

ESA-ECSL Space Debris Workshop: Regulation, Standards and Tools

19 – 21 March, ESA ESOC

Day 1. Regulation (19 of March)

REGISTRATION & WELCOME		
9.00 – 09.30	Registration & Coffee	
OPENING CEREMONY		
09.30 – 10.10	Rolf Densing - "Space Debris in ESA's Space Safety Programme"	
	Marco Ferrazanni - Live video Message	
	Kai-Uwe Schrogl - Recorded video Message	
	Alexander Soucek, Holger Krag - Workshop Logistics	
Part 1. International Space Law		
10.10 – 10.30	International Space Law	Alexander Soucek, ESA
10.30 – 11.00	Non-legally binding instruments	Alexander Soucek, ESA
11.00 – 11.25	Break	
11.25 – 12.00	Introduction to National Space Legislation	Alexander Soucek, ESA
12.00 – 13.00	Lunch	
Part. 2 Space Debris and National Space Legislation		
13.00 – 13.30	Normative References to Non-legally Binding Instruments in National Space Laws with a Focus on Space Debris	Jenni Tapio, Ministry of Economic Affairs and Employment of Finland

13.30– 14.30	PANEL: Perspectives from European States: Space Debris and National Space Legislation Moderator: Alexander Soucek	Jean-Francois Mayence, BELSPO Jenni Tapio, Ministry of Economic Affairs and Employment of Finland Philippe Clerc, CNES
14.30 – 15.00	Space Traffic Management	Kai-Uwe Schrogl, ESA (videoconference)
15.00 – 15.30	Break	
Part 3. Legal consideration and Active Debris Removal (ADR)		
15.30 – 16.00	National Space Legislation and Active Debris Removal	Philippe Clerc, CNES
16.00 – 16.30	IAA Study on Space Debris and Active Debris Removal	Prof. Lesley-Jane Smith, Leuphana University
16.30 – 16.50	Legal Considerations in relations to ADR mission	Alexander Soucek, ESA
16.50– 17.00	Concluding Remarks	

18:00 – 21:00 Reception in the ESOC Cantene

Day 2. Standards (20 of March)

Part. 1 Introduction		
09:00 – 09:15	Welcome and Overview of the Day	
09:15 – 09:40	Space Debris Mitigation Principles and their Effects	Holger Krag, ESA
09:40 – 10:10	International Guidelines	Thomas Schildknecht, AIUB
10:10 – 10:30	Current Implementation Levels	Stijn Lemmens, ESA
10.30 – 11.00	Coffee Break	
Part. 3 Standards and Processes		
11.00 – 11.30	The GVF Best Practices Document	Dan Oltrogge, AGI
11.30 – 11.45	Space Debris Standards on ISO Level	Dan Oltrogge, AGI
11.45 – 12.00	Debris related subordinated ISO-standards	Vitali Braun, ESA
12.00 – 13.00	Lunch Break	
13.00 – 13.30	Future Debris Management Concepts	Stijn Lemmens, ESA
Part. 4 Processes and Implementation Examples		
13.30 – 14.30	The ESA Space Debris Mitigation Process, Handbooks and Examples	Rosario Nasca, ESA
14:30 – 15:00	French Process for Debris Mitigation Compliance Verification	Laurent Francillaut, CNES
15:00 – 15:30	The Belgium Space Debris Mitigation Process	Jean-Francois Mayence, BELSPO
15.30 – 16.00	Coffee Break	
16:00 – 16:30	Licensing Space Activities in the era of New Space	Toby Harris, UKSA
16:30 – 17:00	The New Zealand Process for Space Debris Mitigation	Dave Willing, New Zealand Space Agency
17:00 – 17:30	Space Debris Mitigation – Implementation by DLR	Jan Grosser, DLR
17:30	Adjourn	

19:00 – 21:00 Dinner (self paid, self transport) in the Braustuebl, Goebelstrasse 7

Day 3. Tools (21 of March)

Part. 1		
ESA master to environment models		
09:00 – 09:10	Welcome and Overview of the Day	
09:10 – 09:25	DISCOS - Object properties database for applications	Quirin Funke, ESA
09:25 – 09:35	Introduction to ESA’s MASTER Model and Licensing Process	Vitali Braun, ESA
09:35 – 10:30	MASTER-8 model upgrades and validation	Andre Horstmann,TUBS
10.30 – 11.00	Coffee Break	
11:00 – 12:00	MASTER-8 features	Andre Horstmann, TUBS
12.00 – 13.00	Lunch Break	
Part. 2		
Compliance verification tools		
13:00 – 13:15	Introduction to ESA’s DRAMA-3.0, Scope, License and future Roadmap	Stijn Lemmens, ESA
13:15 – 14:30	CROC, OSCAR, ARES, MIDAS, pyDRAMA	Vitali Braun, Silvia Sanvido, ESA
14.30 – 15.00	Coffee Break	
15:00 – 16:00	SARA	Ronny Kanzler, HTG
16:00	Adjourn	