Regional and International Cooperation and the role of Bilateral and Multilateral Agreements

Tanja Masson- Zwaan
Deputy Director, International Institute of Air and Space Law (IIASL), Leiden Law School
President, International Institute of Space Law (IISL)

UN/Islamic Republic of Iran Workshop on Space Law
Tehran, 10 November 2009

Universiteit Leiden
The Netherlands

Contents

- General remarks & background
- Cooperation in space
  - History, levels, rationale, areas, legal form,…
- Examples of cooperation & lessons learned
  - Global intergovernmental cooperation
  - International intergovernmental cooperation
  - Regional intergovernmental cooperation
  - International operational (agency) cooperation
- Conclusions

Post-cold war: ‘space race’

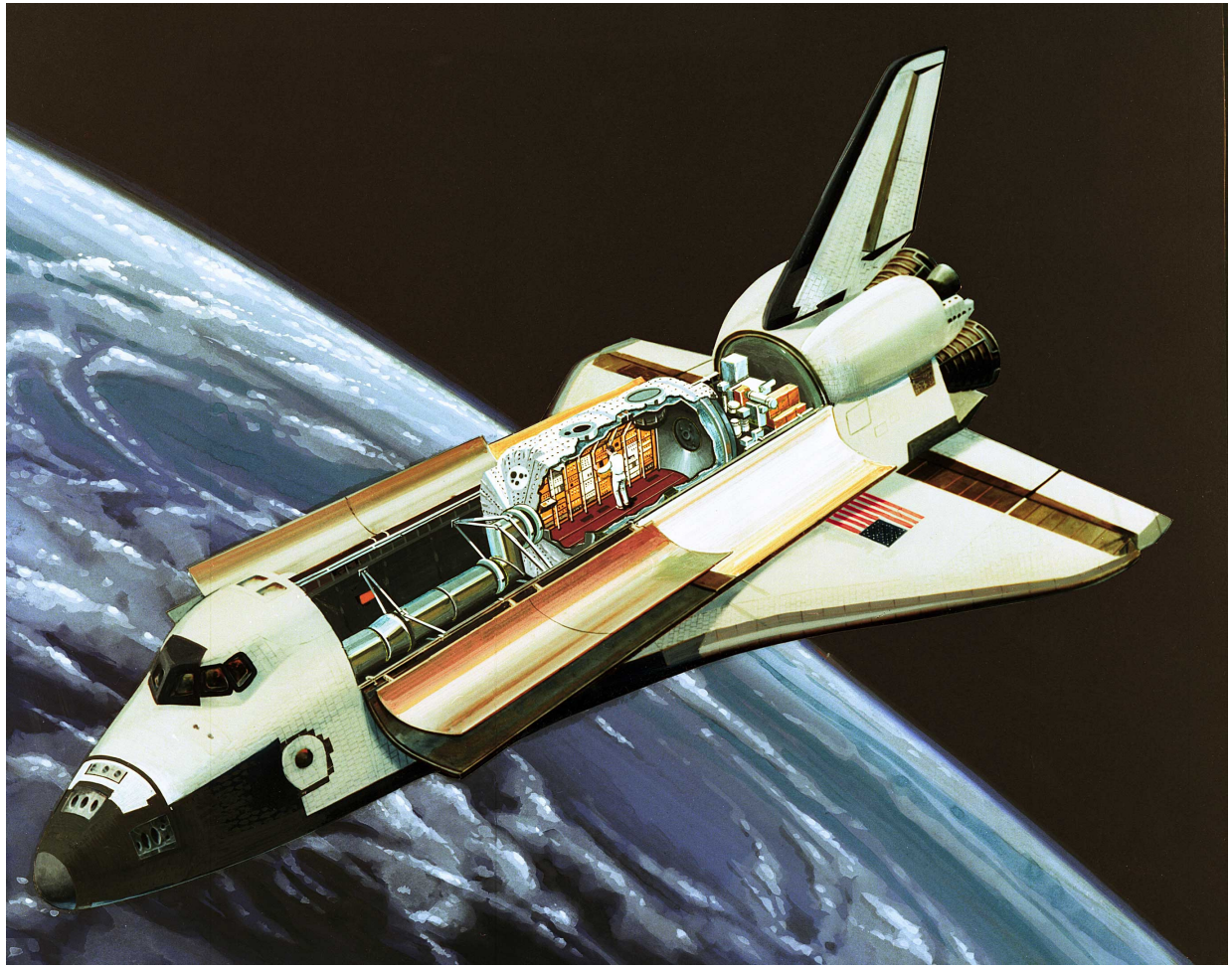
USSR: Sputnik 1, 1957
Yuri Gagarin, 1961

USA: Neil Armstrong 1969

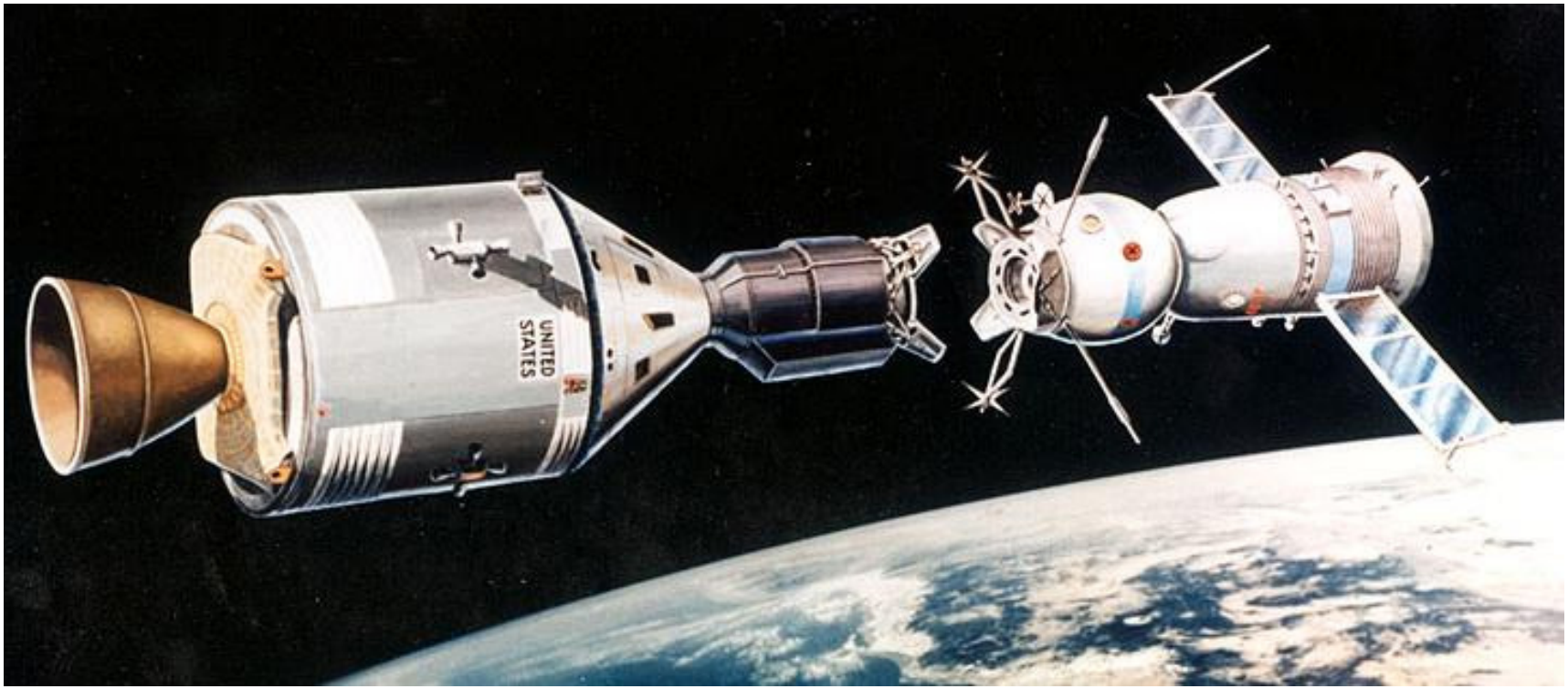
Then: cooperation in space…

- A picture is worth a thousand words…

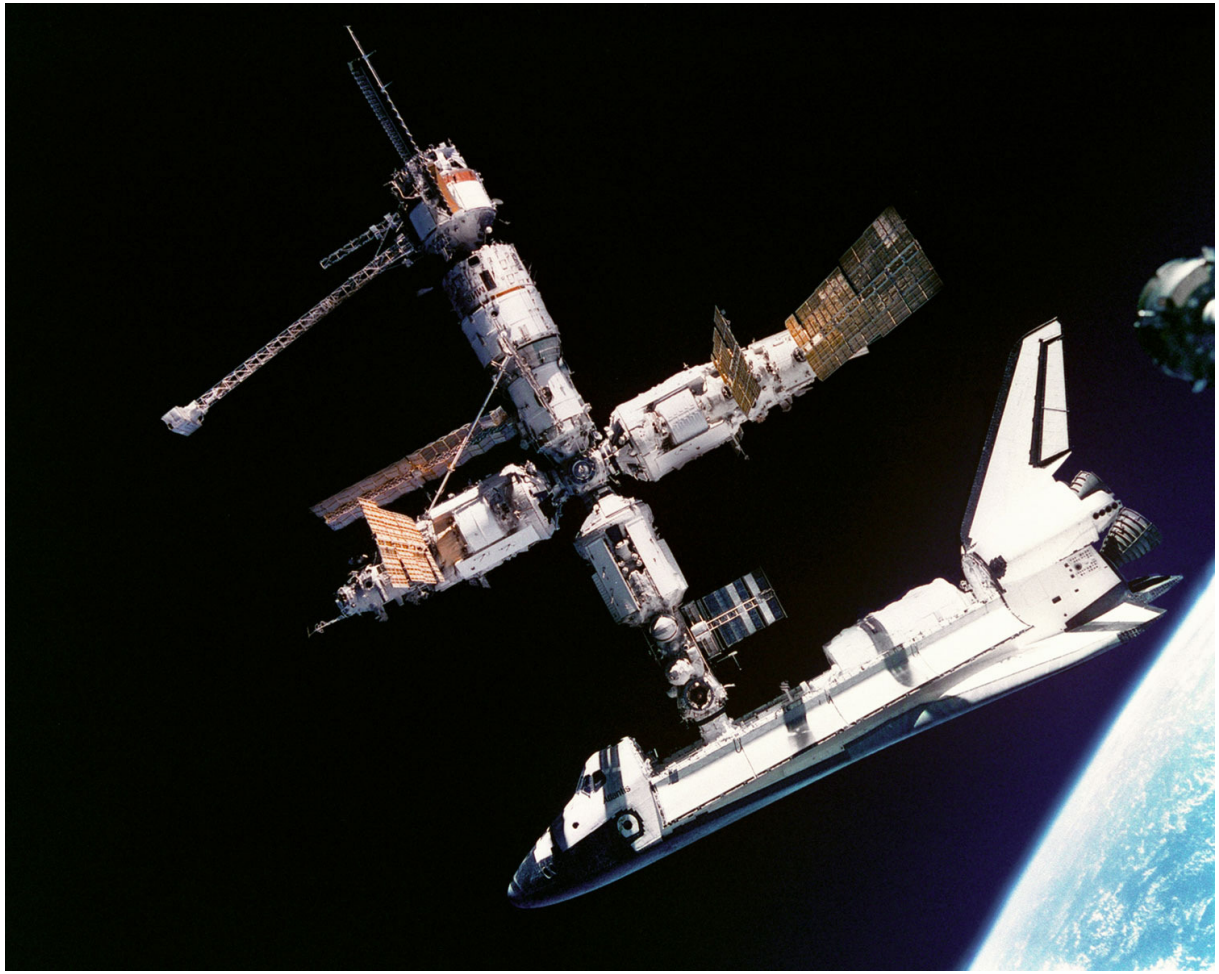
Spacelab (NASA-ESRO) 1973



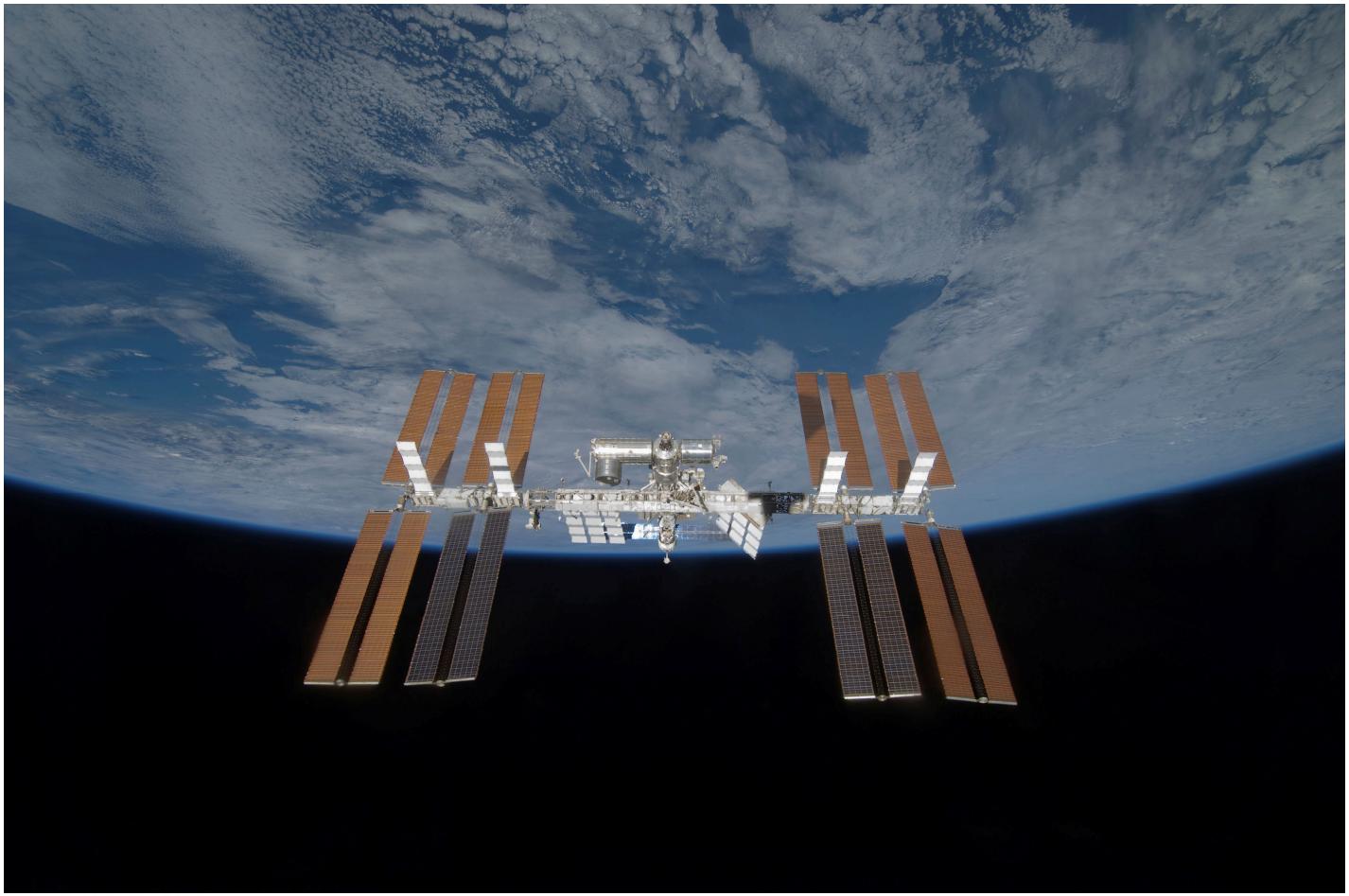
Apollo-Soyuz linkup, 1975



1st Shuttle/Mir docking, 1995



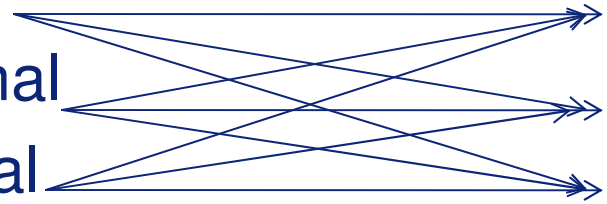
ISS (1988): largest international cooperation project ever



S119E008343

Levels of cooperation

- Geographical spread / number of parties involved :
  - Global
  - Regional
  - Bilateral



- Kinds of actors:
  - Governments
  - Agencies
  - Institutions/industries
- Blends also possible
  - Government with industries, etc.

Levels of cooperation in space

- Global intergovernmental level: UN Charter, UN Treaties & resolutions, giving rise to global cooperation mechanisms: GEO, UN-SPIDER
- International (but not global) intergovernmental cooperation: ISS
- Regional intergovernmental cooperation: ESA
- International operational (agency) cooperation: Disaster Charter, IADC
- Bilateral cooperation (not addressed here)

Rationale for cooperation in space

- Space transcends boundaries…
- Global issues, interdependence
- Idealism
- Technology
- Finance
- But a solid and sustained political will is often the major stimulus (or show-stopper)

Areas of cooperation in space

- Scientific programs, exploration
- Applications (remote sensing, telecom,…)
- Human spaceflight
- To a lesser extent: launch capacity

- Usually excluded: military activities, national security

Legal form

- Cooperation agreements are usually confirmed in a legal instrument, defining rights and obligations of parties
  - Treaty
  - Memorandum of Understanding
  - Code of conduct
  - A combination of the above
- Type is determined by various factors
  - Number and character of parties involved, subject matter, duration of cooperation,…

Issues…

- Different legal systems may imply different legal perceptions about instruments
  - Common law / civil law
  - Transposition to national law required or not
  - National legal systems give different values to international agreements
- Parties must have int. legal personality
  - Capacity to enter into int. agreements
- Problems with funding may influence capability to carry out the agreement

Global cooperation: Legal basis

- UN Charter Art. 1: purposes of the UN
  - (3) To achieve international cooperation in solving international problems of an economic, social, cultural, or humanitarian character […]
- Further ‘rules’ for global cooperation in space activities to be found in the UN space treaties and resolutions

Outer Space Treaty & cooperation

- Preamble:
  - ‘Desiring to contribute to broad international cooperation in the scientific as well as the legal aspects of the exploration and use of outer space for peaceful purposes’
  - ‘Believing that such cooperation will contribute to the development of mutual understanding and to the strengthening of friendly relations between States and peoples’

OST Art. I: Legal obligation?

- Article I OST: there shall be freedom of scientific investigation in outer space, and States shall facilitate and encourage international cooperation in such investigation
  - Consequences of non-cooperation?
    - Internationally wrongful act, entailing international responsibility?
    - If attributable to the state / breach of int. obligation

OST Art. III & IX: aim of cooperation

- Activities to be carried out in accordance with international law, including the UN Charter, in the interest of promoting international cooperation and understanding
- In the exploration and use of outer space, States shall be guided by the principle of cooperation and mutual assistance

OST Art. X & XI: “how to”

- In order to promote int. cooperation:
  - States shall consider requests by other states to observe the flight of space objects launched by those states
  - States agree to inform the UNSG, the public and the international scientific community, to the greatest extent feasible and practicable, of the nature, conduct, locations and results of such activities

Moon Agreement & cooperation

- Article 2
  - All activities on the Moon shall be carried out in accordance with international law, in the interest of maintaining international peace and security and promoting international cooperation and mutual understanding
- Article 4, Para. 2
  - International cooperation should be as wide as possible and may take place on a multilateral basis, on a bilateral basis or through international intergovernmental organizations

The other treaties & cooperation

- Rescue Agreement and Liability Convention only mention international cooperation in the Preamble

- Registration Convention: no mention

UN Resolutions & cooperation

- All mention international cooperation
- 1996 ‘Benefits Declaration’ is of course the instrument that mentions it the most, including in its title:
  - ‘Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries’

Global cooperation in practice

- Note: although the following examples flow from the UN treaty-based space cooperation system, they are not necessarily legally binding mechanisms!
- GEO (Group on Earth Observation):
  - Launched in 2002 at World Summit on Sustainable Development (J'burg)
  - 80 govt's, EU Commission, 56 IGOs / NGOs
  - Coordinates efforts to build the Global Earth Observation System of Systems (GEOSS)

Global cooperation in practice - 2

- ICN (Int. Committee on GNSS), to serve as a forum to discuss GNSS), 2004
- UN-SPIDER (UN Platform for Space-Based Information for Disaster Management and Emergency Response), 2006
- UN Debris Mitigation Guidelines, 2007

Global cooperation: lessons learned?

- No new treaties since 1979, only UNGA Resolutions
- More members of COPUOS, harder to reach consensus
- More aspiring space powers, more interests at stake
- Recent tendency towards nationalism?
- Nevertheless, efficient new cooperation mechanisms have been created, more practice oriented

International intergovernmental cooperation: ISS

- Some facts:
  - Initiated by Reagan in 1984
    - Many delays, redesigns….
  - Elements launched by Shuttle (problems) Soyuz, Proton
  - First IGA on space station Freedom 1988
  - 1998 Russia joined, new IGA on ISS
    - Mir was useful experience
  - Largest international cooperative effort ever

ISS facts - 2

- New space era: no more Superpowers/ national prestige, but int. cooperation
  - Global interdependence
  - Motivations: political, economic, technical
- 5 Partners
  - US, ESA, Canada, Japan, Russia
- A civil station
  - Peaceful purposes
  - Mostly research
  - But also a push for commercial use

ISS Legal Framework: 3 layers

- IGA:
  - Space Station Intergovernmental Agreement (IGA) signed on Jan. 29, 1998 as an international Treaty by the Governments of USA, Canada, Japan, Russian Federation and the European Space Agency (10 states)
- MOU:
  - Bilateral agreements between NASA and each of the other four Cooperating Agencies (ESA, CSA, RSA, JAXA) called Memoranda of Understanding (MOUs) signed Jan. 29, 1998
- IA:
  - Bilateral agreements called Implementing Arrangements between Cooperating Agencies

Issues addressed in instruments

- Registration
- Jurisdiction & Control
- Criminal jurisdiction
- Inter-party waivers of liability
- Intellectual property rights
- Crew Code of Conduct, introducing categories of persons on board ISS
- Powers of ISS commander, flight director

ISS: lessons learned?

- Back to the Moon and onwards to Mars:
  - Cannot be done by any single nation
  - Cooperative effort is essential
  - Lessons learned… ‘Genuine Partnership’
- But many states are developing national moon missions…
  - Return of rush for national prestige?
- Still the ISS cooperation provides a unique experience for future missions

Regional, intergovernmental cooperation: ESA

- 1964: European Space Research Organisation (ESRO) & European Launcher Development Organisation (ELDO)
- 1975: Convention for the Establishment of a European Space Agency (in force 1980)

Purpose of ESA

"To provide for and promote, for exclusively peaceful purposes, cooperation among European states in **space research** and **technology** and their **space applications**"

- Article 2 of ESA Convention

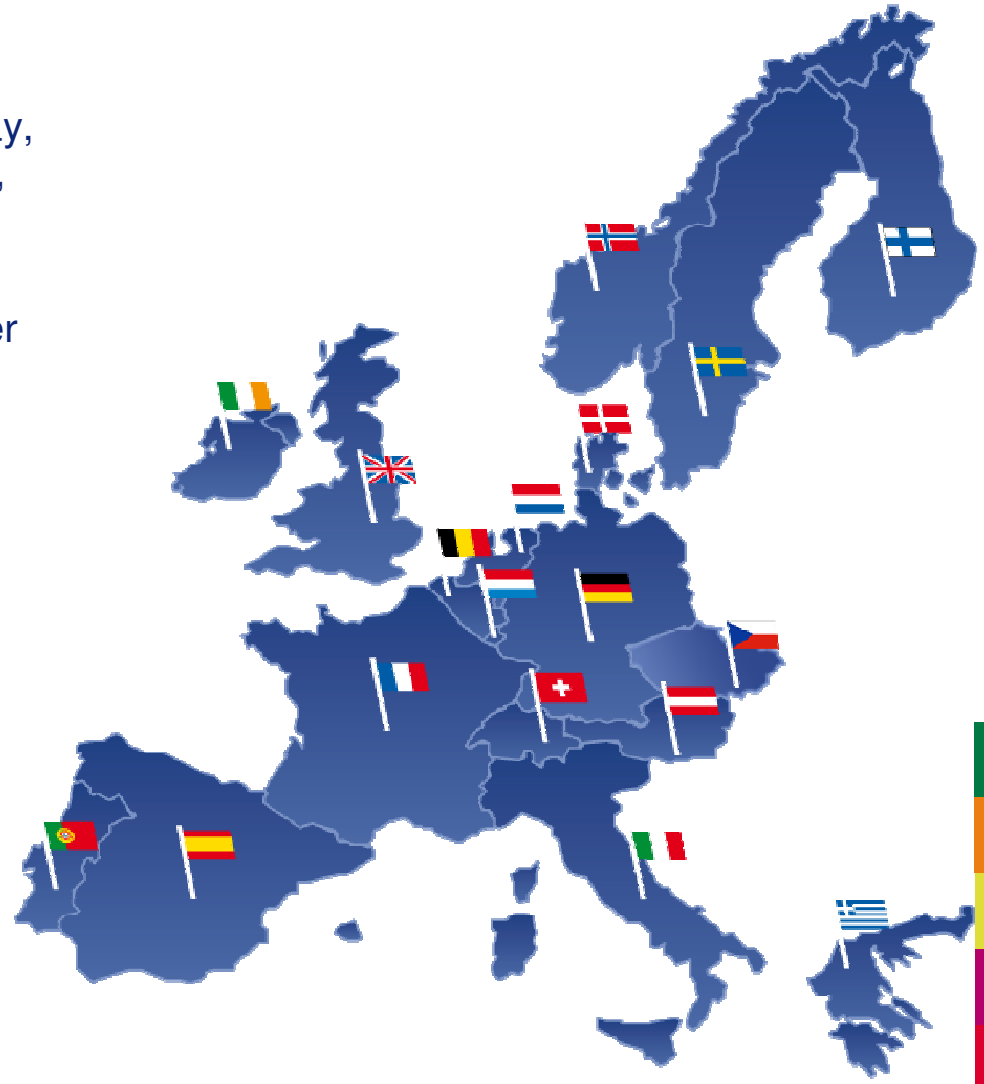
18 Member States

- Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Norway, the Netherlands, Portugal, Spain, Sweden, Switzerland and the United Kingdom

- Canada takes part in some projects under a cooperation agreement

- Hungary, Romania and Poland are European Cooperating States (‘PECS’)

- Estonia and Slovenia have signed cooperation agreements with ESA



Institutional structure

- Two main organs:
  - Council of member states
  - Director General, assisted by staff

ESA Council

- Governing body of ESA
- One state, one vote, regardless of size or financial contribution
- Meetings at ministerial or delegate level
  - Every 3 years, ‘Ministerial Council’ takes key decisions on new /continuing programs

ESA Fields of Activity

- Science & robotic exploration
- Human Spaceflight
- Earth Observation
- Telecommunications
- Navigation
- Launchers
- Space Technology

ESA programmes

- Three types
  - Mandatory
  - Optional
  - Operational
- Flexible framework accommodating interests of individual states while maintaining coherent & manageable programme

Mandatory activities

- All Member States participate (on a GNP basis)
- Council approves programmes, determines level of resources
- e.g. science, budget, facilities, education...

Optional activities

- Members choose level of participation
- Practical nature
- Council accepts programmes, member states may opt out, contribute subject to their interests (à la carte)
- ± 80% of ESA budget = optional
- e.g. human spaceflight, EO, navigation, launchers, telecom,…

General industrial policy

- Promoting cost-effectiveness
- Improving world-wide competitive industry
- Using existing industrial potential Europe
- Preference for European industry & equitable member state participation (‘fair return’)
- Exploit advantages of competitive bidding

ESA: lessons learned?

- Other regions are looking at the example of ESA to set up regional cooperation
  - Asia/Pacific: APSCO (next talk); Latin America
- Each region has its own characteristics, backgrounds, needs…
- ESA can be a useful model
- But situation in Europe is changing?
  - Relation with EU; Eur. Space Policy ’07, Lisbon Treaty, ‘space security’, militarization?
  - Flagship programs ESA/EU: Galileo, GMES

Global cooperation at operational (agency) level

- Disaster Charter, set up after UNISPACE III, in 2000 by space agencies
- IADC guidelines set up by agencies, later developed into UN debris mitigation guidelines 2007, endorsed by UNGA
- Efficient, practical instruments, responding to a real need
- Less political, ‘get the job done’

Operational cooperation: lessons learned?

- An excellent tool for practical solutions to real problems
- It works!
- But these instruments are not legally binding, they are voluntary guidelines
  - Usually no liability accepted by operators
  - But that does not mean no legal effect could result… (e.g. ‘good samaritan’ principle, duty to inform?,…)

Iran and cooperation in space

- Participates in global programs / activities
  - Signed and ratified 4 UN space treaties
  - Member of COPUOS, active since 1958
    - Chair LSC from 2010
  - UNISPACE, UN-SPIDER, GEO,…
- Participates in regional cooperation efforts
  - E.g. APSCO
- Has bilateral cooperation with many states
  - USA, Russia, China, India. N. Korea, Italy,…

Iran & space

Kay Kavus airborne,ca. 1520-25

Safir-2 launch of Omid, Feb. 2009

Conclusions

- Cooperation in space takes place at different levels, with different legal effect
- Use & exploration of space for peaceful purposes is a global concern, so global cooperation is essential
- Regional and agency level cooperation is particularly useful when similar interests, needs & characteristics exist
- Cooperation helps states to further their ambitions in space, ánd benefits all states

Thank you!

International Institute of Air and Space Law
www.iiasl.aero / t.l.masson@law.leidenuniv.nl

Universiteit Leiden
The Netherlands