



Návrhy nových aktivit Organizace pro vědu a technologie NATO s možností zapojení českých expertů jaro 2022

Poznámka ke zkratkám:

(ET) – Exploratory team, jehož cílem je dohodnout a navrhnout cíle a náplň aktivity.

(RTG) – Research Task Group, který realizuje již schválené cíle a náplň aktivity.

(RSY) – Symposium.

(RTC) – Research Technical Course.

(RWS) – Research Workshop.

(RST) – Specialist team, zpravidla na dobu trvání jednoho roku.

TAP – Technical activity proposal, který se předkládá při prvním návrhu aktivity a aktualizuje se v rámci Exploratory team.

VKI_RLS – Von Karman Institute Research Lecture Serie

Panel systémových analýz a studií (SAS)



SAS – System Analysis and Studies Panel

Studies & analysis of operations & technology; Develop methods & tools

- 1) SAS-ET-FB Climate Security and Defence Activities.
- 2) SAS-ET-FC Exploiting Reinforcement Learning to Achieve Decision Advantage.
- 3) SAS-ET-FD Understanding Strategic Culture.
- 4) SAS-177 (RTG) on Defending Democracy in the Information Environment –Foundations and Roles for Defence.
- 5) SAS-178 (RWS) on Defence Investment Portfolio Decision-Making and Analysis Support.

Panel lidský faktor a medicína (HFM)



HFM – Human Factors and Medicine

Optimize health, safety, well-being and performance of humans in operational environments

- 6) HFM-ET-196 ET; Enhanced Physical Protection and Hazard Management in CBRN Defence.
- 7) HFM-ET-198 ET; The applicability of the Value Based Healthcare concept in NATO (operational) Military Health Systems.
- 8) HFM-ET-202-ET; COCID 19 in Aerospace and Diving: Riding the High and Low Waves.
- 9) HFM-SET-353 RTG; Operational CBR Threat Situational Awareness.
- 10) HFM-358 RTG; Microbiome Applications in Human Health and Performance.



- 11) HFM-359 RTG; Ionizing Radiation Bio effects and Countermeasures.
- 12) HFM-364 Technical Course RAMS to be held in Garmisch-Partenkirchen, Germany.
- 13) HFM-IST-ET-200-T; Extended Reality (XR) technology for mediated communication.
- 14) HFM-ET-201-T; Human Security.
- 15) HFM-352-T-RTG; Moral Challenges in the Future Security Environment (FSE): Guidance for Leaders.
- 16) HFM-361-T-SYM; Mitigating and responding to cognitive warfare.
- 17) HFM-363-T-RWS; Understanding of Military Culture to Support Organizational Change: Systems Approaches, Critical Analyses, and Innovative Research Methods.

Panel technologií informačních systémů (IST)



IST – Information Systems Technology Panel

Information warfare & assurance; Communications & networks; Architecture & enabling technologies

- 18) IST-RTG on Free-Space Optical Communications.
- 19) IST(aktivita typu nebyla specifikována) on Exploring Countermeasures against Misinformation of a Nation's Population.
- 20) IST- RSY/RSW/RSM on Military Impact of Quantum Technology to take place during IST Fall PBM 2023.

Panel aplikovaných technologií pozemních, vzdušných a námořních dopravních prostředků (AVT)



AVT – Applied Vehicle Technology Panel

Vehicle, platform, propulsion and power systems – land, sea, air and space

- 21) MSM P-2022-01 ET Characterization of thermal protection materials designed for extreme environments.
- 22) MSM P-2022-02 ET Climate Change Mitigation and Impact on NATO Platforms.
- 23) MSM P-2022-03 ET Survivability and armour protection levels for Uncrewed Ground Platforms.
- 24) MSM P-2022-04 ET Assessment of Perovskite Advanced Functional Materials for Low-Cost Low-Environmental Impact Resilient Energy Systems.
- 25) PPS P-2022-05 ET Aggregated Design for Hypersonic Gliding Vehicles.
- 26) PPS P-2022-06 RTG Progressive Rotorcraft Propulsion Alternatives.

Skupina modelování a simulací NATO (NMSG)



NMSG – NATO Modelling and Simulation Group

Maximize the effective utilization and co-ordination of M&S

- 27) RSY - NMSG Annual Symposium 2023 on M&S Support of operations, transformation of the defense enterprise, interoperability and standardization etc.



- 28) RSY - MSG/MSCO Support to International Training & Education Conferences IT2EC, I/ITSEC and CA2X2 Forum 2023
- 29) RTG on Allied Interoperability and Standardization Initiatives for Digital Twins.
- 30) RTG on Common Framework for the assessment of XR technologies for use in Training and Education.

Panel technologií senzorů a elektronických systémů (SET)



SET – Sensors and Electronics Technology Panel

Reconnaissance, surveillance & target acquisition; Electronic warfare; Communications & navigation; Multi-sensor integration/fusion

- 31) SET-ET-128 Open Data RFT/OT Initiative.
- 32) SET-318/RSM AI/ML and Cognitive Radar.
- 33) SET-HFM-ET-130 Existence and Detection of Signal-induced Human Performance Degradation (HPD).
- 34) SET-320/RTG New frontiers in modern passive radars.
- 35) SET-319/RSM New Mathematical Frontiers for Multi-Dimensional Radar Systems.
- 36) SET-ET-129 Algorithms as Observers: The Future of Imaging System Design, Modeling, and Testing.

Panel konceptů a integrace systémů (SCI)



SCI – Systems Concepts and Integration Panel

System of systems approach across spectrum of platforms & operating environments; Integrated defense systems

- 37) TAP for new ET on 'Satellite Artificial Intelligence & Machine Learning (SATAM)'.
38) TAP for RTG follow-on of SCI-ET-055 on 'Air Platform Generic Self-Defence'.

Společné aktivity více panelů

- 39) Operational CBR Threat Situational Awareness (HFM-SET RTG).
- 40) Military Impact of Quantum Technology (IST).
- 41) Contrasting & Combining Design Space Exploration Approaches for Systems with Autonomous Functions (SET).
- 42) Quantum Algorithms for Data Fusion and Resources Management (SET).
- 43) Satellite Artificial Intelligence & Machine Learning (SATAM) (SCI).
- 44) C-UAS Mission-Level Modelling & Simulation (SCI)