

EU in space: from a technical approach to a regulatory proposal

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Università
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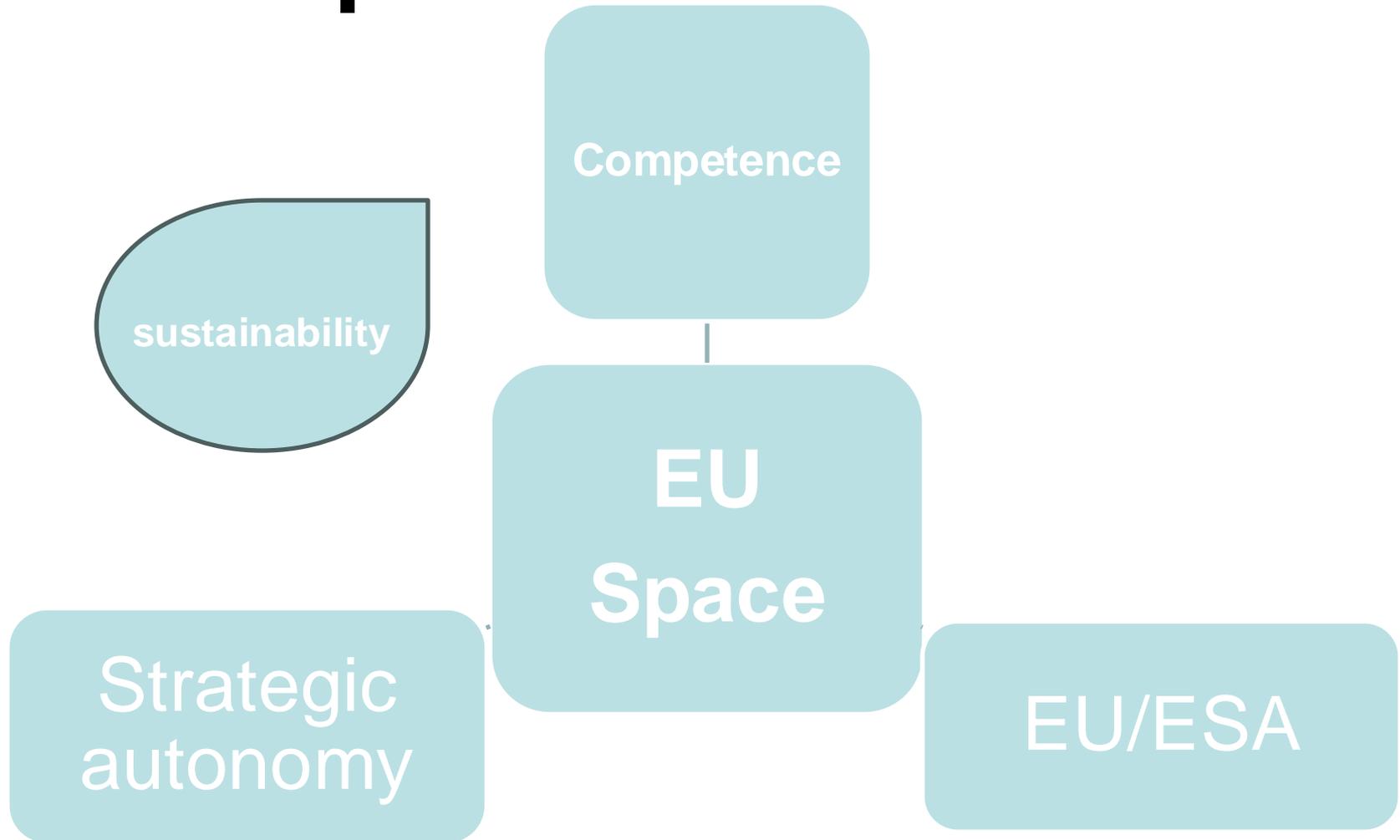
PRIN 2022 – 2022F74F8T

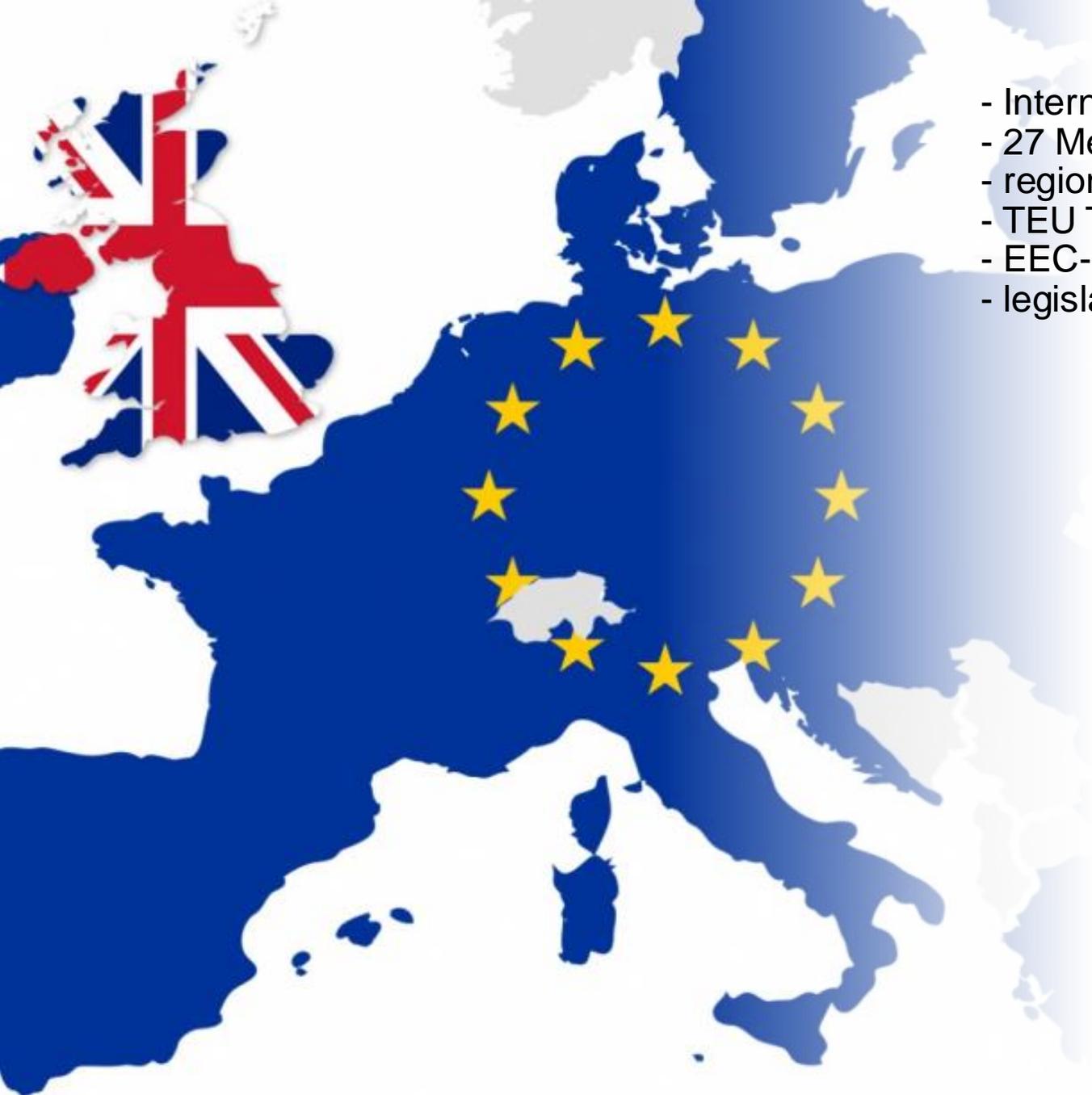
Intergenerational solidarity, collective human rights claims and environmental sustainability in international and European law.



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Concepts





- International organization
- 27 Member States
- regional
- TEU TFEU - consolidated
- EEC-EC-EU
- legislative powers

Principle of conferral

- Art. 5 TEU
- *“1. The limits of Union competences are governed by the principle of conferral. [...]*
- *2. Under the principle of conferral, the Union shall act only within the limits of the competences conferred upon it by the Member States in the Treaties to attain the objectives set out therein. Competences not conferred upon the Union in the Treaties remain with the Member States”.*

Features of EU comp.

- special, not original nor general
- principle of legality (legal basis)
- implied powers
- flexibility clause (art. 352 TFEU)
- Lisbon classification of competences

Exclusive

Art 2.1 TFEU

«When the Treaties confer on the Union exclusive competence in a specific area, only the Union may legislate and adopt legally binding acts, the Member States being able to do so themselves only if so empowered by the Union or for the implementation of Union acts»

Exclusive: close list

Art. 3 TFEU

(a) customs union;

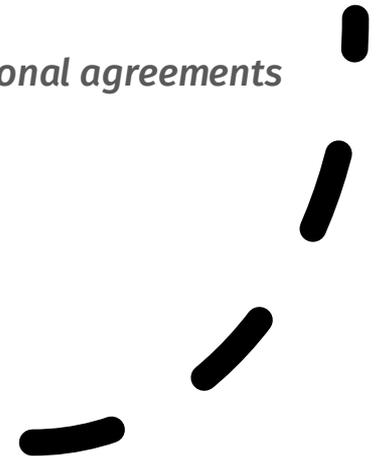
(b) the establishing of the competition rules necessary for the functioning of the internal market;

(c) monetary policy for the Member States whose currency is the euro;

(d) the conservation of marine biological resources under the common fisheries policy;

(e) common commercial policy

+ exclusive competence to conclude international agreements in certain cases



Shared

Art. 2.2 TFEU

2. When the Treaties confer on the Union a competence shared with the Member States in a specific area, the Union and the Member States may legislate and adopt legally binding acts in that area. The Member States shall exercise their competence to the extent that the Union has not exercised its competence. The Member States shall again exercise their competence to the extent that the Union has decided to cease exercising its competence”.

- **Only specific elements governed by EU law are pre-empted**

List of shared comp.

Art. 4.1 TFEU

(a) Internal market; (b) social policy; (c) economic, social and territorial cohesion; (d) agriculture and fisheries, excluding the conservation of marine biological resources; (e) environment; (f) consumer protection; (g) transport; (h) trans-European networks; (i) energy; (j) area of freedom, security and justice; (k) common safety concerns in public health matters, for the aspects defined in this Treaty.

Parallel

Art. 4.2 and 4.3 TFEU

No pre-emption effect in certain areas of EU shared competence:

1) Research, technological development and space

2) Development cooperation and humanitarian aid

➤ Member States preserve the power to act in parallel with the EU

Ancillary:
support
coordination
supplement

Art 2.5 TFEU

*“5. In certain areas and under the conditions laid down in the Treaties, the Union shall have competence to carry out actions to **support, coordinate or supplement the actions of the Member States, without thereby superseding their competence in these areas.***

*Legally binding acts of the Union adopted on the basis of the provisions of the Treaties relating to these areas shall **not entail harmonisation of Member States' laws or regulations**”.*

List of
ancillary
comp.

Art 6 TFEU

(a) protection and improvement of human health; (b) industry; (c) culture; (d) tourism; (e) education, vocational training, youth and sport; (f) civil protection; (g) administrative cooperation.



Special
competences

Art 2.3 and 2.4 TFEU

- **coordination of economic and employment policies of MS**
 - **definition and implementation of a common foreign and security policy, including common defence policy**
 - **unanimity v. majority rule**
- 

Subsidiarity principle

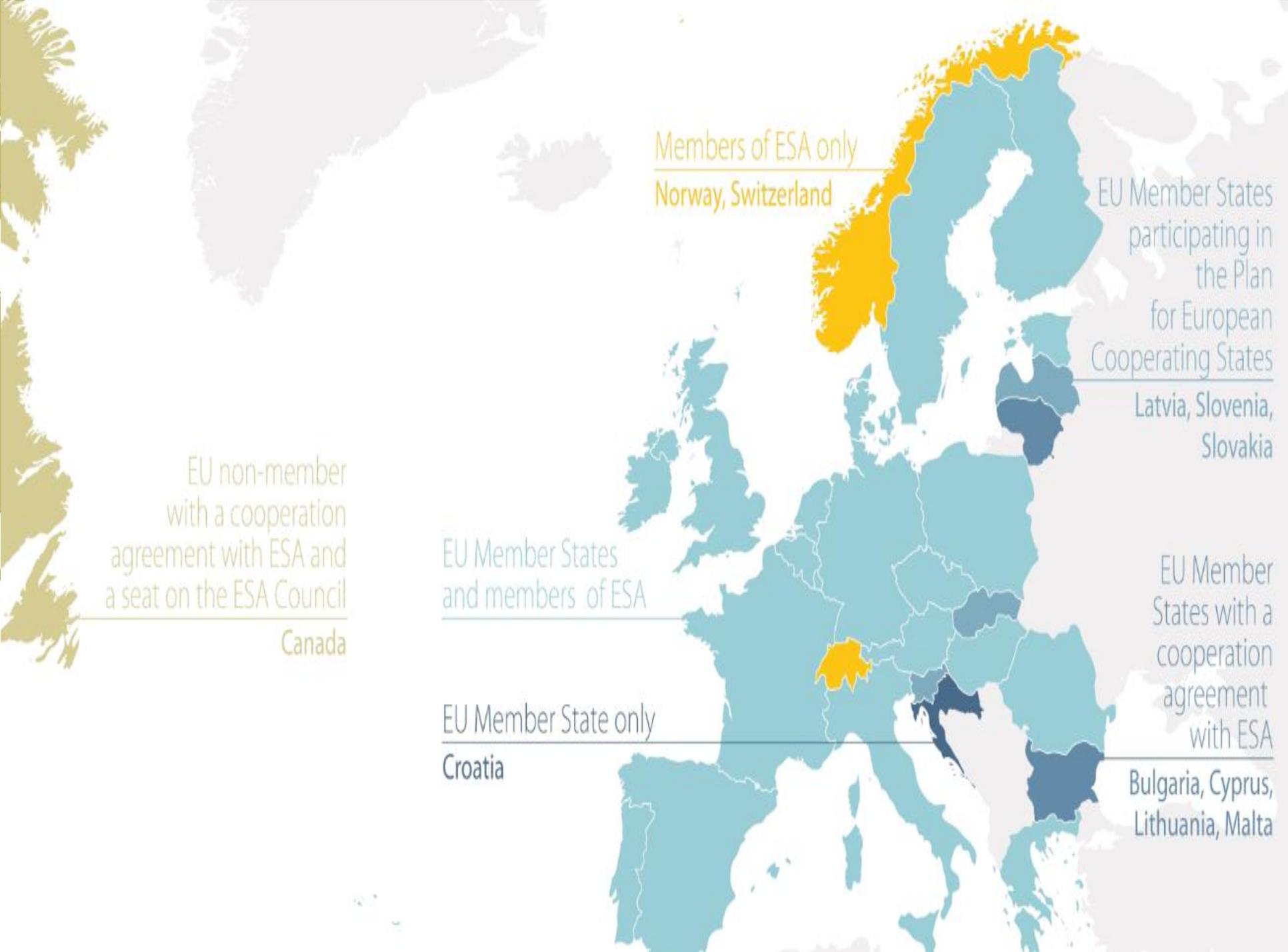
Art 5.3 TFEU

“in areas which do not fall within its exclusive competence, the Union shall act only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States, either at central level or at regional and local level, but can rather, by reason of the scale or effects of the proposed action, be better achieved at Union level”

- Secondary law: regulations and directives

EU involvement in space

- Space NOT a primary concern of EC/EU, left to MS until 90'. No private involvement in space sector. No commercial reasons for the EEC to intervene in this sector + strategic implications
- Space as a member States competence
- 1962: European scientific knowledge and effort in space integrated within ESRO and ELDO > no relationship with EEC
- 1975: ESA Convention as a result of the merger of ESRO and ELDO:
- different membership: 22 States parties, 19 are also EU Member States, while 3 are not (United Kingdom, Switzerland, Norway)
- different goals from EEC.



Members of ESA only
Norway, Switzerland

EU Member States
participating in
the Plan
for European
Cooperating States
Latvia, Slovenia,
Slovakia

EU non-member
with a cooperation
agreement with ESA and
a seat on the ESA Council
Canada

EU Member States
and members of ESA

EU Member State only
Croatia

EU Member
States with a
cooperation
agreement
with ESA
Bulgaria, Cyprus,
Lithuania, Malta

ESA VS. EU

- Art. 2 ESA Convention:
 - *“provide for and promote, for exclusively peaceful purposes, cooperation among European States in space research and technology and their space application”*
NO DIRECT LEGISLATIVE POWER
- Art 1 and 3 TEU:
 - *“creating an ever closer union among the peoples of Europe, in which decisions are taken as openly as possible and as closely as possible to the citizen...”*
 - *“The Union's aim is to promote peace, its values and the well-being of its peoples”*
 - *The Union shall pursue its objectives by appropriate means commensurate with the competences which are conferred upon it in the Treaties. LEGISLATIVE POWERS*

EU involvement in space (i)

- In the 90' After the European Act (1986), competence in the realm of science and technological development: EC can coordinate national research programs
- Fall of Soviet Union and global reduction of public spending in space
- Heavy impact on economic and social aspects of Space: advent of global information society and business opportunities for EU service industry (satellite communications, multimedia, navigation, etc.)
- start interest in space activities and development of informal European Space Policy through soft-law instruments (Commission Communications): access to space as goal to be pursued also at EU level.



First contacts ESA/EU Commission: Commission acknowledgment of technical superiority of ESA and need to cooperate



EU involvement in space (ii)

- EC/EU involved in space sector, mainly as a “regulator” of the internal market, space is functional to other policies eg.:
- a) space as part of the R&D agenda and funds
- b) satellite telecommunication services to be subject to internal market rules + export control rules on “dual use”
- c) EU as a data customer: *sui generis* copyright protection of database of space generated images

EU involvement in space

- Despite lack of competence, Council acknowledges that that EU space policy is functional to several other EU policies (border control, agriculture, transport, digital markets, industrial development, environment)
- Strategic implications in the shadow
- First two flagship Programmes commissioned to ESA end of 90': [GALILEO/EGNOS](#) and [COPERNICUS](#) (satellite navigation and earth observation)
- 2003 EU/ESA Framework Agreement: strategic partnership between the supply side of space systems (ESA) and demand side of the same (the Union)

Lisbon Treaty

Art. 189 TFEU (repealing similar provision in the 2004 Treaty establishing a Constitution for Europe, never entered into force)

*“To promote scientific and technical progress, industrial competitiveness and the implementation of its policies, the Union shall **draw up a European space policy**. To this end, it may **promote joint initiatives, support research and technological development and coordinate the efforts needed for the exploration and exploitation of space.***

*“To contribute to attaining the objectives referred to in paragraph 1, the European Parliament and the Council, acting in accordance with the **ordinary legislative procedure**, shall establish the **necessary measures**, which may take the form of a European space programme, **excluding any harmonisation of the laws and regulations of the Member States.***

“The Union shall establish any appropriate relations with the European Space Agency.”

Lisbon Treaty

- Space as a goal in itself, not merely functional to other policies
- Member states retain room to regulate space activities: no harmonization clause
- Other possible competences available: internal market, trans-european networks, industrial policy, defence
- Appropriate relations with the European Space Agency



More EU political involvement in shaping policy



EU Space Programme

EU Space Programme reg. 696/2021

6 components

Copernicus

Galileo

EGNOS

GovSatCom (satellite communication for governments)

IRIS (reliable connectivity to governmental users – Starlink competitor)

SSA (information on the space environment - sustainability)

The will to establish strategic autonomy from third States is still present BUT reverse path in comparison to other space actors (from civil to military/defense uses)

EUSPA

Originates with the 2002 Galileo Joint Undertaking, then 2004 GNSS Supervisory authority and EUSPA 2022

Mission set by Space Regulation

It is the user-oriented operational Agency of the EU Space Programme, contributing to sustainable growth, security and safety of the EU.

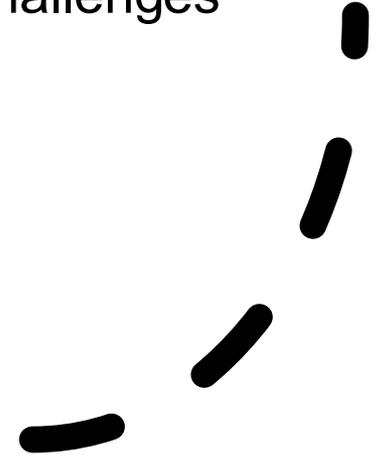
EUSPA counts on strong partnerships with the European Commission, European Parliament, Member States, European Space Agency, and private actors across the EU.

Is it going to substitute the role of ESA?

What's next

EU is more and more involved in space
From a technical/operative approach
functional to its policies is moving to a
regulatory approach, that considers space
assets and space activities the new border
of European integration

EU objectives in space are compliant to
international space activities' challenges



EU and Int.l Space Law

- **Can the EU access the OST and other Treaties?**

No accession but application of the rules set therein if 2 conditions are met (participation of MS + declaration)

Can the EU deliver the declaration?

See 2024 EU-US agreement on Galileo satellites' launch – EU agrees to refund US whenever it will be held liable because considered “launching State”

EU and Int.l Space Law

Article 7 - Registration

1. With respect to each Galileo satellite launched from United States' territory in connection with this Agreement, the Union shall ensure the provision of information about the space object to the Secretary-General of the United Nations, consistent with the Convention on the Registration of Objects Launched into Outer Space, done on November 12, 1974 (Registration Convention).
2. The Parties agree that the United States shall not be responsible for registering Galileo satellites in accordance with the Registration Convention, and that the United States has no jurisdiction or control over such objects in outer space.

Article 8 Liability

1. In the event the Galileo satellite, or a component part thereof, causes damage giving rise to one or more claims for compensation made against the United States under international law:
 - a. The United States may seek to substitute the Union in place of the United States in whatever forum such a claim is brought. The Union shall facilitate such efforts.
 - b. If such substitution is not successful, the Union agrees to hold the United States harmless and indemnify the United States in relation to any financial obligation arising from the settlement or adjudication of such claims. The Parties shall coordinate on the defence to such claims.
 - c. In the event of a dispute or potential claim, the United States shall notify the Union promptly in writing, providing all relevant details.
 - d. If the United States elects to settle the claim, it should obtain the Union's written consent before agreeing to the settlement. The Union shall be responsible for indemnifying the United States for the settlement amount only if it granted its consent to the settlement.
 - e. The Parties agree to consult at all stages, as appropriate, on the handling and disposition of any such claims.
2. For purposes of this article, the term 'damage' means loss of life, personal injury or other impairment of health; or loss of or damage to property of States or of persons, natural or juridical.
3. Nothing in this Agreement is to be construed as a waiver of the sovereign immunity of the United States or of any other privileges or immunities derived from customary international law, from treaties and agreements in force between the United States and the Union, or from any other international legal obligations.

The EUSL

- 2023 Commission announces the will to promote a EUSL in early 2024
- Delayed twice, not yet proposed (still on the agenda, Draghi in the [EU Competitiveness Report](#) September 2024 stresses it is needed)
- Legal basis: art. 114 TFEU and art. 191 TFEU

▶ is it possible? Given the limits posed by art. 189 TFEU? See CJEU case-law

The EUSL

Content

Double scheme act: *binding + non-binding & funding*

Binding rules – obligation to register space objects, responsibility, security, sustainability and resilience standards

Non binding - higher sustainability standards, conditionality on funding

The EUSL

Impact

Non binding standards – indirect effect

Binding - which connecting criteria?

pure territoriality v. extended territoriality

Any impact on the relationship MS-ESA?

Sincere cooperation principle art. 4.3 TEU

See CJEU case-law on participation of MS
to Int.l org. to which the EU can not be a
party

**Focus on
sustainability**



Sustainability

Definition

non-legal concept - It deals with the capacity of humans to live within environmental constraints respecting ecological limits and ecological integrity while performing activities on earth, it acquired legal value after the industrial revolution

environmental law

▶ engine for normative intervention

Sustainable Development

Definition – normative concept

derived from the sustainability principle - appeared for the first time in 1987 within the Brundtland Commission Report Our Common Future: Report of the World Commission on Environment and Development

«humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of the future generations to meet their own needs »

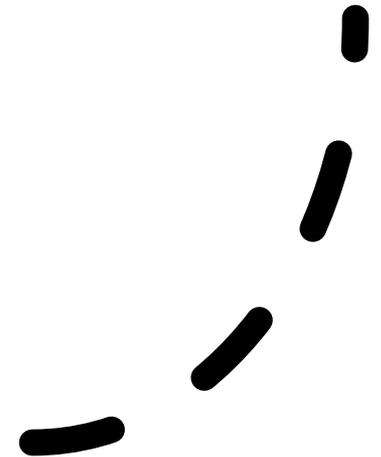
Counterpart of the right to development of all Nations, it is provided with normative value in many Treaties (UN Climate Change, Desertification)

Outer Space? Have a look to OST

Sustainable Development

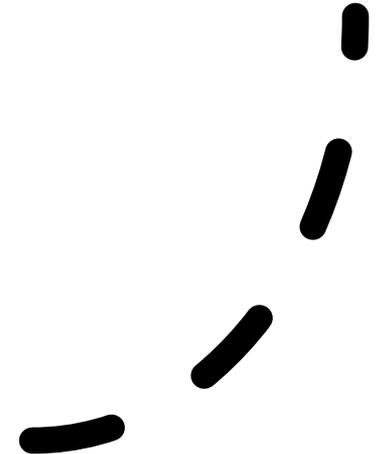
Space

- Longevity of space objects - construction standards
- Space debris mitigation



ESA and sustainability

- ESA sustainability standards
Contractual clause imposing them to companies participating to ESA programmes
- ESA contributes to UN sustainable development goal (ESA Corporate Social Responsibility CSR guiding principles)

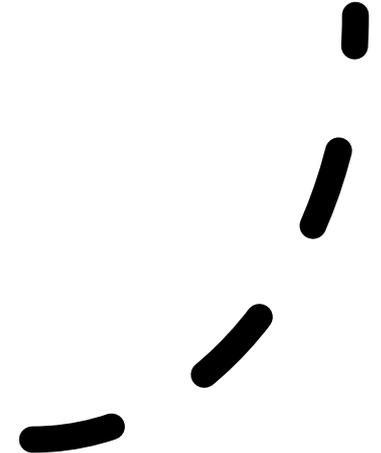


EU and Sustainable Space Activities

Apart from the EUSL adoption, EU is active in this field since many years

2007 CoC – international initiative, political

EU space programme – Space Situational Awareness and SST (Space Surveillance and Tracking) cooperation agreement between MS space agencies



EU SST

Services:

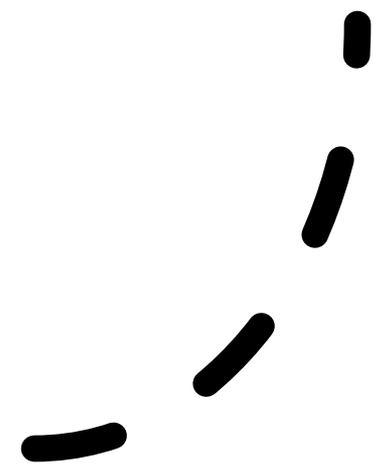
- Collision Avoidance (CA) - Provides risk assessment of collision between spacecraft or between spacecraft and space debris, and generates collision avoidance alerts
- Re-entry Analysis (RE) - Provides risk assessment of uncontrolled re-entry of man-made space objects into the Earth's atmosphere and generates related information
- Fragmentation Analysis (FG) - Provides detection and characterisation of in-orbit fragmentations, break-ups or collisions

SST services are provided upon request to all *EU Member States, EU institutions, spacecraft owners and operators, and other public and private entities*. Access to the services is **free of charge** and requires registration in the SST Service Provision Portal.



???

What about Legitimacy of space activities?
Can the principle impose limits on the
autonomy of sovereign States in exploiting
space (given the general principles set in
the Treaties)?



Case

MOONMINE – A company, incorporated in Luxembourg, operating space mining missions, approved and authorised by its State, to extract lunar regolith and bring it back to earth in order to have a new clean energy source for earth activities

Group of EU States – Italy, Belgium and Spain – and the EU Commission release a declaration opposing the violation of international law

Which rules can be invoked from both parties?

Case

Outer space ruled at the international level through Treaties (OST + 4 UN Treaties)

BUT Systemic integration - int.l law legal framework

National laws and regional regulations

then Soft law instruments (adopted by int. Org. or adopted through Treaties and agreements)

Best Practices of private actors

Case

Art. I OST: The exploration and use of outer space, including the moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind.

Art. IX Due regard principle

Further evolution (failure) Art. 4 Moon Agreement

Case

Despite the rules contained in the Treaty, did CHM (common heritage of mankind - management) or CCH (common concern of humankind – collective responsibility to act) become customary international law?

Not the same legal notion, different legal implications and consequences

Can It be considered as a parameter of legitimacy of States' behavior in the silence of Treaties towards a specific Space Activity?

Can it be used as interpretative tool for Space Law legal Instruments as incorporating the sustainable development principle?

Which interests have to be balanced by law and legal operators?

Outcome in procedural obligations (impact assessment and benefits' demonstration)

Case

ICJ, ECHR and ITLOS reluctant to decide cases on the basis of the principle of sustainable development or CCH/CHM, but use it as interpretative tool for existing and affirmed rules

ICJ 1997 Gabcikovo-Nagymaros case (Hungary v. Slovakia) – violation of a Treaty assessed but ICJ asked the party to enter negotiations that keep into account sustainable development principle in the interpretation and application of the Treaty.

ITLOS Advisory Opinion 2015 – balance between allowed fishing activities and protection of the environment set by UNCLOS Convention is to be found through sustainable development principle.

ECHR and ICJ interpretate the CCH principle as a benchmark to assess the legality of unilateral measures that address shared problems of the whole mankind

Case

Once the EU will adopt the EUSL, given the actual wording of art. 189 TFEU, can it prescribe which activities are allowed and which are not?

Can the EU provide for a uniform authorization mechanism for space activities?

Can the CJEU interpretate the Int.l Treaties introducing the sustainable development principle as an interpretative tool providing for evolutionary interpretation?