



Universiteit
Leiden
The Netherlands



McGill

Institute of
Air and Space Law

Institut de
droit aérien et spatial

The **Leiden** & **McGill** Academic Workshop on Air & Space Law

Friday, 18 September 2026
at Leiden University

Welcome Addresses and Housekeeping

09:00 - 09:30

- **Steven Truxal** - Director of the International Institute of Air and Space Law
- **Vincent Correia** - Co-Director of the Institute of Air and Space Law
- **Benjamyn I. Scott** - International Institute of Air and Space Law

Session 1

Technology, Autonomy and Digital Security

09:30 - 11:00

Laura Pierallini - Chair

- **Sofia Kyrampalidou** - More Regulation or Better Guidance? User Perspectives on Accountability in Aviation AI-based Systems
- **Aleyna Kilic** - The Legal Status of Automated Collision-Avoidance Decisions: Algorithmic Delegation and the Due Diligence Standard under Article VI of the Outer Space Treaty
- **Anna Blechova** - Who Is In, Who Is Out, and Who Should Be? A Transatlantic Perspective on Space Cybersecurity
- **Kateryna Vodolaskova** - Airports in the Age of Drones: Balancing UAS Integration and Counter-Drone Security in the European Aviation Framework

Sofia Kyrampalidou

More Regulation or Better Guidance? User
Perspectives on Accountability in Aviation
AI-based Systems

More regulation or better guidance?

User perspectives on accountability in aviation AI-based systems



Macro level



231

Aviation
Professionals

98.3%

Need regulation for
human-AI teaming

- ✈ Strong demand for regulation
- ✈ Governance uncertainty ≠ new hard law

Micro level



7 ATCOs

interacting with an AI-
enabled controller

Level 2B

Human-AI
collaboration

AI Act requirements translated into
user-facing questions



Generally open | gradual integration | routine tasks
BUT unclear aspects remain:

Roles & limits

Explainability

Oversight

Edge cases

Bridge



Non-binding draft guidance

High-level AI requirements translated into
aviation-specific expectations

Usage domains &
scenarios

AI Levels & task
allocation

Operational
explainability

Responsibility scheme



Main argument

Many accountability concerns are not just legislative gaps. They are often guidance, assurance or competence gaps.
Formal responsibility becomes meaningful only when combined with authority, information, skills & organizational support.



Method

Exploratory socio-legal case study
Framework-based mapping



Added value

Connects macro survey results to micro
user feedback
Links findings to sectoral guidance



Suggestion

Identify the nature of the gap before
choosing hard law, guidance, assurance or
training measures.



Aleyna Kilic

The Legal Status of Automated Collision-Avoidance Decisions: Algorithmic Delegation and the Due Diligence Standard under Article VI of the Outer Space Treaty

Algorithmic Delegation & the Due Diligence Standard

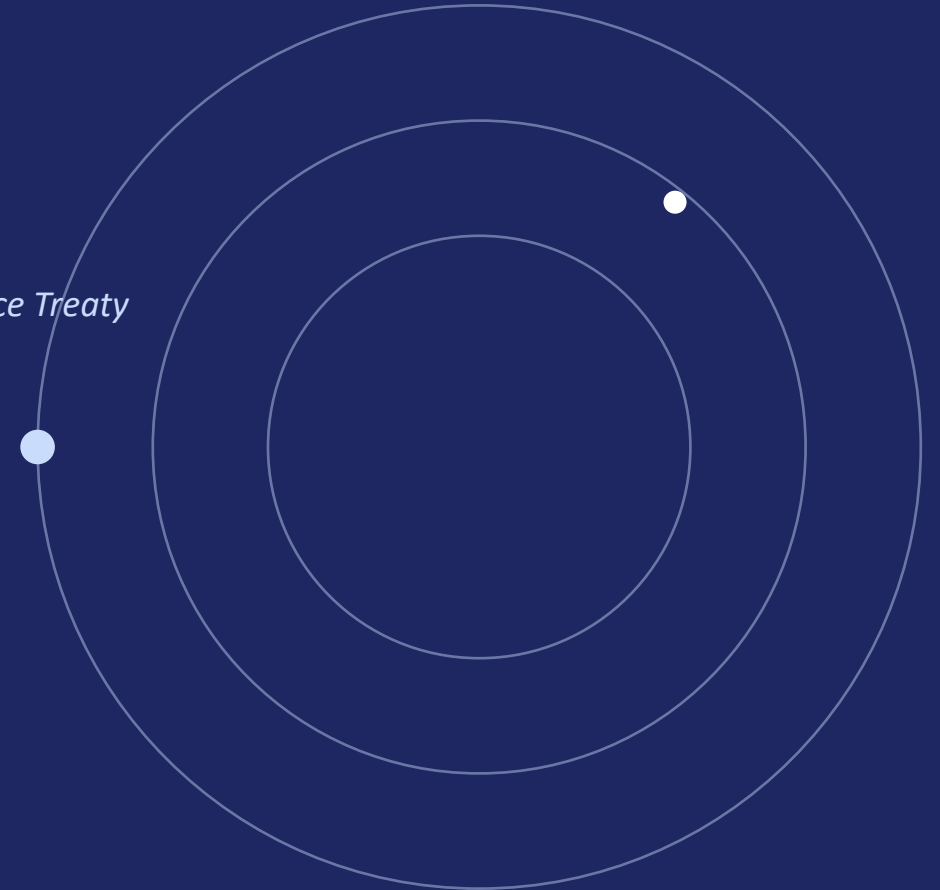
The Legal Status of Automated Collision-Avoidance Decisions under Article VI of the Outer Space Treaty

Argument: Algorithmic delegation modifies due diligence under Article VI . Not by creating a gap, but by requiring “continuing supervision” to be reinterpreted for machine autonomy.

~300,000 *autonomous collision-avoidance manoeuvres in 2025 - zero human review*

Aleyna Kilic

Master 1 International and European Law · LL.M. Cross-Border Disputes
European School of Law, Toulouse Capitole University



Key Findings & Conclusions

- 1 Supervise the System** : “Continuing supervision” shifts from individual decisions to the algorithmic architecture itself.
- 2 Procedural Due Diligence** : Impact assessments, adversarial testing, and human-in-the-loop escalation, borrowed from aviation and EU AI law.
- 3 Closing the Traceability Gap** : Mandatory algorithmic logging plus a rebuttable presumption of causation for fault-based liability.
- 4 Machine-to-Machine Coordination** : Article IX consultation reinterpreted for algorithmic speed : pre-agreed rules, not case-by-case diplomacy.
- 5 A Three-Layer Architecture** : Reinterpreted hard law + soft law + national licensing. No treaty amendment required.

HURDLES & FEEDBACK SOUGHT

- Extending “launching state” liability to software developers (*see Section III.b*)
- Presuming fault when safeguards are skipped (*see Section III.b*)
- Evolving practice, but drawn from one region (*rooted mainly in Section I.b*)

Anna Blechova

Who Is In, Who Is Out, and Who Should Be?
A Transatlantic Perspective on Space
Cybersecurity

Who Is In, Who Is Out, and Who Should Be?

A Transatlantic Perspective on Space Cybersecurity Regulation

M U N I
L A W

Anna Blechová – Leiden–McGill Academic Workshop on Air & Space Law
18th September 2026

²Space infrastructure and its impact

17 000

9 400

State => Private

Navigation, mobile banking, precise time-stamping, and global supply chains all **depend** — **often invisibly** — **on satellite systems**. That **dependence** has made space infrastructure an **increasingly attractive target**, and the long-standing assumption that physical distance affords protection has been repeatedly disproven.

Cybersecurity in Space Is No Longer Hypothetical



A screenshot of the Viasat website. The browser address bar shows 'https://www.viasat.com/'. The navigation bar includes links for Satellite internet, Aviation, Energy, Enterprise, Government, Maritime, About, Perspectives, News, and Partners. The main heading is 'KA-SAT Network cyber attack overview'. Below the heading, it says '03-30-2022', 'Viasat, Inc.', '5-minute read', and 'Corporate'. The text states: 'Viasat is providing an overview and incident report on the cyber-attack against the KA-SAT network, which occurred on 24 February 2022, and resulted in a partial interruption of KA-SAT's consumer-oriented satellite broadband service.' A detailed paragraph follows: 'On 24 February 2022, a multifaceted and deliberate cyber-attack against Viasat's KA-SAT network resulted in a partial interruption of KA-SAT's consumer-oriented satellite broadband service. While most users were unaffected by the incident, the cyber-attack did impact several thousand customers located in Ukraine and tens of thousands of other fixed broadband customers across Europe. This incident was localized to a single consumer-oriented partition of the KA-SAT network that is operated on Viasat's behalf by a Eutelsat subsidiary, Skylogic, under a transition agreement Viasat signed with Eutelsat following Viasat's purchase of Euro Broadband Infrastructure Sàrl ("EBI"), the wholesale broadband services business created as part of Viasat's former partnering arrangement with Eutelsat. The residential broadband modems affected use the "Tooway" service brand. This cyber-attack did not impact Viasat's directly managed mobility or government users on the KA-SAT satellite. Similarly, the cyber-attack did not affect users on other Viasat networks worldwide.' A final paragraph mentions: 'Network stabilization and security mitigation actions began immediately, and the network was largely stabilized within hours and fully stabilized within several days. Viasat also undertook proactive operational measures to ensure other essential back-office applications and reporting/analytics services were not impacted. These actions were strictly precautionary while Viasat monitored network behavior and activity.'



A screenshot of a Forbes article. The browser address bar shows 'https://www.forbes.com/'. The Forbes logo is in the top right. The article title is 'Space Agency Confirms Breach — Hackers Claim 200 GB Of Data Stolen'. The byline is 'By Davey Winder, Senior Contributor. © Davey Winder is a veteran cybersecur...'. There is a 'Follow Author' button. The article text includes: 'Updated January 6 with a warning for all organizations from a data protection risk mitigation veteran, following the European Space Agency's science servers breach, which hackers claim has compromised 200 GB of data.' The main body text states: 'The European Space Agency has confirmed, in a statement emailed to me, that a number of external science servers have been compromised during a security incident. The servers, are "used for unclassified collaborative engineering solutions within the scientific community," according to an ESA spokesperson. Although it is unclear at this stage which data has been compromised, I understand that the attack has not impacted any classified or highly sensitive mission systems. Threat actors have claimed a total of 200GB of data has been compromised. Here's what is known so far.'

European Regulatory Framework

EU Space Act

NIS2 Directive

Cyber Resilience Act

Revised Cybersecurity Act

Digital Networks Act (proposed)

American Regulatory Framework

Space Policy Directive-5

NIST guidance (IR 8270, IR 8323)

IEEE 3536-2026

FCC licensing conditions

DoD / IC-specific frameworks

Development of EU Space Act

Area	Commission Proposal June 2025	Council Text December 2025	Impact of the Change
Relationship with NIS2	Lex specialis (Art. 75) – this regulation prevails	Without prejudice (Art. 75) – NIS2 prevails for major operators	Avoids dual regulation for large strategic entities
Technical Measures	Set out in Arts. 76–92 (cryptography, physical security, backups)	Consolidated in Art. 75a(4).	Greater clarity; details delegated to implementing acts or standards
Cryptography	Stand-alone Art. 85 requiring a cryptographic concept and key management	Item (h) in Art. 75a(4).	Less prescriptive in primary text, increased flexibility
Incident Reporting – where	Reporting to space authorities (Art. 93)	Reporting through NIS2 CSIRT structures (Art. 93(7))	Utilises existing national cybersecurity infrastructures
Incident Reporting – when	12 hours, 72 hours, month	24 hours, 72 hours, month	Give entities necessary time to react to incident
Small Enterprises	Art. 79 defined a simplified risk management regime	Art. 75a(6) requires Commission to establish a mandatory light regime for research and educational missions	Simplification guaranteed through future implementing act
Compliance Deadlines	Immediate applicability of technical rules	Implementing acts to define details within specific deadlines	Allows adequate time for operators to prepare

Who is currently regulated within space cybersecurity frameworks — and who should be?

Method

Doctrinal, desk-based analysis of EU and US instruments, combined with 24 semi-structured interviews across academia, industry, and policymaking institutions, analysed through grounded theory.

Scope

Nine components across the ground, space, and link segments — from ground stations and CubeSats to megaconstellations and satellite communications links.

I will now present a list of space-sector components. For each please elaborate how exposed you believe it is to cyber threats, based on current standards or protection measures.

Please justify your answer.

- a. Ground station
- b. CubeSat in Low Earth Orbit (LEO)
- c. Government satellite in Medium or Geostationary Earth Orbit (MEO/GEO)
- d. Commercial satellite in LEO
- e. LEO megaconstellation
- f. "Smart" satellite component (e.g., refueling tank, satellite control software)
- g. Government-owned ground station
- h. Launch pad
- i. Satellite communications (uplink/downlink)

Nine Components, Exposure vs. Regulatory Coverage

Component	Exposure	EU coverage	US coverage
Ground stations	High	NIS 2	Indirect (NIST, voluntary)
CubeSats (LEO)	Medium - High	Unaddressed	Unaddressed
Government satellites (MEO/GEO)	High (State-level)	Carved out (NIS 2, EUSA)	DoD/IC frameworks
Commercial satellites (LEO)	High (Dual - Use)	Partial (NIS 2/CRA)	Partial (NIST/FCC)
LEO megaconstellations	Systemic	Emerging (EUSA)	Unaddressed
Smart satellite components	High (novel)	Unaddressed	Partial (NIST/IEEE)
Government-owned ground stations	High	Exempt	FISMA
Launch facilities	Medium	Unaddressed	Unaddressed
Satellite communications links	High (KA-SAT)	Indirect (DNA, NIS2)	FCC (limited mandate)

Two Regulatory Philosophies, One Trade-off

European Union

Binding, but fragmented

United States

Voluntary, but flexible

The **EU's binding-but-fragmented** approach and the **US's voluntary-flexible** approach converge on the same gaps, by opposite roads.

MUNI
LAW

Thank you for your attention!

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LinkedIn: [linkedin.com/in/anna-blechova](https://www.linkedin.com/in/anna-blechova)



Kateryna Vodolaskova

Airports in the Age of Drones: Balancing
UAS Integration and Counter-Drone
Security in the European Aviation
Framework

AIRPORTS IN THE AGE OF DRONES: *BALANCING UAS INTEGRATION AND COUNTER- DRONE SECURITY IN THE EUROPEAN AVIATION FRAMEWORK*

Kateryna Vodolaskova, MSCA Postdoctoral Researcher
k.v.vodolaskova@law.leidenuniv.nl



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Why are airports at the centre of the drone debate?

Three developments

UAS expansion	→ more drone operations around airports
Security risks	→ disruption, unauthorised operations, critical infrastructure threats
European regulatory response	→ integration <i>and</i> protection

The airport is no longer only a place where aviation takes place — it is becoming a governance node where integration and security meet.



The research question

How can airports effectively perform their dual role of facilitating UAS integration while ensuring protection against drone-related threats under the European legal and policy framework?

From:
traditional airport
governance



To:
dual airport governance



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From integration to dual governance

The airport performs two functions simultaneously:
enabling UAS operations and protecting aviation infrastructure from UAS-related threats.



The European legal framework

Integration	Protection
Regulation (EU) 2018/1139	EU Counter-UAS Strategy
Regulation (EU) 2019/947	Critical infrastructure resilience
Regulation (EU) 2019/945	C-UAS guidance
U-space Regulation 2021/664	Security / resilience policies
Drone Strategy 2.0	Airport security

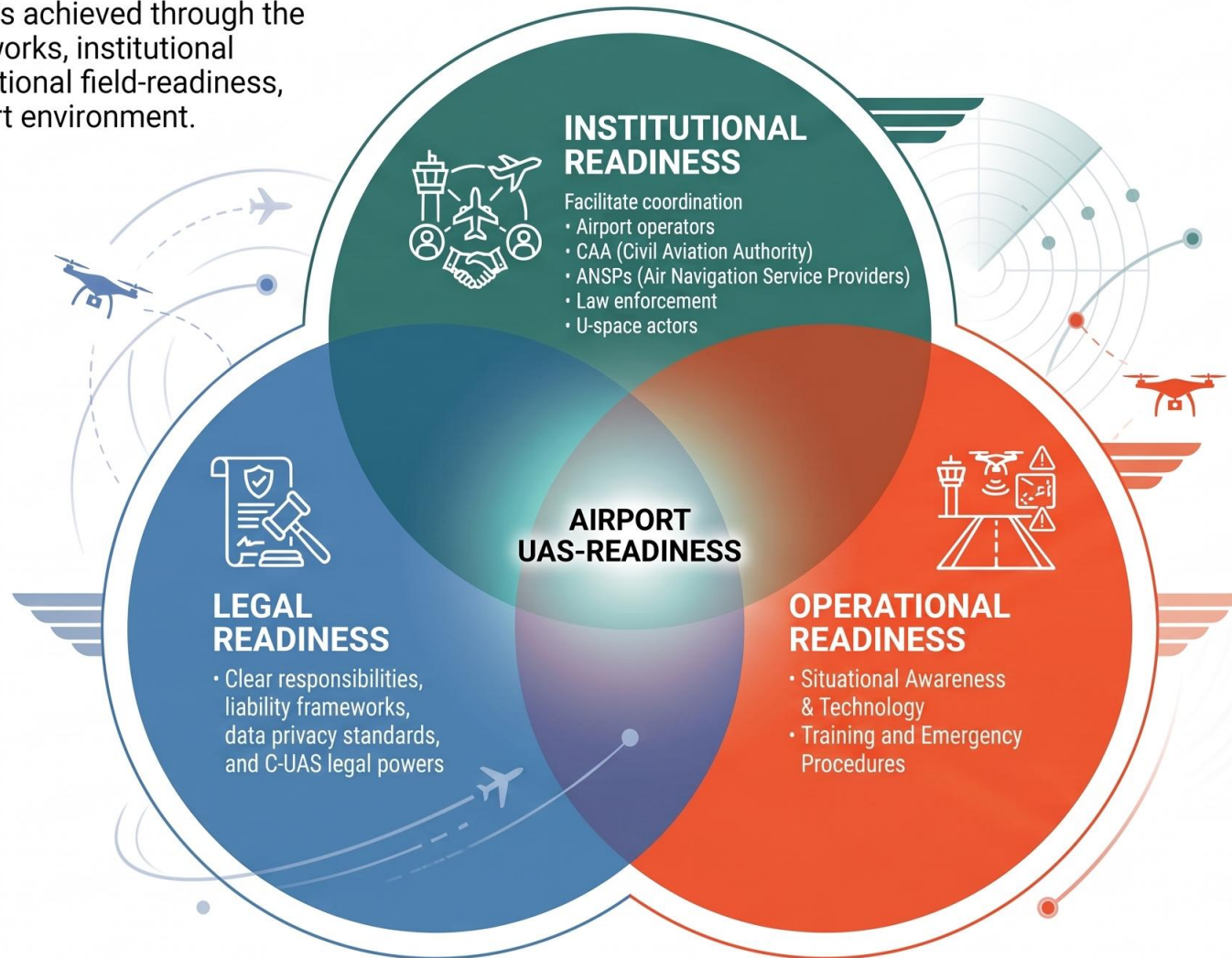
The two regulatory trajectories increasingly converge at airport level



Airport UAS-readiness

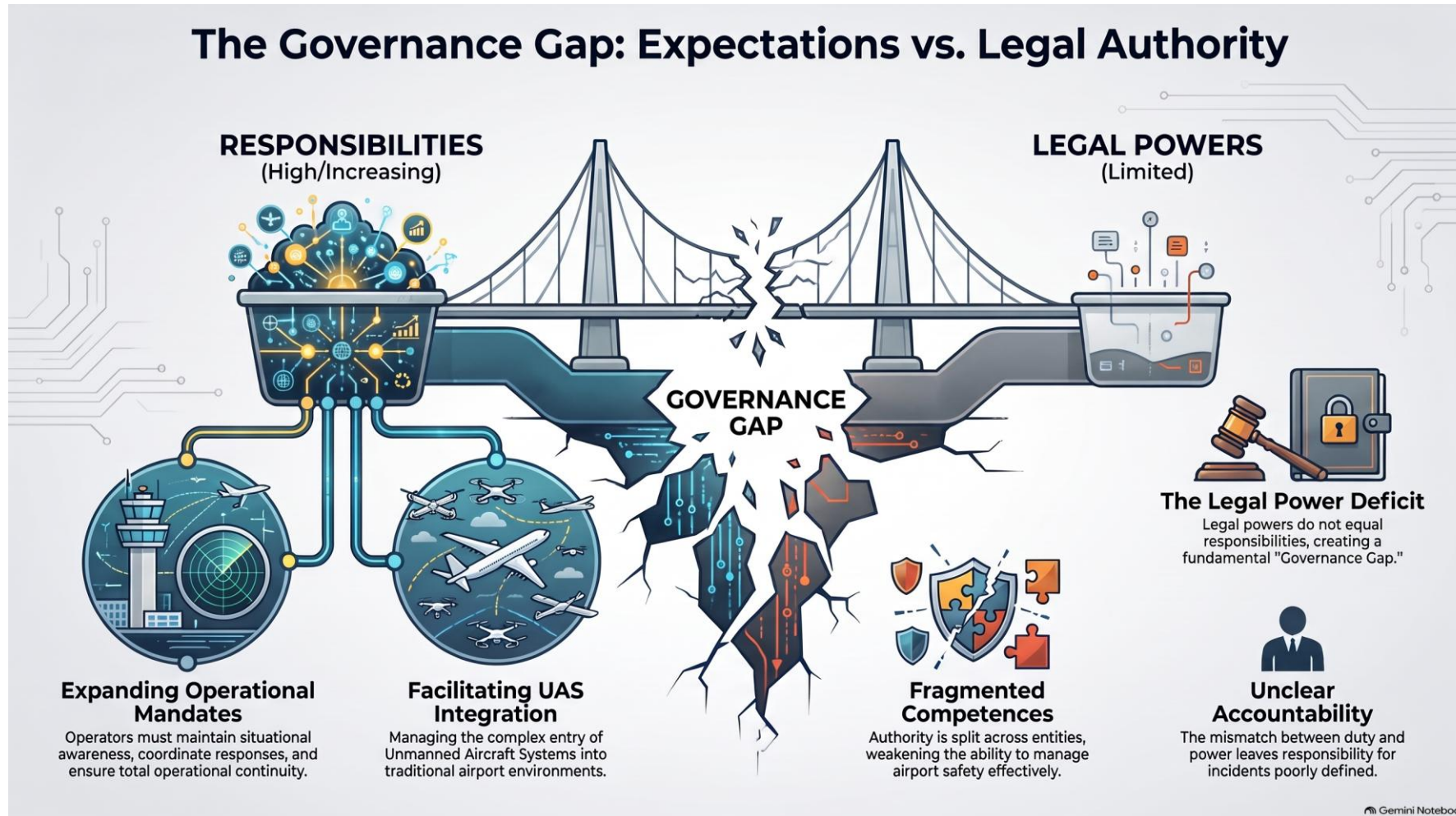
The Pillars of Airport UAS-Readiness

Airport UAS-readiness is achieved through the overlap of legal frameworks, institutional cooperation, and operational field-readiness, forming a secure airport environment.



Where does the legal problem lie?

It is not sufficient to assign responsibilities to airports. Legal frameworks must also provide the competences and institutional support necessary to exercise those responsibilities.



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Ukraine as a stress test

What does the experience of Ukraine reveal?

Drone threats have changed

From accidental / unauthorised incursions

➡ deliberate use against critical infrastructure

Resilience becomes a legal concern

Safety alone is insufficient

➡ continuity + preparedness + adaptation

Airport governance must account for hybrid risks

Airport protection becomes part of broader critical infrastructure resilience.



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Main findings & contribution

What does this analysis show?

1. Airports are dual governance actors

They facilitate UAS integration and protect aviation infrastructure.

2. Integration and security cannot be regulated separately

They increasingly converge at airport level.

3. UAS-readiness is more than technology

It requires legal, institutional and operational readiness.

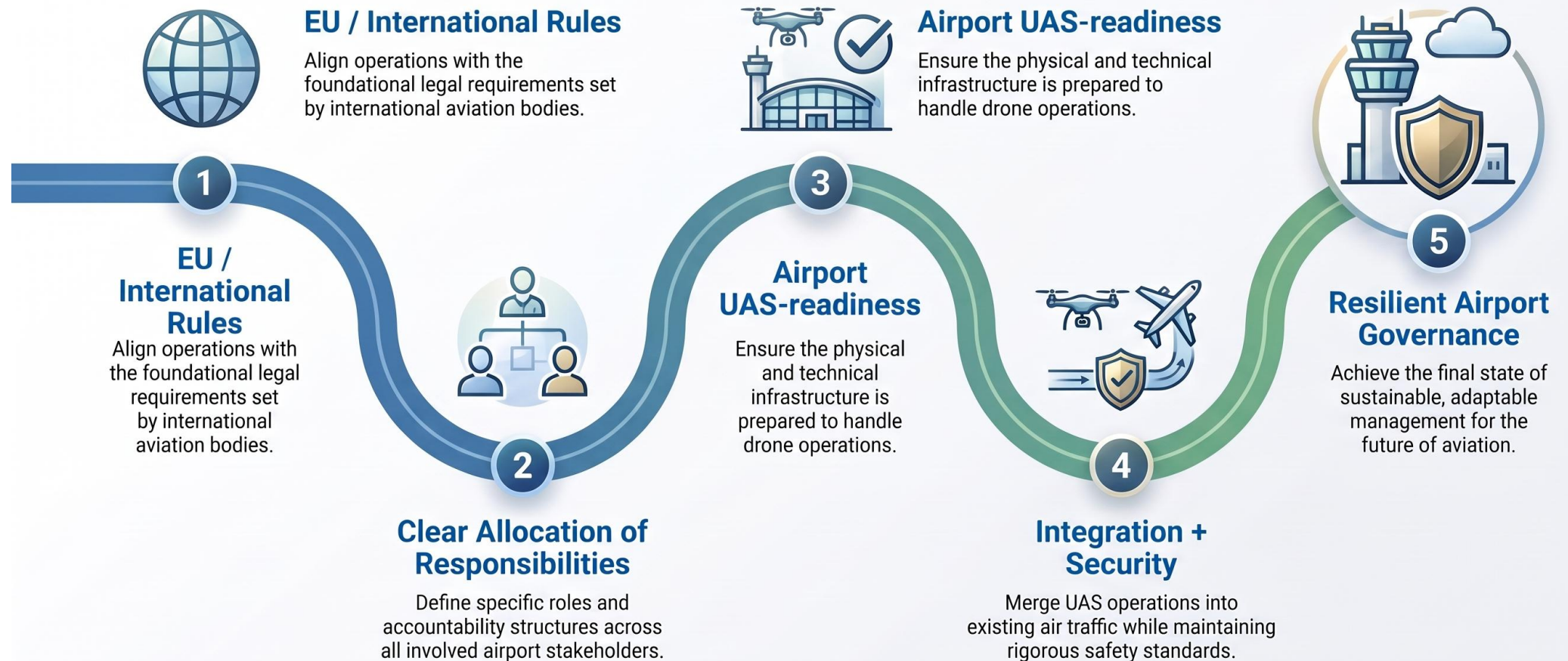
4. Resilience requires clear competences

Responsibilities, powers and accountability must be aligned.



From research to future legal design

The Path to Resilient Airport Governance



Thank you very much!

Let's collaborate for a safer, more resilient and sustainable future for aviation

Kateryna Vodolaskova, MSCA Postdoctoral Researcher
k.v.vodolaskova@law.leidenuniv.nl



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Coffee Break

11:00 - 11:30

Session 2

Conflict, Security and International Responsibility

11:30 - 13:00

Ntorina Antoni - Chair

- **David Woodworth** - The Evolution of Article 3bis: Conflict Zones and Conflicting Views
- **Sophia Stellatou** - Regulating Anti-Drone Systems in Times of Extensive Use of Military Drones
- **Alexander Wallace Watson** - Regulating Orbital Electronic Warfare and Signal Intelligence Under United Kingdom and International Law

David Woodworth

The Evolution of Article 3bis: Conflict
Zones and Conflicting Views



Chicago Convention Article 3*bis*: Outdated or Evolving?

David Woodworth, LLM
PhD Candidate – Leiden University
Professorial Lecturer in Law, George Washington
University
A320 Captain, American Airlines



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Chicago Convention Article 3*bis*

(a) The contracting States recognize that every State must refrain from resorting to the use of weapons against civil aircraft in flight and that, in case of interception, the lives of persons on board and the safety of aircraft must not be endangered. This provision shall not be interpreted as modifying in any way the rights and obligations of States set forth in the Charter of the United Nations.



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Considerations:

Civil aircraft involved in illegal activity

Accidental or negligent shootdown

Prevention

Post event actions/inactions/omissions

Use of weapons



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Questions, Comments or Recommendations?

David Woodworth, LLM

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Sophia Stellatou

Regulating Anti-Drone Systems in Times of
Extensive Use of Military Drones

Regulating counter-drone systems

Technology has outpaced the legal framework

01 Layered capability

Radar, radio-frequency, optical and acoustic sensors feed electronic, cyber, kinetic and directed-energy responses.

02 Exemplary operational models

Israel, the USA, Ukraine, China, the UK and Türkiye combine sensors, AI-assisted command systems and multiple interception options.

03 Fragmented legal authority

Most states rely on separate aviation, spectrum, security, privacy and military rules. Civilian authority remains narrower than military authority.

Central problem

How can states stop hostile drones without creating new risks for civil aviation, communications and fundamental rights?

Regulate operational effects, not specific hardware

The paper's proposed direction for a durable C-UAS framework

01 Authority and accountability

Define who may detect, disrupt, seize or destroy a drone, under what conditions and with what review.

02 Airspace and spectrum coordination

Connect defence and police operations to civil aviation and telecommunications authorities in real time.

03 Necessity and proportionality

Use the least harmful effective response, with kinetic force reserved for serious or imminent threats.

04 Privacy, data and cybersecurity

Protect surveillance data and harden networked command systems against spoofing, intrusion and manipulation.

05 Target verification and human control

Require reliable identification, clear rules of engagement and accountable human authorization for force.

Institutional conclusion

A dedicated authority or multidisciplinary board can align defence, aviation, spectrum, data protection and security.

Outcome: security measures that remain lawful, proportionate and safe in civil airspace



Alexander Wallace Watson

Regulating Orbital Electronic Warfare and
Signal Intelligence Under United Kingdom
and International Law



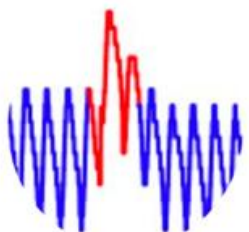
Active Electronically Scanned Arrays (AESAs)

+



Cognitive Software-Defined Radios (SDRs)

+



Low-power Telemetry Spoofing or Sensor Blinding



ATtribution GAP

Sovereign Oversight

```
graph TD; SO[Sovereign Oversight] --> SDHI[Statutory Definition of "Harmful Interference"]; SO --> TOS[Trusted Operator Status]; SO --> ME[Market Enforcement]; TOS --> HRM[Hardware Resilience Mandates]; TOS --> ATE[Automated Telemetry Escrow];
```

Statutory Definition of
"Harmful Interference"

Market Enforcement

Trusted Operator Status

Hardware Resilience Mandates

Automated Telemetry Escrow



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Lunch

12:40 - 14:00



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Track A

Rights, Commerce and Remedies

Session 3

Passenger and Consumer Protection

14:00 - 15:30

Öykü Kurtpinar - Chair

- **Mario Kuhn** - Regulating Online Airline Ticket Advertising – Legality of Drip Pricing Under Consumer Protection Law?
- **Delphine Defossez** - Is There a Need for an International Convention on Passenger Rights?
- **Arlette Tanga** - Consumer Protection in Air Transport Services within the Framework of the Single African Air Transport Market
- **Amy Jessica Adams** - Collective Enforcement of Air Passenger Rights: A Consumer Law Perspective on the Mass Claims Enforcement Gap

Mario Kuhn

Regulating Online Airline Ticket Advertising
– Legality of Drip Pricing Under Consumer
Protection Law?

99€

Luggage
+ XE

Seat
Selection
+ XE

Insurance
+ XE

Rental Car
+ XE

Final Price

Drip it `til they drop:

Regulating Drip Pricing in the Airline Industry under EU Law

Background of the Paper

- Origin of research idea: Canadian Supreme Court Case (No. 41866)
- Next level relevance?
- Connection with current topics: Passenger Rights, AI, Digital Fairness
- EU law perspective
- Comment on existing law
- Overview character

Thoughts for the Discussion

- Which questions arise after reading the paper?
- Is the content clear and coherent?
- How is the focus of the paper? (relevance, balance, word count)
- Which perspectives deserve more/less attention? (airlines, passengers, regulators, other parties)
- (Future) challenges/developments that deserve attention?
- Other comments?

Delphine Defossez

Is There a Need for an International
Convention on Passenger Rights?

Arlette Tanga

Consumer Protection in Air Transport
Services within the Framework of the
Single African Air Transport Market

Rethinking Consumer Protection in Air Transport Services within the Single African Air Transport Market

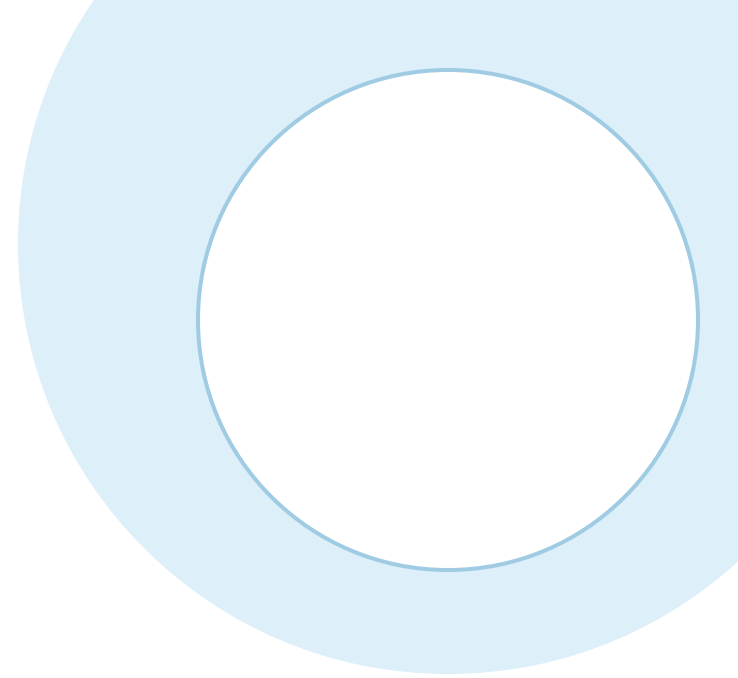
Dr Arlette Afouba Tanga

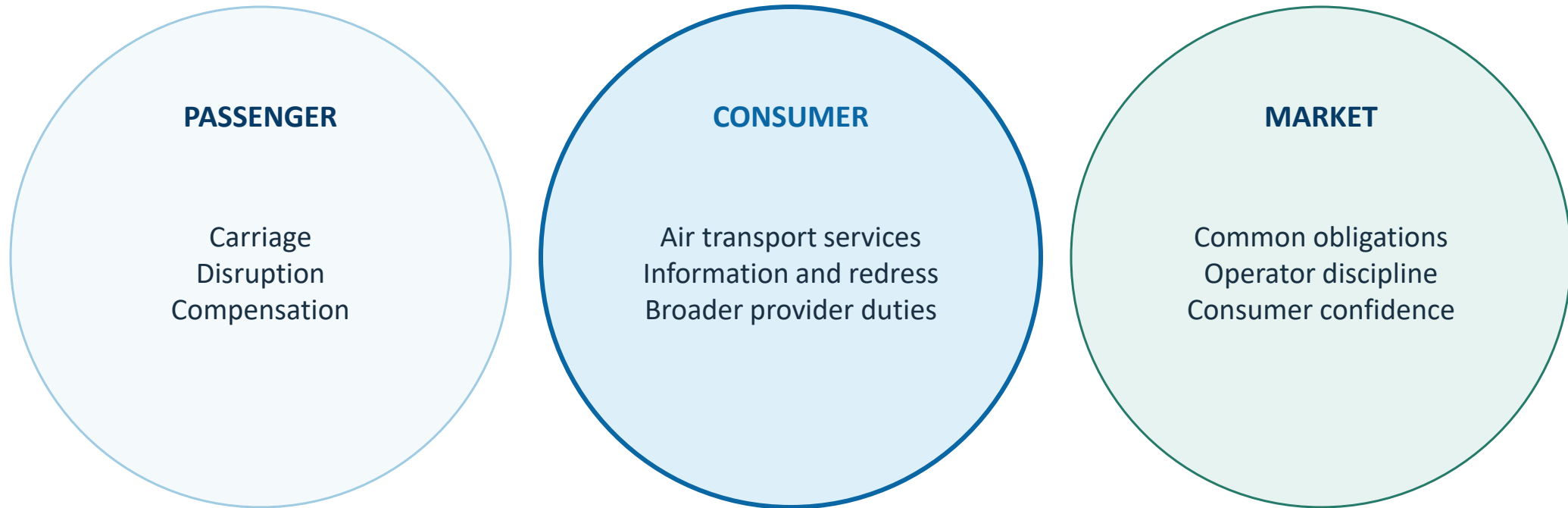
Maitre-Assistant Cames | University of Yaoundé II

Founder President of African Air and Space Law Association

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Leiden | 18 September 2026

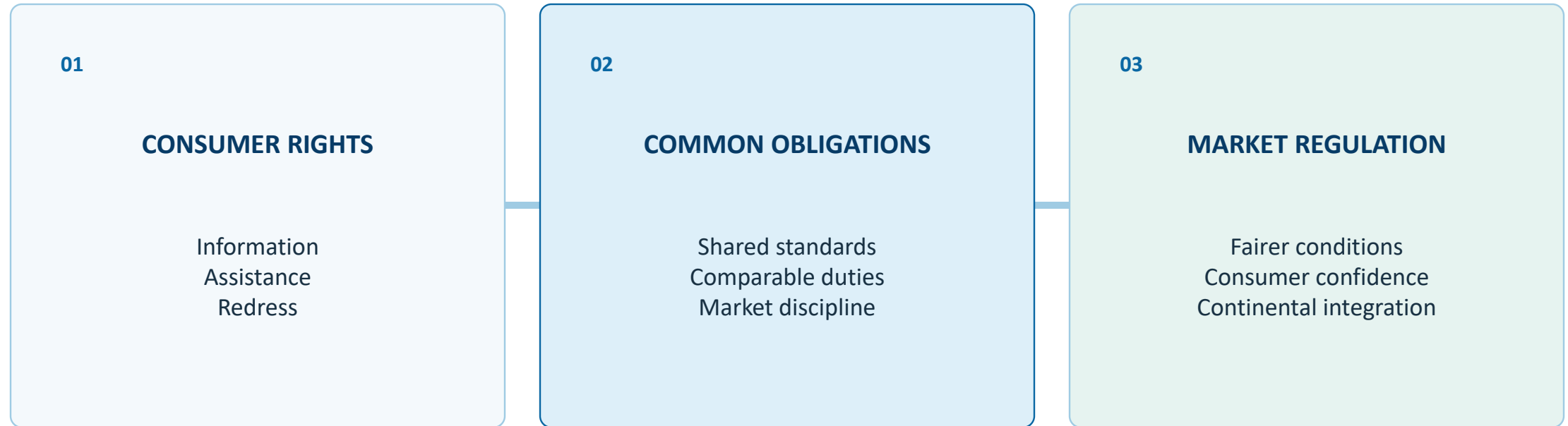




Annex 6 extends protection beyond the performance of carriage

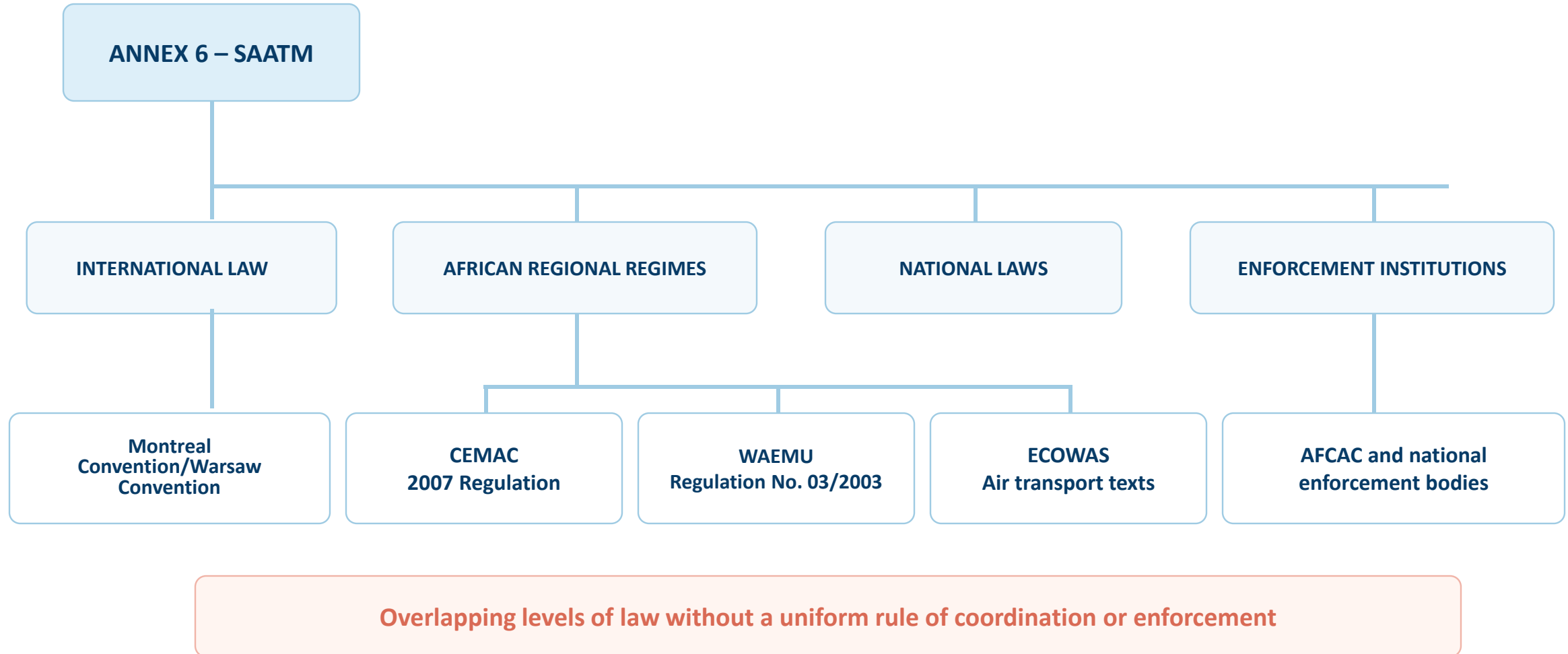
Consumer protection within the SAATM architecture

03

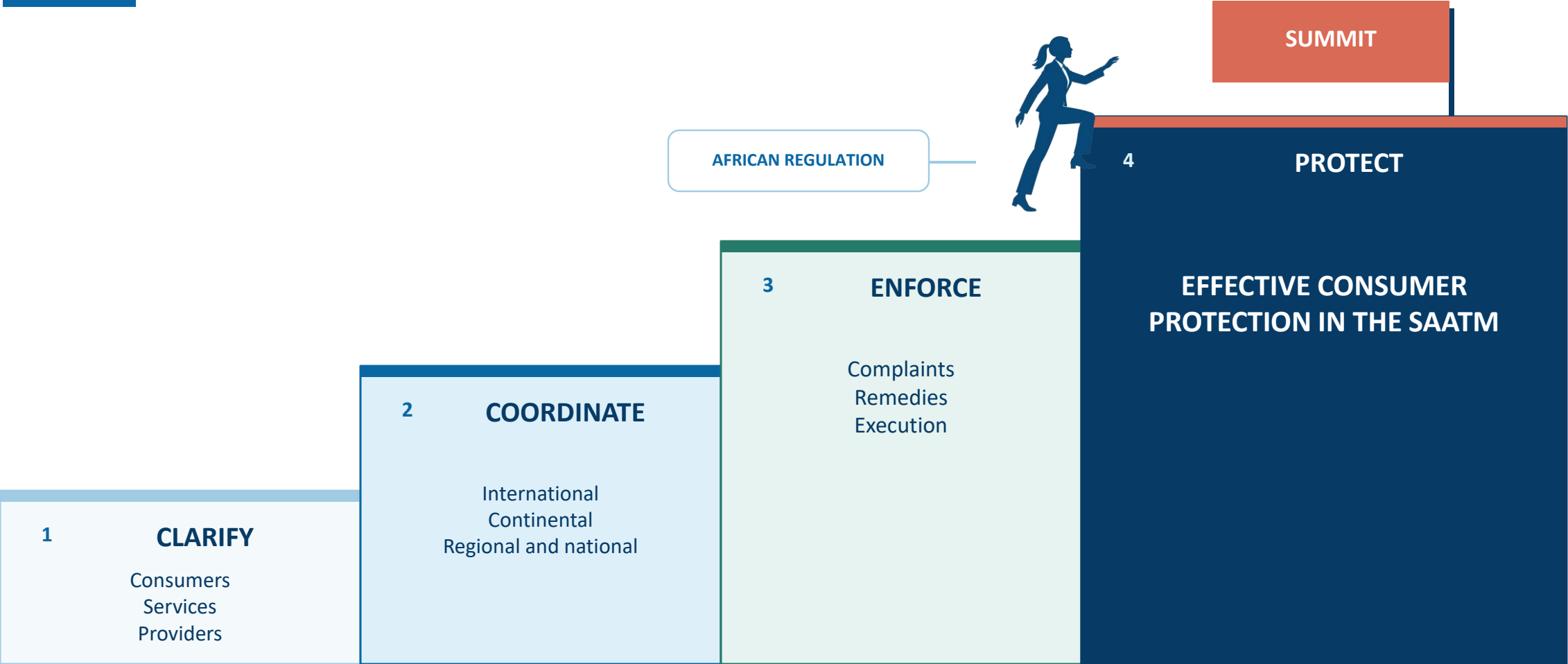


Consumer protection supports the functioning of the continental market

A fragmented legal and institutional environment



From recognised rights to effective protection



The next step is to make existing rights coherent and enforceable

Amy Jessica Adams

Collective Enforcement of Air Passenger
Rights: A Consumer Law Perspective on
the Mass Claims Enforcement Gap

Collective Enforcement of Air Passenger Rights: A Consumer Law Perspective on the Mass Claims Enforcement Gap

Amy Jessica Adams

Leiden & McGill Academic Workshop on Air & Space Law
18 September 2026, Leiden University

The EU enforcement gap as an institutional choice

- ❖ National Enforcement Body discretion over individual redress: *Ruijsenaars* (C-145/15); *LOT* (C-597/20); Enforcement Regulation 2026, Arts 16a–16b
- ❖ 38 airline aid decisions, 2020–21 — none conditional on passenger reimbursement (*cf.* Recommendation 2020/648)
- ❖ Package travel asymmetry: no Art 17 equivalent for airlines (mandatory insolvency protection, Directive 2026/1024)
- ❖ Compounded by obstacles found in the Montreal Convention; limitation periods; opt-in/out

Limits of the available mechanisms for aviation mass harm

- ❖ Assignment facilitated by CJEU (*e.g.* *DelayFix* (C-519/19)) — results of mechanism lack rigour; legislative intervention absent
- ❖ Collective redress — incoherence in aviation context
Inclusion of Reg 261/2004 in Annex I to Representative Actions Directive — *But* Art 7 claims unlikely to meet ASG 2 threshold for compelling collective action
- ❖ 2026 EC261 Revision & Enforcement Reg — monitoring & prevention, rather than redress; ADR Directive 2025/2647; compensation explicitly deprioritised (Council, June 2025)
- ❖ Insolvency — No individual or collective mechanism operates. Carrier solvency protected; vzbv proposed model unresolved since 2014. Once carrier ceases trading, no defendant against whom any mechanism can act



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Coffee Break

15:30 - 16:00



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Track A

Rights, Commerce and Remedies

Session 5

Commercial Interests, Risks and Relationships

16:00-17:30

Michael Nas - Chair

- **Marco Franzoso** - Keeping Secrets in Orbit: A Preliminary Ambient Survey of Trade Secret Protection in the LEO Commercial Ecosystem
- **Henry Wong** - Skies Apart: The Dubious Status of International Flight between China and Hong Kong
- **Abraham Pardede** - Fly an Aircraft in “Total Loss”: Unanswered Questions in the Aftermath of Russia’s Aircraft Seizure
- **Louis Chabbert** - The War Risk Trigger: Temporal and Causal Uncertainty in Aviation War Risk Insurance

Marco Franzoso

Keeping Secrets in Orbit: A Preliminary
Ambient Survey of Trade Secret Protection
in the LEO Commercial Ecosystem

Henry Wong

Skies Apart: The Dubious Status of
International Flight between China and
Hong Kong

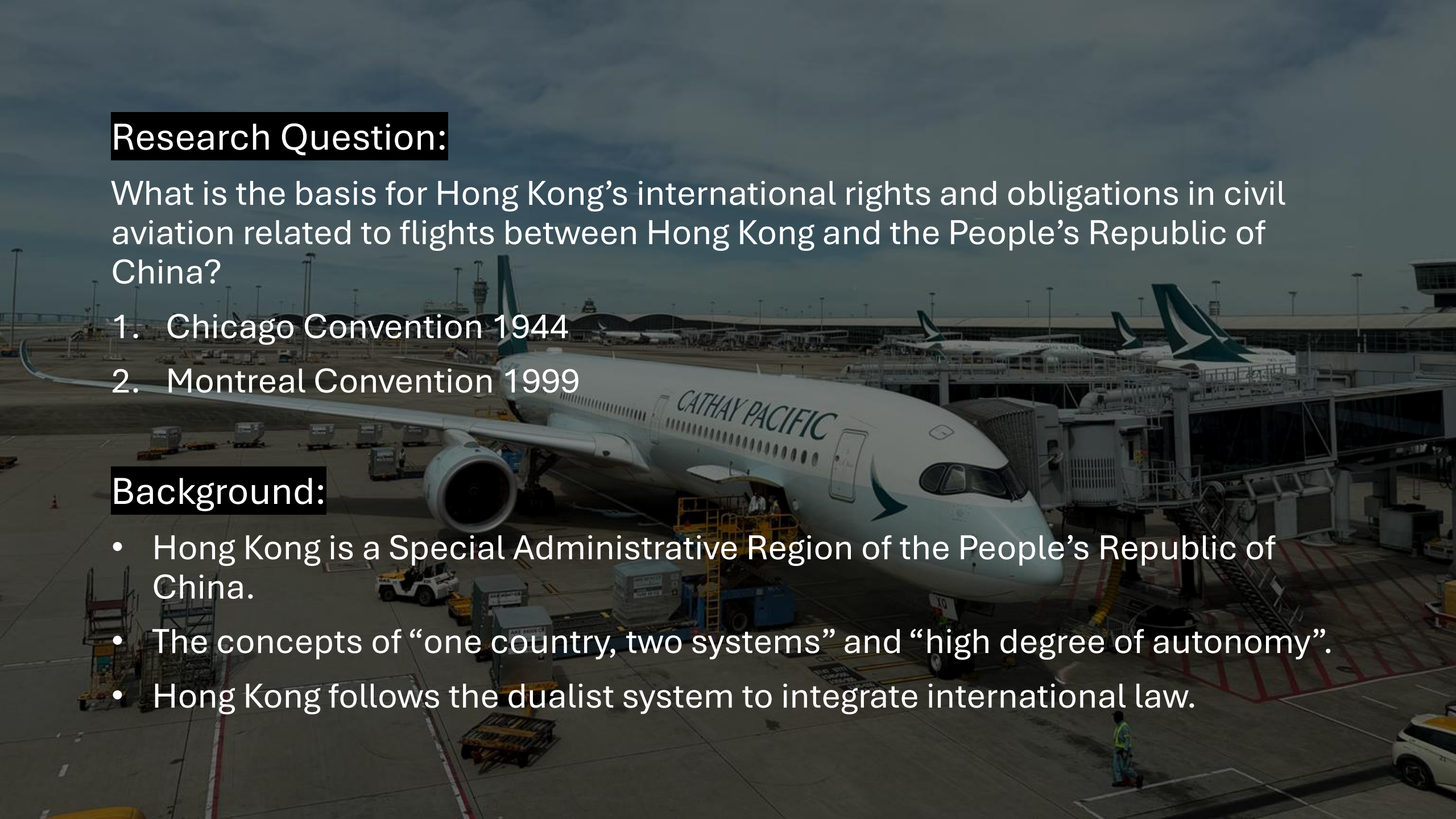
Research Question:

What is the basis for Hong Kong's international rights and obligations in civil aviation related to flights between Hong Kong and the People's Republic of China?

1. Chicago Convention 1944
2. Montreal Convention 1999

Background:

- Hong Kong is a Special Administrative Region of the People's Republic of China.
- The concepts of “one country, two systems” and “high degree of autonomy”.
- Hong Kong follows the dualist system to integrate international law.



Chicago Convention 1944

- Articles 1 and 6
- Air Services Arrangement between the Mainland and the Hong Kong Special Administrative Region
- Articles 153 and 131 of the Basic Law
- Conclusion: It is a domestic legal issue

Montreal Convention 1999

- Articles 1 and 53
- Article 56(1) “The Hong Kong Clause”
- Article 153 of the Basic Law and the incorporation into domestic law → Carriage by Air Ordinance (Cap 500)
- Article 13, Schedules 3 and 4 of Cap 500 → A non-international carriage by air
- Conclusion: It is a domestic legal issue



Abraham Pardede

Fly an Aircraft in “Total Loss”: Unanswered Questions in the Aftermath of Russia’s Aircraft Seizure

HOW TO FLY AN AIRCRAFT IN TOTAL LOSS: UNANSWERED QUESTIONS IN THE AFTERMATH OF RUSSIA'S AIRCRAFT SEIZURE

Background

- 70% of aircraft worldwide are leased
- The majority of lessors are EU/US entities
- 2022: Russia's "special military operation" in Ukraine
- EU/US sanctions: lease termination and repossession
- Repossession possible under the Bermuda scheme
- Russia prevented repossession by re-registering approximately 500 leased aircraft.
- 2025: *AerCap Ireland Ltd v AIG Europe SA & Ors* ("AerCap"), finds "Total Loss" despite continued operation
- What happens next?

Setting the Field

Aircraft Operation, Lease Arrangement and Risk Allocation

- Aircraft are mobile financial assets
- Business model of interest holders
- Jurisdictional risk, financial risks, operational risks

Aviation Insurance in Hindsight

- Addresses only financial risks
- Market-driven and commercially oriented
- No relation to airworthiness

Aircraft Re-Registration and "Total Loss"

- "Total Loss" in *Aercap* is not CTL
- Permanent Deprivation & Grip of the Peril
- Aircraft continues to fly

Asking the Questions

Ownership and Residual Interests (Who holds the title now?)

- Insurance payment ≠ title transfer.
- Subrogation ≠ ownership.
- Salvage rights for insurer?
- Future sale or transfer raises unresolved questions

Insurability and Commercial Continuity (“Total Loss” but remain commercially alive?)

- *Economic value.*
- Aircraft is operational and marketable.
- Insurance markets price risk.
- Future transfer or sale.

Safety Oversight and Airworthiness (Can confidence be restored?)

- Records and oversight.
- ICAO SSC and industry concerns.
- Confidence on Airworthiness.
- Addressing questionable oversight.

Implications on the Legal Framework

- Commercial issues may eventually be addressed.
- Safety questions remain unresolved.
- The aircraft may re-enter international aviation.
- No clear framework to accommodate such reintegration.

Questions for Discussion

“How should the international aviation system evaluate aircraft whose oversight history has been questioned for years before they re-enter international operations?”

Louis Chabbert

**The War Risk Trigger: Temporal and Causal
Uncertainty in Aviation War Risk Insurance**

The grip of the peril principle in aviation “hull war insurance”

- Aviation Hull “War and Allied Perils” policy cover loss of or damage to aircraft (LSW555D clause)
- Insurer may cancel or review this coverage on short notice (usually 7 days)
- No obligation to indemnify a loss that occurs after a material change in the insured risk, if it has not been notified to the insurer and accepted.
- Gulf airspace closure (2 March 2026) treated by some market participants as a “material change”
- “Grip of the peril” doctrine (Butcher J., Russian Aircraft Lessor Policy Claims [2025] EWHC 1430 (Comm)) => concerns that grounded aircraft might already be in the “grip of the peril”, potentially rendering any subsequent cancellation ineffective
- Grip of the peril => During the policy period, the insured is deprived of possession by a war risk peril, in circumstances beyond his control; if that deprivation develops – through an unbroken sequence of events - into a permanent deprivation of possession/total loss after expiry, and the same peril remains the effective cause , coverage will follow the loss.

Distinguishing the peril and testing continuity

What does “outside the control of the Assured by reason of any of the above perils” mean?

LSW555D clause:

“this Policy covers claims excluded from the Hull “All Risks” Policy from occurrences whilst the Aircraft is outside the control of the Assured by reason of any of the above perils. [i.e., war risk perils]“

How to distinguish an airspace closure from a seizure or restraint by a government?

Article 9(a) of the Chicago Convention:

"a) Each contracting State may, for reasons of military necessity or public safety, restrict or prohibit uniformly the aircraft of other States from flying over certain areas of its territory, provided that no distinction in this respect is made between the aircraft of the State whose territory is involved, engaged in international scheduled airline services, and the aircraft of the other contracting States likewise engaged."

What sustains the “grip of the peril”, and what could break the causal chain?

Closing Remarks and What Is Next

17:30-17:45

- **Michael Nas** - Workshop Organising Committee
- **Benjamyn I. Scott** - Workshop Organising Committee



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The **Leiden** & **McGill** Academic Workshop on Air & Space Law

Friday, 18 September 2026
at Leiden University



Universiteit
Leiden
The Netherlands



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Track B

Governance and Public Values

Session 4

Practical Challenges in Space

14:00 - 15:30

Chris Johnson – Chair

- **Meer Shais Ali** - Impact of the Artemis Accords on the Domestic Space Laws of its Signatories
- **Deborah Housen-Couriel** - International Arbitration for Outer Space Disputes: Current Critical Needs and Emerging Practice
- **Raoul Cardellini** - Nuclearity in Orbit: Prohibitions, Silences, and Effectiveness between Hard Law and Soft Law

Meer Shais Ali

Impact of the Artemis Accords on the
Domestic Space Laws of its Signatories

Deborah Housen-Couriel

International Arbitration for Outer Space
Disputes: Current Critical Needs and
Emerging Practice

International Arbitration for Outer Space Disputes: Current Critical Needs and Emerging Practice

18 September 2026

Deborah Housen-Couriel
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Federmann Cyber Security Research Center, Hebrew University of Jerusalem
Housen-Couriel Law Offices

The core research question explored in this paper is
the extent to which the use of arbitration as a
preferred mechanism for the resolution of space
disputes effectively supports space sustainability
and governance.

I argue that the **leveraging of arbitration mechanisms** in international agreements, contracts and national licenses for space activities **can contribute significantly to the clarification** of currently unresolved legal and regulatory issues of space law, and **to the mitigation of operational risks** inherent in the New Space economy.

The paper further argues that **when stakeholders can rely upon such a dispute resolution measure to bolster certainty** regarding due compensation for liability claims throughout the lifespan of space objects and activities, the **sustainability of space activity is expanded**.

The need for **updated risk mitigation measures** such as arbitration stems from New Space's **increasingly complex ecosystem**, which is characterized by dramatic technological innovation, unprecedented financial investment, and new operational risks.

The OST regime, including the Liability Convention, does not provide an effective dispute resolution tool for space activities.

How does arbitration reduce risk for space stakeholders?

IT ALLOWS FOR A WIDE DEGREE
OF CONTROL OVER THE DISPUTE
RESOLUTION PROCEEDINGS
(VENUE, IDENTITY OF THE
ARBITRATORS, THE ISSUES TO
BE RESOLVED).

VOLUNTARY YET BINDING.

ARBITRATORS CAN BE CHOSEN
WITH RELEVANT SPACE
EXPERTISE
(TECH, REGULATORY,
FINANCIAL, OPERATIONAL).

TRANSPARENCY OF THE
PROCESS.

AGREED TIMELINE FOR
RESOLUTION OF THE DISPUTE.

MULTI-JURISDICTIONAL
ENFORCEMENT
(Devas v. Antrix).

MEMOS

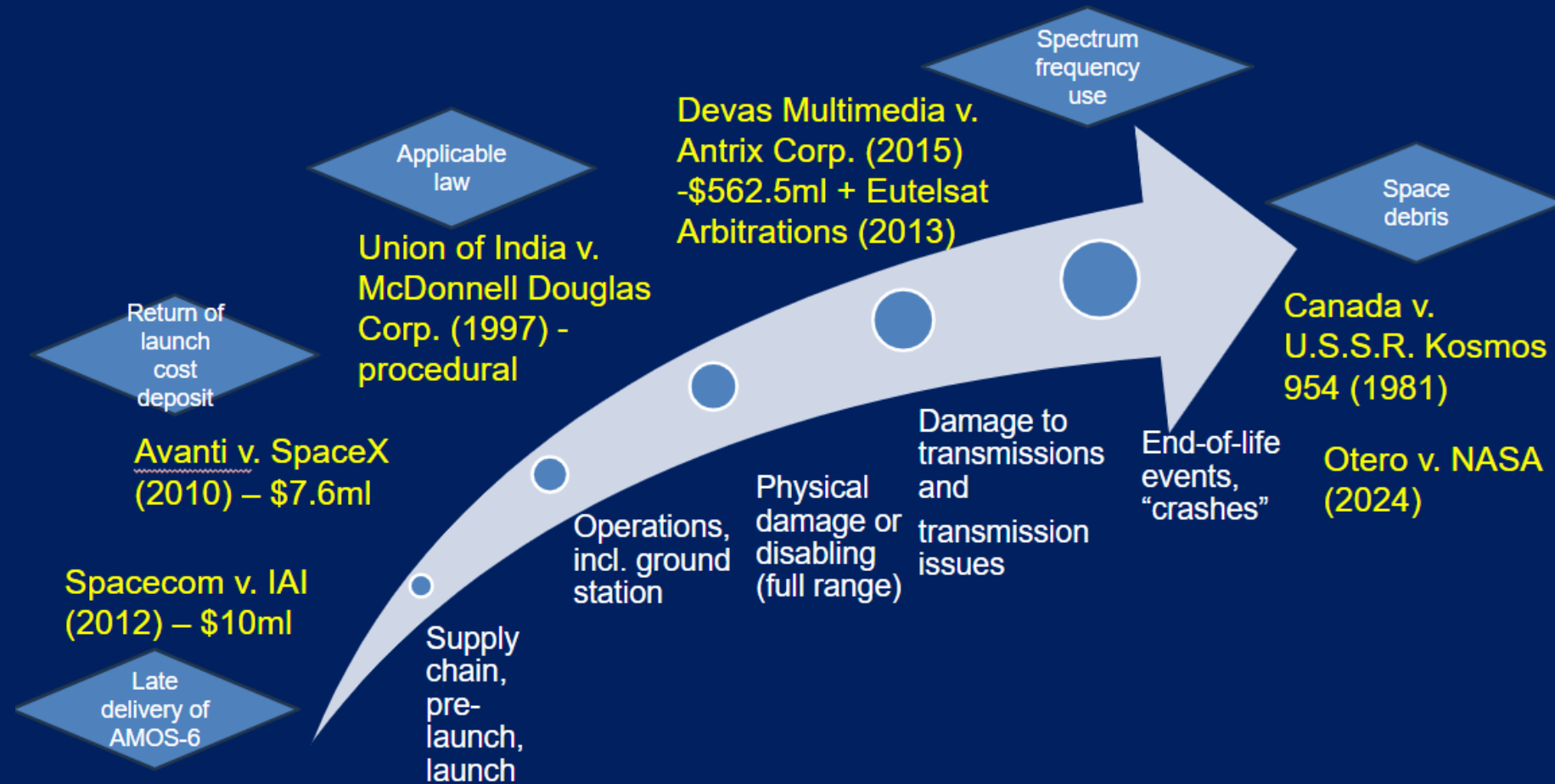
Ninth Circuit Holds FSIA Gives U.S. Courts Jurisdiction to Confirm Arbitral Awards Against Foreign Sovereigns Without U.S. Nexus

August 19, 2026 | 4 min read | 

Summary

On August 12, 2026, the U.S. Court of Appeals for the Ninth Circuit in *Devas Multimedia Private Ltd. v. Antrix Corp. Ltd.* affirmed in part confirmation of a \$562.5 million international arbitral award against Antrix Corp. Ltd. ("Antrix"), an Indian state-owned company. In a matter of first impression in the Ninth Circuit, the Court joined the D.C. Circuit to rule that *forum non conveniens* does not apply in an action to confirm a foreign arbitral award under the Convention on the Recognition and Enforcement of Foreign Arbitral Awards ("New York Convention" or the "Convention"). The Ninth Circuit also held that regardless of whether the claims or parties in the underlying arbitration have a U.S. nexus, the district court had subject matter jurisdiction to confirm the award under the arbitration exception of the Foreign Sovereign Immunities Act ("FSIA") and had personal jurisdiction over Antrix based on a Fifth Amendment reasonableness assessment. The decision may make it easier for award creditors to pursue confirmation of foreign arbitral awards against sovereigns and state-owned entities under the New York Convention within the Ninth Circuit.

Arbitration is relevant throughout the lifespan of space objects.



Trends

(1) Disputes submitted to arbitration have so far focused on **four main categories**: **supply chain and pre-launch issues, launch timelines, active operations (mostly of satellites), and geopolitical constraints that are claimed as *force majeure*** by parties defaulting on their contractual obligations.

(2) The **lack of transparency with respect to arbitral awards in outer space disputes** is currently a **double-edged sword**: on the one hand, it provides an important incentive to disputing parties; on the other, the prized confidentiality of arbitration prevents comprehensive analysis of the instances in which it has been utilized and the awards themselves.

Some open issues

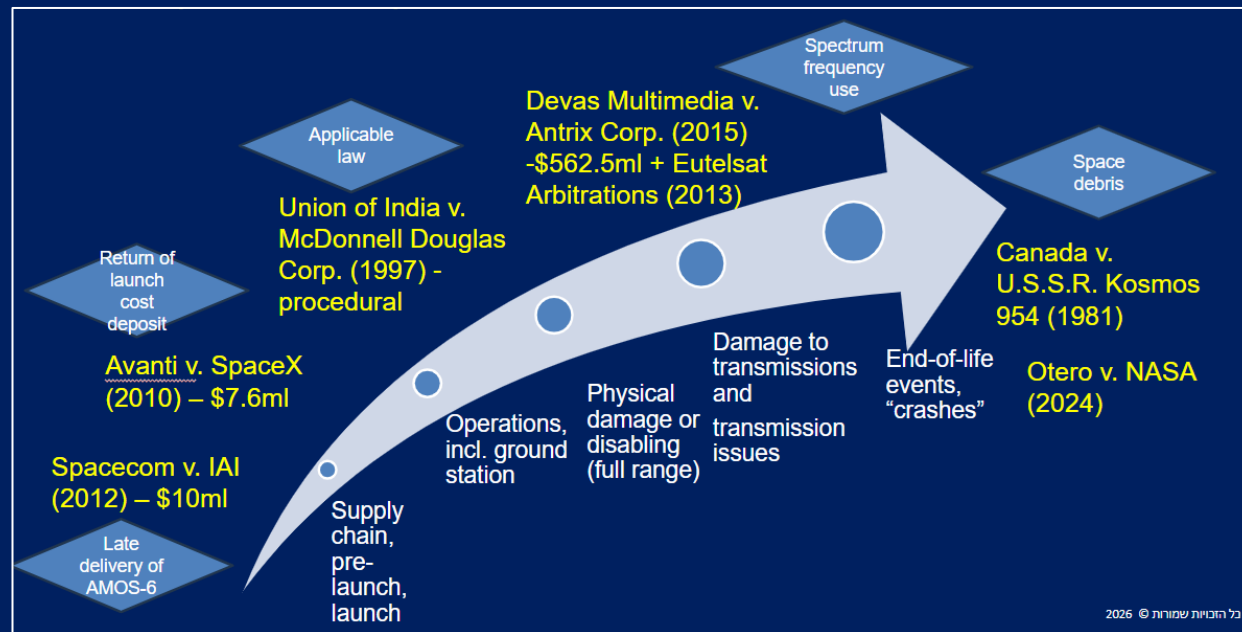


It remains to be seen whether arbitration will be leveraged **over the entire lifespan of space assets** to include, *e.g.*, space resource exploitation issues, intellectual property disputes, collisions, and space debris liability.

Insurance claims for all aspects of space activities: **the data on risk is not transparent.**

As the militarization of space increases, **the national security aspects of the use of space may increasingly impact arbitrations** (*i.e. Devas v. Antrix, Ukrkosmos v Macdonald Dettwiler and OneWeb v. Russia.*

Thank you!



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Raoul Cardellini

Nuclearity in Orbit: Prohibitions, Silences,
and Effectiveness between Hard Law and
Soft Law

Article IV at the Margins

Fractional Orbit, Payload Opacity and the Limits of Verification

By Raoul Cardellini Leipertz

*Doctoral Researcher
School of Advanced Defence Studies (CASD/SSU)*

18/09/2026

LEIDEN-MCGILL AIR AND SPACE LAW WORKSHOP



"On-orbit space control weapons"

United States, 14 September 2026

Not prohibited by Article IV OST, which bans nuclear weapons and other WMD, not conventional counterspace systems.

But it poses the question the Treaty cannot answer:

- **Where is the object?**

Placement in orbit, or stationing in outer space.

- **What does it carry?**

A nuclear weapon, or another weapon of mass destruction.

Evidence of one does not establish the other.

Article IV's margin

- **Ballistic transit:** temporary passage through outer space
- **FOBS:** de-orbiting before one completed revolution
- **MOBS:** one or more completed revolutions

A persistent full-orbit interpretation, extending well beyond 1967

- Serious contrary authority
- No universally accepted orbital threshold

Negotiators repeatedly added express fractional-orbit language, from the SALT II instructions onward.

Placement and stationing remain distinct inquiries.





The verification gap

Tracking an object does not reveal its payload.

Detecting nuclear material does not establish a nuclear weapon.

Registration assists identification, not inspection.

- Article IX provides consultation.
- Article IV therefore has:
 - a clear core
 - a disputed fractional margin
 - an independent problem of payload opacity

Where States want either settled, the substantive rule and the verification arrangements must be expressed together.

What evidence should be sufficient?

Thank You for Your Attention!

For further inquiries, feel free to
reach out at any time

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Coffee Break

15:30 - 16:00



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Track B

Governance and Public Values

Session 6

Human, Animal and Environmental Protection

16:00-17:30

Garry Pratama - Chair

- **Reece Lenting** - Flying and Suffering in Silence: Prioritising Pilot Mental Health by Proactively Regulating the Use of Selective Serotonin Reuptake Inhibitors (SSRIs)
- **Juliana Tellez-Wilches** - Live Animals in the Air: Biodiversity Obligations, Uniform Private Law, and the Legal Status of Non-Human Passengers
- **Varvara Kut'yina** - Collateral Damage in Orbit: The Environmental Consequences of Anti-Satellite Weapons Testing and the Case for Reinterpreting Existing Space Law

Reece Lenting

**Flying and Suffering in Silence: Prioritising
Pilot Mental Health by Proactively
Regulating the Use of Selective Serotonin
Reuptake Inhibitors (SSRIs)**

Juliana Tellez-Wilches

Live Animals in the Air: Biodiversity
Obligations, Uniform Private Law, and the
Legal Status of Non-Human Passengers

That Imperceptible Field

Live Animal Transport Challenges to International Air Law

Juliana Téllez-Wilches

Academic Director, CADA · Leiden–McGill Workshop



Biodiversity

Nine years of calls to action — no binding standard yet



Service Animal: Two Definitions, One Category

ICAO

A service animal, “normally being dogs or other animals,” accompanies a person with a disability to provide physical or emotional support — no formal training or certification required, so long as it does not endanger flight safety, threaten other passengers, or raise hygiene concerns.

Manual on Access to Air Transport by Persons with Disabilities, Doc 9984 (ICAO, 2013) at (xiii) (Definitions, “Service animals”).

IATA

Limited to dogs “individually trained to do work or perform tasks for the benefit of a person with a disability,” with that training “completed by an organization recognized by a competent national authority or accredited by an international assistance dog organization.”

International Air Transport Association, Guidance on Service Dogs, 1st ed (2026) at 5, s 1.1.

Neither definition is binding. Where they diverge, the disabled passenger absorbs the cost.

Carrier Liability: Classification Under the Montreal Convention

Persons

Baggage

Cargo

Montreal Convention, Article 1 — only three categories

Traditionally: the animal is treated as property — no different from a suitcase (*Dalton v Delta Air Lines*, 1978).

Rights-holder theory

Sandra (Argentina, 2014) · Estrellita (Ecuador, 2022)

Protected welfare interest

Majority-accepted position across Western legal systems

Felicísima v Iberia (CJEU, 2025)

Kept the animal within Montreal's existing categories — preserving uniformity, but only within the EU. Nothing stops another State Party from applying its own domestic theory instead.

Questions?

Juliana Téllez-Wilches · julianatellez19@gmail.com

Varvara Kut'yina

Collateral Damage in Orbit: The
Environmental Consequences of Anti-
Satellite Weapons Testing and the Case for
Reinterpreting Existing Space Law