

**DAY 1**

**Welcome / Introduction  
ESA Harmonisation overview  
(Highbay, 09:00 - 09:30h)**

Time	Downstream Applications: land use and management - Part 1 (High Bay, 09:30 - 12:30h)	Materials and Manufacturing processes (Auditorium, 09:30 - 12:30h)	Satellite to ground communications (Multimedia Library, 09:30 - 12:30h)
09:30	SentiRice: Sentinel data-based support tool for sustainability certification of rice fields (D. Jakovels / Institute for Environmental Solutions, LV)	Fused Deposition Modelling of Ceramic Component (L. Baca / Slovak University of Technology / Faculty of Chemical and Food Technology, SK)	End-to-end hardware encryption and PKI for CCSDS/SDL5 satellite communication (S. Alberico / Kluksa O&I, EE)
09:50	Instillicee - Finding ideal bore forage areas using EO and IoT data (D. Maic / List Labs, HR)	Interlaminar reinforcement of fiber reinforced polymer composites with electrospun nanofibres (A. Evangelou / AmaDema, CY)	Extensible Runtime Framework for Procedure Languages in the Context of the European Ground Systems - Common Core (L. Atanasov / SkimPro OOD, BG)
10:10	Dynland™ technology for classification of satellite and supplementary data (I. Mednick / Institute Of Electronics And Computer Science, LV)	Improvement of Mechanical and Wear Resistance Properties by Hybrid Additive Manufacturing of Ti6Al4V Alloy and Ti6Al4V-TiC Metal Matrix Composite (S. Malj / Balmar d.o.o., SI)	Towards Deep Space Ground Segment in Latvia (M. Doneshchik / VIRAC/VIRATEC/IRGS, LV)
10:30	Direct Observation & Monitoring of Instability via Satellite-Radar Interferometry ("DOMISI") (S. Perdikou / Geofem Ltd, CY)	Potential solid lubricant for extreme temperatures based on vanadium boride (to be combined with Staton, new title) (T. Rosh / Comenius University in Bratislava, FMPI, SK)	Radio architectures for advanced communication applications (B. Eged / Sagax Communications, HU)
<b>Coffee break (10:50 - 11:00h)</b>			
11:00	KappaOne and KappaMask - improving the usability of Sentinel-1 and -2 data (K. Voornmans / KappaZero Ltd, EE)	A novel technological approach in satellite communication to provide software middleware solution for information confidentiality and security in multitenant environments. (M. Kossida / Decent Cybersecurity s.r.o., SK)	See and be seen - GNC solutions in the VNIR and TIR spectra / Towards greener coatings for space metallic and thermal hardware (B. Somosvari / Admatis Ltd., HU)
11:20	NaturaSat - software for exploring Natura 2000 habitats by satellite data (K. Mikula / AlgoritmySK s.r.o., SK)	Data exchange and management platform for space (DEMPS) - System for optimal data transfer in nanosatellites constellations using Data Distribution Service technology (A. Ungutaitis / Elbas Pro, LT)	DUSTFLOW - Particulate Contamination Flow Simulator (A. Jaworski / CIM-mes Projekt, PL)
11:40	Sentinel Hub and Sinergise - going from a completely unknown to a renown player in the EO field, with a little help from our friends at ESA (G. Mikinski / Sinergise, SI)	Establishing of Ground Segment industry in Latvia based on large aperture antennas (A. Klokova / VIRATEC Ltd. / Ventspils International Radio Astronomy Centre, LV)	Concept of Space Junkyard managed by intelligent satellite swarms and its potential role in fostering sustainability and cyclic economy in space / In-space Capacitor Discharge Welding - An opportunity for In-Orbit Assembly (M. Gebura / Space Scavengers, SK)
12:00	CAPCON - the first operational CAP satellites control service based on Copernicus SAR data / Copernicus C-Band and Airbus X-Band SAR data integration for smart farming services (G. Geomatrix UAB, LT)	High Isolation X-band and S-band DPLEXers in economical Technologies for Space Applications (R. Stefanski / WIRan Sp. Z.O.O., PL)	In-space Capacitor Discharge Welding - An Opportunity for In-Orbit Assembly (N. Beronka / Institute of Materials and Machine Mechanics of SAS, SK)
12:20		Compact and affordable optical telecommunication solutions for micro satellites (S. Beatece / Golbraik, EE)	A novel technological approach in satellite communication to provide software middleware solution for information confidentiality and security in multitenant environments. (M. Michalco / Decent Cybersecurity s.r.o., SK)
12:40		ProtoSat - AI software development platform for small satellites (F. Novoselich / Protoplat Labs d.o.o., HR)	ESA outlook and needs (ESA)
13:00		ESA outlook and needs (ESA)	

**Lunch (12:30 - 14:00h)**

Time	Downstream Applications: land use and management - Part 2 (High Bay, 14:00 - 17:00h)	Structures and Thermal (Auditorium, 14:00 - 17:00h)	Training courses (starting at 14h)
14:00	Satellite technology and cultural heritage - networking across disciplines (C. Galdes / University of Malta, MT)	Building competence of Polish sector in the manufacture of Space structures - case study (B. Pionka / SCNTPL - Silesian Science And Technology Centre Of Aviation Industry Ltd, PL)	<p>CDf training course will take place in the CDf facility of ESA / ESTEC - participants will be accompanied there</p> <p>TRL calculator course will take place in the Multimedia Room</p>
14:20	New member state company success story: GPU-accelerated EO data processing in CGI Estonia (M. Jassi / CGI Estonia, EE)	Protect and serve - Technology developments in satellite thermal control (J. Štokelj / Admatis, HU)	
14:40	ESA satellite imagery applications in forestry, agriculture, utilities and municipalities (I. Barga / Bahic Satellite Service, LV)	Latvian contribution to the development of novel two-phase thermal & propulsion space technologies (D. Mishkinis / Albatross Sia, LV)	
<b>Coffee break (15:00 - 15:30h)</b>			
15:30		COMOTI contribution to the development of mechanisms for the European space industry (-> focus on pump) (R. Mihalache / Conosi - Romanian Research And Development Institute For Gas Turbines, RO)	
15:50		Adaptation of 0.5W Miniature Stirling Cryocooler for Space (A. Osterman / LE-TEHNKA, SI)	
16:10		ESA outlook and needs (ESA)	

**Social event including transfer to location**

**DAY 2**

Time	Downstream Applications: water & coastal monitoring (High Bay, 09:00 - 12:00h)	Smallsat missions and hardware (Auditorium, 09:00 - 12:00h)	Planetary exploration and rovers (Multimedia Room, 09:00 - 12:00h)
09:00	Intelligent e-Infrastructure for Sustainable Management and Exploitation of Rivers and Dams based on Earth Observation and AI (I. Danova / Mozaika, BG)	GAN-FET-based highly efficient scalable converter for LEO / High-Rel mission needs (L. Bago / CBS LLC, HU)	Illumination module for various spacecrafts (satellites to rovers) to enable cameras to monitor processes in low to no natural light conditions (P. Halapan / Crystalspace, EE)
09:20	WeSea - Autonomous Coastal Monitoring System (D. Maic / List Labs, HR)	HyperSat - modular, scalable, universal, small satellite platform (M. Boda / Creotech Instruments, PL)	Flagging wing concept optimization for Mars exploration (Z. Terze / Faculty of Mechanical Engineering and Naval Architecture, HR)
09:40	Advancing aquatic remote sensing in Estonia through ESA membership (M. Lagi / University of Tartu, EE)	Shared Satellite Platform Development (ShareSat) - a paradigm shift in sustainable and accessible space (V. Dinov / Endorasat, BG)	Capacitive Absolute Sensor for Space Applications - CAPSE (C. Stratyński / CTRL s.r.o., SK)
10:00	An emerging demand and solutions for Earth Observation-based water quality assessment and monitoring in Lithuania (D. Vasaitis / Marine Research Institute, Klaipeda University, LT)	RD ALFA Microelectronics (L. Lapiš / RD Alpha Electronics, LV)	Leveraging Unreal Engine 5 framework for custom Lunar Lander and rover mission simulations (H. Teras / Tartu University Tartu Observatory, EE)
<b>Coffee break (10:30 - 11:00h)</b>			
11:00	Sentinel-Based detection and identification of negative human influence on the Mediterranean coastal zone (I. Tomljanovic / Oikon Ltd - Institute of Applied Ecology, HR)	KP Labs - AI computers and software to bring autonomy into demanding space missions (J. Nalpa / KP Labs, PL)	Lightweight prospecting rover platform (M. Hazadi / Puli Space Technologies Ltd, HU)
11:20	Earth Observation initiatives for the Black Sea region (S. Constantin / Terraviva, RO)	In-house RF simulations accelerate pico-satellite development (M. Scopimakis / Cenos, LV)	Design and development of a proof of concept strategic mission planning tool for future Lunar rovers missions (Q. Islam / Tartu Observatory, University Of Tartu, EE)
11:40	Sentinel-1 based complex case studies for safety and sustainability (G. Gromerzy / Geo-Stationed Research, Service and Consulting Ltd, HU)	Light-Pollution Characterization Module (J. Titovac / University of Zagreb Faculty of Electrical Engineering and Computing, HR)	New capabilities for on-orbit satellite servicing and ISRU (W. Boscovsz / Deep Space, PL)
12:00		NANOSky satellite avionics (D. Gačnik / Skytabs, SI)	GMV eyes and brain - developing capabilities for future planetary exploration missions (C. Chiu, GMV Innovating Solutions S.R.L., RO)
12:20		Romanian in Space Engineering (C. Cherciu, RISE / RO)	ESA outlook and needs (ESA)
12:40		ESA outlook and needs (ESA)	

**Lunch (12:30 - 14:00h)**

Time	Optics, Lasers and their applications (High Bay, 14:00 - 17:00h)	Life Sciences, ISRU and Life Support in Space (Auditorium, 14:00 - 17:00h)	Space weather monitoring and analysis (Multimedia Room, 14:00 - 17:00h)
14:00	Towards Real-life Free-space Quantum Communications (M. Czornom / Budapest University Of Technology And Economics (BME), HU)	Steps towards efficient and unobtrusive monitoring of the state of astronauts and optimizing performance in space (A. Ikonides / AAI Scientific Cultural Services Ltd, CY)	ROSIE: Radio Observations of Solar Indexes in Europe (A. Tomczyk / ITTL, PL)
14:20	Scalable ultra-short-pulse actively mode locked laser source for optical communication and ranging (SCALA) (V. Tomkus / Astroflight UAB, LT)	3D printing of personalized food supplements and pharmaceutical forms in space - a review of the 3DMedLowG project (R. Capuder / Zaved 404 / Institute 404, SI)	Monitoring and prediction of disturbances in the interface between Space and Earth's atmosphere (S. Mackovjac / Institute of Experimental Physics, Slovak Academy of Sciences, SK)
14:40	Development of Bismide-based Interband Lasers for Methane Leak Sensing at High Operation Temperatures (J. Devenson / Centre For Physical Sciences And Technology, LT)	Programmable Modular Detectors for Ionizing Radiation Measurements (S. Ivanov / Space Fluent Ltd, BG)	Potential Enhancements in Ionospheric Monitoring under SSA / Enhancing Space Awareness in Cyprus through Space Weather Studies (H. Haralambous / Frederick University, CY)
15:00	Precision time interval meter for Space (P. Rammjevs / Evencel, LV)	Content Analysis of Diaries of Antarctic Wintertime in Concordia and Halley VI Stations / Cognitive performance and brain activity in real and simulated microgravity (B. Ehrmann, L. Balazs / Research Centre for Natural Sciences, HU)	ESA outlook and needs (ESA)
<b>Coffee break (15:30 - 15:45h)</b>			
15:30	Ultra-Broadband Antireflection Coatings Based on Highly Absorbing Thin Amorphous Diamond Like Carbon Nanocomposite Films with Silver Nanoparticles (I. Tamulevičius / Kaunas University of Technology, LT)	Microbial degradation of cellulose containing wastes - a key process in life support system at Earth and long term space missions (H. Najdoski / The Stephan Angeloff Institute Of Microbiology, Bulgarian Academy Of Sciences, BG)	
15:50	ESPRESSO II: Essential preparation steps for qualification longevity of Space Optics (G. Batavičič / Lidaris, LT)	Optimization of the natural photosensitizer-based antimicrobial photoactivation technology for terrestrial and space applications (I. Buhacev / Vrbins University, LT)	
16:10	Software-enhanced non-mechanical 3D camera development and feasibility study for space applications (A. Olak / Lightcode Photonics, EE)	Planetary Habitat Simulation: ESA ground-base research facility in Slovenia (I. Mekjavic / Jozef-Stefan-Institute, SI)	
16:30	ESA outlook and needs (ESA)	Recovery of edible cells from liquid loop, current R&D projects and capabilities (R. Krampf / Bios Technologies, SK)	
16:50		ESA outlook and needs (ESA)	