Prof. Alberto Leon-Garcia, University of Toronto, Canada Prof. Liljana Gavrilovska, Ss. Cyril and Methodius University in Skopje, North Macedonia
12:10 – 12:30	G5319 - Threat Predict: From Global Social and Technical Big Data to Cyber Threat Forecast Dr. Jérôme François, INRIA, France Dr. Ghita Mezzour, International University of Rabat, Morocco
12:30 – 13:30	Lunch Demonstration of Project G5461 - SOCRATES
13:30 – 13:50	G5263 - Analysis, Design and Implementation of an End-to-End 400km QKD Link Dr. Marina Mondin, California State University, Los Angeles (CSULA), United States
13:50 – 14:10	G5448 - -Quantum-safe Authenticated Group Key Establishment Dr. Rainer Steinwandt, Florida Atlantic University, United States
14:10 – 14:30	G5485 - Secure Quantum Communication Undersea Link Prof. Andre Xuereb, University of Malta, Malta

14:30 – 15:00	Round Table Discussion: Contributions of SPS Programme to the Field of Communication Systems Recommendations for future SPS Activities
15:00 – 15:20	Coffee Break
Session 3: Innovative and advanced materials Moderators: Ivana Capan, Rudjer Boskovic Institute - Claudio Palestini, NATO	
15:20 – 15:40	G5215 - Engineering Silicon Carbide for Enhanced Border and Port Security (E-SiCure) Dr. Ivana Capan, Rudjer Boskovic Institute, Croatia
15:40 – 16:00	G5120 - Infrared Transparent Ceramic Windows for High-speed Vehicles Dr. Mathias Hermann, Fraunhofer Institute of Ceramic Technologies and Systems, Germany Prof. Andrey Ragulya, National Technical University of Ukraine, Ukraine
16:00 – 16:20	G5176 - Agile Tyre Mobility for Severe Terrain Environments Dr. Vladimir Vantsevich, University of Alabama at Birmingham, United States Dr. Lyubomyr Demkiv, Lviv Polytechnic National University, Ukraine
16:20 – 16:40	G5453 - Radiation Hard UV Detectors against Terrorist Threats Dr. Igor Lubomirsky, Weizmann Institute of Science, Israel Mr. Sergey Khodorov, Weizmann Institute of Science, Israel
16:40 – 17:00	G5580 - Creation of New Generation Titanium Diboride Composite Armour Material Dr. Gabriel Benga, University of Craiova, Romania
17:00 – 17:20	G5030 - Titanium Armour with Gradient Structure: Advanced Technology for Fabrication Dr Sergey Prikhodko, University of California Los Angeles, USA
17:20 – 17:50	Round Table Discussion: Contributions of SPS Programme to the Field of Innovative and advanced materials Recommendations for future SPS Activities
17:50 – 18:00	Practical information End of Day 1
18:30 – 21:00	Social Dinner

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09:30 – 10:00	Registration
10:00 – 10:20	Sum-up of Day 1 and Introduction of Day 2 Dr. Claudio Palestini Officer, Emerging Security Challenges Division, NATO
Session 4: Sensors and Detectors Moderators: Eyup Turmus, NATO - Claudio Palestini, NATO	
10:20 – 10:40	G5267 - Maritime Security - Multistatic and Multiband Coherent Radar Fleet for Border Security (SOLE) Prof. Antonella Bogoni, Inter-University National Consortium for Telecommunication (CNIT), Italy Dr. Steve Lecomte, Centre Suisse d'Electronique et de Microtechnique, Switzerland
10:40 – 11:00	G5465 - Noise Imaging Radar Network for Covert Air and Maritime Border Security (NORMA) Dr. Sonia Tomei, Radar and Surveillance System (RaSS) National Lab – CNIT, Italy
11:00 – 11:30	Coffee Break
11:30 – 11:50	G5248 - Compact Eye-Safe Lidar Source for Airborne Laser Scanning (CALIBER) Dr. Nadia Boetti, Links Foundation, Italy Prof. Amiel Ishaaya, Ben-Gurion University of the Negev, Israel

11:50 – 12:10	G4840 - Microelectronic 3D Imaging and Neuromorphic Recognition for Autonomous UAVs Prof. Jean-Michel Redouté, Université de Liège
12:10 – 12:30	G5244 - Graphene / Polymer based Sensor Dr. Radmila Tomovska, Universidad del Pais Vasco, Spain Dr. Jadranka Blazevska-Gilev, University St. Cyril and Methodius, Faculty of Technology and Metallurgy, North Macedonia
12:30 – 14:00	Lunch
14:00 – 14:20	G5351 - Nanocomposites Based Photonic Crystal Sensors of Biological and Chemical Agents Prof. Tatiana Smirnova, Institute of Physics of National Academy of Sciences of Ukraine, Ukraine
14:20 – 14:40	G5140 - Advanced Nanotechnologies For Multivariate Sensor Fabrication Dr. Andrea Goldoni, Elettra - Sincrotrone Trieste, Italy Dr Borys Snopok, V.Ye. Lashkarjov Institute of Semiconductor Physics National Academy of Science of Ukraine
14:40 – 15:20	Round Table Discussion: Contributions of SPS Programme to the Field of Sensors and Detectors Recommendations for future SPS Activities
15:20 – 15:50	Coffee Break
Session 5: Unmanned and autonomous systems Moderators: Herman Deconinck, von Karman Institute for Fluid Dynamics – Claudio Palestini	
15:50 – 16:10	G5293 - Autonomous Platform for Securing Marine Infrastructures Dr. Paolo Casari, IMDEA Networks Institute, Spain Dr. Roe Diamant, University of Haifa, Israel
16:10 – 16:30	G5322 - High Altitude Balloon-Borne Radar Prof. Marco Martorella, University of Pisa, Italy
16:30 – 16:50	G5428 - Dynamic Architecture based on UAVs Monitoring for Border Security and Safety Prof. Fabrizio Granelli, Università di Trento (UNITN), Italy
16:50 – 17:30	Round Table Discussion: Contributions of SPS Programme to the Field of Unmanned and autonomous systems Recommendations for future SPS Activities
17:30 – 18:00	Conclusions