

SPACE POLICY & LAW COURSE
4 TO 6 NOVEMBER 2024**ON-LINE****MONDAY 4 NOVEMBER 2024***

1. SPACE ENVIRONMENT AND TECHNOLOGY – 09.15 - 10.30* JE
- Delimitation of Space and Airspace
 - Environmental characteristics
 - Orbits, types of Spacecraft, Mega-constellations
 - Discussion and questions MS

BREAK – 10.30 - 10.45

2. POLICY FORMULATION AND INSTITUTIONS – 10.45 - 12.00 AKS
- Policy Principles, Peaceful Use, Non-appropriation, Cooperation and Non-interference
 - Policy development, Institutions and Diplomacy
 - International and National Institutions - nature and role
 - UN COPUOS, ESA, Regional Organisations and operating methods
 - National Policies, formulation and implementation
 - Discussion and questions DS

LUNCH – 12.00 - 13.00

3. THE LEGAL REGIME – 13.00 - 14.15 PJB
- Sources of Space Law, Outer Space Treaties, UN Resolutions
 - Other regimes - Antarctic, Law of the Sea and Air Law
 - International Responsibility and Liability distinguished
 - National Space Laws and Licensing
 - Norms, Practices, Guidelines, Regulations and Standards
 - Discussion and questions OS

BREAK – 14.15 - 14.30

4. THE LAWS GOVERNING SPACE APPLICATIONS – 14.30 - 15.45 TM-Z
- Sovereignty, Property Rights
 - Earth Observation: Data v. Information; UN Principles; Disaster Charter
 - Scientific experiment, Exploration and Exploitation
 - Crewed and Robotic activities: ISS; Chinese Space Station
 - Lunar and Planetary Stations
 - Discussion and questions IZ

BREAK – 15.45 - 16.00

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5. SPACE POLITICS AND DIPLOMACY – 16.00 - 17.15 HLM

- EU, EUSPA and ESA Relationship
- UK ESA and EU Relationship
- Space Powers Mid-century, China, EU, India, Japan, Russia, US
- Discussion and questions

RK

TUESDAY 5 NOVEMBER 2024*

6. COMMERCIAL SPACE ACTIVITIES – 09.15 - 10.30* MR

- Nature and Range of Commercial Space Ventures
- PNT Applications and Services
- Spaceflight and Spaceports
- Small Satellite Mega-constellations
- On-orbit Servicing
- Space Solar Power Systems
- Active Debris Removal
- Regulation, Market Access
- Discussion and questions

MLR

BREAK – 10.30 - 10.45

7. RISK, LIABILITY AND INSURANCE – 10.45 - 12.00 AS

- Laws Governing Liability (Risk and Fault)
- Liability for Debris and Obligation not to Create, SDA
- Active Debris Removal - Remediation vs Mitigation
- Insurance
- Discussion and questions

TM-Z

LUNCH – 12.00 - 13.00

8. CURRENT AND FUTURE DEVELOPMENTS – 13.00 - 14.15 RJ

- Large Constellations
- Extra-terrestrial habitation
- Resource Extraction (Private & State participation, property rights, appropriation and the issue of Territory vs. Resources, and other concepts)
- Space-based Solar Power
- Artificial Intelligence and Autonomous Systems
- Discussion and questions

J-JD

BREAK – 14.15 - 14.30

9. SATELLITE COMMUNICATIONS – 14.30 - 15.45 LR

- Telecommunications and Broadcasting: The Role of the ITU
- Orbital Positions, Co-ordination
- Spectrum management: Frequency Efficiency and Market Reach
- Harmful interference, Jamming, Signal Interception, Cyber Security
- Frequency priority, EU and the ITU
- Discussion and questions

SM

BREAK – 15.45 - 16.00

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10. MILITARY AND SECURITY USES – 16.00 - 17.15 JG
- Military support functions and Space Weapons
 - Space a "war-fighting" domain
 - Role of Cyber, Drones and Robotics
 - Consequences of AI
 - Environmental and Humanitarian factors
 - Small Satellite Constellations potential and risks
 - Discussion and questions JS
- WEDNESDAY 6 NOVEMBER 2024***
11. SPACE HAZARDS AND SAFETY – 09.15 - 10.30* RC
- Space hazards - Man made and natural: Meteorites, Debris
 - Debris Reduction and Elimination Measures
 - Responsible Behaviour, Transparency and Confidence Building Measures
 - Discussion and questions SE
- BREAK – 10.30 - 10.45
12. SPACE HAZARDS AND SAFETY – 10.45 - 12.00 SE
- Space Domain Awareness and Space Traffic Management
 - Space Weather
 - Terrestrial environmental impact
 - Discussion and questions RC
- LUNCH – 12.00 - 13.00
13. CASE STUDIES – 13.00 - 14.15 SM
- Recovery and Return
 - Debris (liability, sovereignty, space domain awareness and other concepts)
 - Resource Extraction (Private & State participation, property rights, potential pollution from space, appropriation and the issue of territory vs. resources, and other concepts)
 - Active Debris Removal
 - Responsible Behaviour in Outer Space
- BREAK – 14.15 - 14.30
14. REVIEW & CONCLUSION – 14.30 - 15.45 SM
- Course Summary, Discussion and Conclusion

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LECTURERS

AKS	Arne Sönnichsen, Scientific Consultant & Researcher, IQIB
AS	Alexander Soucek, Head, International Law Division, European Space Agency (ESA)
HLM	H Ludwig Moeller, Director, European Space Policy Institute (ESPI)**
JE	Prof Jonathan Eastwood, Director, Space Lab, Imperial College London
JG	Prof Maj Jeremy Grunert, US Air Force Academy; Mississippi Univ. Air & Space Law Centre
LR	Prof Lucien Rapp,* School of Law, Toulouse1-Capitole Univ; Chair, SIRIUS
MR	Matija Renčelj, Research Manager, ESPI**
PJB	Prof PJ Blount,* Asst Professor, Durham Univ; Adj. Prof, Mississippi Univ, Air & Space Law
RC	Prof Richard Crowther,* Technical Adviser for Orbital Space, CAA; ISPL Adviser
RJ	Prof Ram Jakhu,* Former Director of Institute of Air and Space Law, McGill University
SE	Dr Stuart Eves,* Principal, SJE Space
SM	Prof Sa'id Mosteshar,* Barrister; Senior Associate Research Fellow, IALS; ISPL Director
TM-Z	Dr Tanja Masson-Zwaan,* Asst Prof & Deputy Director, IIASL, Leiden Univ; President Emerita, IISL

DISCUSSANTS

CB	Dr Christoph Beischl,* ISPL Associate Deputy Director
DS	Prof David Southwood,* past Chairman, Steering Board, UK Space Agency; ISPL Board Chairman
IZ	Ilaria Zilioli,* Legal Officer, ESA
J-JD	Jean-Jacques Dordain,* past Director General, ESA; Advisory Bds, RFA; & Space Resource, LSA
JS	Juliana Suess, International Security, STAND, German Institute for International and Security Affairs
MLR	Air Commodore (Ret'd) Mark Roberts,* Defence & Security, RHEA Group;
MS	Prof Sir Martin Sweeting,* Executive Chairman, Surrey Satellite Technology; ISPL Board
OS	Oonagh Sands,* Partner, Fietta LLP
RK	Dr Ranjana Kaul,* Partner, Dua Associates

The Discussants will join the discussion as the occasion arises.

- * ISPL Faculty
- ** ISPL Collaboration Partner