



# 2023 Clean Space Industry Days

## Tuesday, October 17, 2023

### **End-of-Life Management & Zero Debris: Plenary: Zero Debris Policy evolution (9:30 AM - 11:00 AM)**

time	[id] title	presenter
9:30 AM	[138] Introducing the Zero Debris approach	SOARES, Tiago
10:00 AM	[139] Introducing the Zero Debris charter	VERSPIEREN, Quentin
10:15 AM	[140] ESA Space Debris Mitigation Standard 2023	LETIZIA, Francesca
10:45 AM	[141] Evolution of the LOS (Loi relatives aux Operations Spatiales/ French law on space operations)	OMALY, Pierre

### **End-of-Life Management & Zero Debris: Lessons Learnt End-of-Life (2:00 PM - 3:30 PM)**

time	[id] title	presenter
2:00 PM	[119] Aeolus re-entry paving the way to mitigate on Ground casualty risk	LAGADEC, Kristen
2:18 PM	[98] Aeolus assisted reentry: a successful story	Mr PARRINELLO, Tommaso
2:36 PM	[37] CHEOPS: from reentry in 25 years to 5 months	MODREGO CONTRERAS, David
2:54 PM	[18] Rocket body reentry trends	WRIGHT, Ewan
3:12 PM	[53] Ariane 6 - Space debris limitation	DIAS, Nathalie

### **End-of-Life Management & Zero Debris: Space Surveillance and Tracking (4:00 PM - 5:30 PM)**

time	[id] title	presenter
4:00 PM	[30] Objects characterisation with on-ground SST measurements in support of space debris removal operations	GALLEGO TORREGO, Angel DE ANDRÉS TIRADO, Adrián PAULETE PERIAÑEZ, Carlos TORRAS RIBELL, Marc CARRO, Javier
4:20 PM	[66] CNN4NEOOD - CONVOLUTIONAL NEURAL NETWORK FOR NEAR EARTH OBJECT OBSERVATION AND DETECTION	Ms UNNI, Aiswarya VENANZI, mauro
4:40 PM	[149] Dark & Quiet Skies	WILLIAMS, Andrew

# Wednesday, October 18, 2023

**End-of-Life Management & Zero Debris: How to reach Zero Debris WS: Successful Disposal and Orbital clearance (9:30 AM - 11:00 AM)**

**End-of-Life Management & Zero Debris: How to reach Zero Debris WS: Active Debris Removal and Space Debris release (11:30 AM - 1:00 PM)**

**End-of-Life Management & Zero Debris: How to reach Zero Debris WS: Collision risk management and Space Situational Awareness (3:00 PM - 4:30 PM)**

**End-of-Life Management & Zero Debris: How to reach Zero Debris WS: Re-entry safety (5:00 PM - 6:30 PM)**

# Thursday, October 19, 2023

## **End-of-Life Management & Zero Debris: Deorbit & Passivation technologies (9:30 AM - 11:00 AM)**

time	[id] title	presenter
9:30 AM	[25] Advancements in Inflatable Drag Devices for Satellite De-Orbiting by SPACEO	LOUREIRO, Joao Pedro
9:48 AM	[54] Deorbiting Solid Rocket Motor equipped with Thrust Vector Control – a base for propulsion system for controlled re-entry	Ms MAJEWSKA, Ewa
10:06 AM	[79] The Deorbiting Kit: Optimised solution for ESA's Zero Debris Policy Implementation	GARCES DE MARCILLA, Diego Ms SAURA CARRETERO, Gemma Mr ANTONETTI, Stefano
10:24 AM	[99] Equipment for Satellite End-of life Management and Deorbit	WURDAK, Malte
10:42 AM	[124] Introducing the European Reconfigurable Battery Unplugging System: a Step Towards Sustainable End-of-Life Management for Small-Satellites Constellations	FAZZOLETTO, Emilio

## **End-of-Life Management & Zero Debris: EOL for SmallSats (11:30 AM - 1:00 PM)**

time	[id] title	presenter
11:30 AM	[73] ADEO-N2 - Dragsail Deorbit Mission - The European Commercial Passive De-Orbit Subsystem Enabling Space Debris Mitigation for CubeSats, SmallSats and Constellations	Mr STELZL, Daniel
11:45 AM	[92] Assessing impacts of Zero Debris approach on Cubesats: A System Analysis	SURIANI, Lucia
12:00 PM	[132] SmallSat End-of-Life Workshop	

## **End-of-Life Management & Zero Debris: Methods and tools for Zero Debris and re-entry (11:30 AM - 1:00 PM)**

time	[id] title	presenter
11:30 AM	[12] Utilization of a risk index to incentivize satellite operators to follow best practices for post mission disposal: the mission index module of the Space Sustainability Rating	Mr SAADA, Adrien
11:48 AM	[5] A cloud-based multi-fidelity solution for space debris assessment	Dr BRIDEL-BERTOMEU, Thibault
12:06 PM	[89] Methodologies and Tools to Ensure the Safe and Sustainable Re-entry of Spacecrafts	Ms BURLOU, Andreea
12:24 PM	[133] A Direct Approach for Assessing Demise Capability and Modelling Correlation for DRAMA: A Case Study on Composite Materials	LOOTEN, Alexandre
12:42 PM	[123] Extension of ESA's Survival And Risk Analysis tool with hemisphere and lattice shapes	SPEL, Martin

## **End-of-Life Management & Zero Debris: Design for Demise (2:00 PM - 3:30 PM)**

time	[id] title	presenter
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2:00 PM	[29] SpaceCraft Object Risk Evaluation Database (SCORED)	BECK, James
2:20 PM	[51] The Topology Optimization approach, a promising technology to adopt as a Design for Demise solution	Dr GALERA, Stephane
2:40 PM	[106] A Multiscale Heating Correction Code for Space Debris Demise Simulations	MERRIFIELD, James DONALDSON, Nathan
3:00 PM	[86] On Demisable Fiber Reinforced Plastic Composites	SCHLEUTKER, Thorn
3:20 PM	[148] Challenges in the development for a demisable Xenon Tank	HEHER, Philipp

**End-of-Life Management & Zero Debris: Design for Removal (2:00 PM - 3:30 PM)**

time	[id] title	presenter
2:00 PM	[134] Preparing for a Cleaner Space: Introduction to ESA's Design for Removal	PADILLA, Estefania
2:10 PM	[28] Markers Supporting Navigation Development and Qualification	SZEGEDI, Laszlo
2:30 PM	[75] MICE (Mechanical Interface for Capture at End-of-Life): Qualification results and future use	CAMAÑES, Carmen
2:50 PM	[101] A PASSIVE DEVICE FOR POSTMORTEM DETUMBLING / ANTITUMBLING OF LEO SATELLITES, TO FACILITATE ACTIVE REMOVAL	SENES, Maxime Mr LAGADEC, Kristen Mr PAYOT, Frédéric
3:10 PM	[43] The puzzling dynamic evolution of defunct satellites: a challenge for Active Debris Removal missions	BENOIT, Alain

**End-of-Life Management & Zero Debris: Design for Demise (4:00 PM - 5:30 PM)**

time	[id] title	presenter
4:00 PM	[103] Generic separation technologies to improve demise behaviour	WEIHRETER, Martin
4:18 PM	[32] Demise Testing and Modelling of Glass Materials and Demisable Bipod Concepts	BECK, James
4:36 PM	[87] Influence of the Selected Alloy and the Dynamic Loads on the Demisability of Aluminium	SCHLEUTKER, Thorn
4:54 PM	[36] DRACO mission phases A-B1 outcomes and way forward	Mr CAMPO, Saul
5:12 PM	[104] Demisability of Platform Optics and Electronics	LOCKETT, Bradley

**End-of-Life Management & Zero Debris: Design for Removal (4:00 PM - 4:20 PM)**

time	[id] title	presenter
4:00 PM	[55] CAT: A Satellite Capture Payload Bay for ADR Servicing	GANDIA, Fernando PRIETO, Manuel

**End-of-Life Management & Zero Debris: Workshop: Standardized removal interface (4:20 PM - 5:30 PM)**

time	[id] title	presenter
4:20 PM	[135] Standardized Removal Interface Workshop	