

# Models for Coordination and Cooperation: Bilateral and Multilateral Agreements


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# Outline

- 1 Introduction: purpose of the presentation
- 2 Work of the COPUOS/LSC: “review of international mechanisms for cooperation in the peaceful exploration and use of outer space”
- 3 Mechanisms favoured by States
- 4 A multilateral mechanism selected by States
- 5 Conclusion: possible contributions for tomorrow

# 1 Introduction: purpose of the presentation

Space activities have flourished last 50 years through international cooperation. To pursue a better international mechanism for space cooperation, “international cooperative mechanisms” has been studied in the UN since 2013.

This presentation demonstrates types of bilateral and multilateral mechanisms favoured by States  Extract elements commonly found in agreements  
Elements could be chosen (customized) according to the project



Promote and facilitate cooperation in the future

## 2 “Work of the COPUOS/LSC: “review of international mechanisms for cooperation in the peaceful exploration and use of outer space”

### (1) Background

1) 29 March 2012 proposed by the US, cosponsored by China, Ecuador, Japan, Peru and Saudi Arabia

2) Reasons of the proposal and the goal of this agenda item

\*Accomplishment: international cooperation through a variety of mechanisms for the last 50 years



\*1996 UNGA Principles “Space Benefit Declaration” urges COPUOS to strengthen its role as a forum for exchange of information on international space cooperation



To take stock of the various mechanisms to conduct international collaboration with a view to **identifying common principles and procedures**. This information could be helpful to Member States as they choose relevant mechanisms to facilitate future cooperative endeavours.

# Cooperative mechanisms suggested in the 1996 Space Benefit Declaration

International cooperation should be conducted in the modes that are considered most effective and appropriate by the countries concerned:

- governmental and non-governmental;
- commercial and non-commercial;
- global, multilateral, regional and bilateral. (para.4)
- UN Programme on a space applications and other initiatives (para.8)

Space Benefit Declaration as a useful tool to consider the conditions of cooperation

- particular account should be taken of the needs of developing countries (para.1)
- on an equitable and mutually acceptable basis; (paras.2 & 3)
- contractual terms should be fair and reasonable (e.g., intellectual property rights) (para.2)

## (2) Five-year work plan 2013-2017

### Year 1 (2013)

- **Exchange of information** on the range of existing international space cooperation mechanisms. Member States and permanent observers were invited to provide information prior to the session of the Legal Subcommittee.

They were also invited to make **special presentations** on the range of bilateral and multilateral mechanisms they utilize for space cooperation.

- Australia, Kazakhstan and Portugal (A/AC.105/C.2/102);
- Austria, China and Germany (A/AC.105/C.2/2013/CRP.14); and
- USA (A/AC.105/C.2/2013/CRP.17)

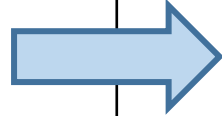
- Intergovernmental Agreement on the International Space Station (ISS) (A/AC.105/C.2/2013/CRP.24)

#### **Mechanisms of the ISS**

- USA
- Japan
- Representatives of the ISS Partners

# Year 2 (2014)

- Member States and permanent observers continued the **exchange of information.**
- LSC Established a working group.
- Request the Secretariat **to prepare a report categorizing the range of mechanisms for international cooperation** based upon submissions by Member States as well as additional research → to be distributed in the 2015 LSC.



- Algeria, Germany, Kenya (A/AC.105/C.2/105)
  - Argentina (A/AC.105/C.2/105/Add,1)
  - International Law Association (A/Ac.105/C.2/105/Add.2)
  - Russia (A/AC.105/C.2/2014/CRP.23)
  - Japan (A/AC.105/C.2/2014/CRP.24)
  - Canada (A/AC.105/C.2/2014/CRP.25)
  - Turkey (A/AC.105/C.2/2014/CRP.26)
  - ESA (A/AC.105/C.2/2014/CRP.28)
- Non-paper by the chair containing a draft set of questionnaire



# Year 3 (2015)

- Exchange of additional information
- Examination in the WG the report in order to **develop an understanding of the range of collaborative mechanisms employed by States and international organizations, and the circumstances in which certain classes of mechanisms are favoured by States over other mechanisms.**
- Request the Secretariat to prepare a report identifying the legal issues commonly addressed in the existing cooperative mechanisms → to be distributed in the 2016 LSC.

- Japan and Spain (A/AC.105/C.2/107)
- Austria (A/AC.105/C.2/2015/CRP.14)
- Note by the Secretariat (A/AC.105/C.2/2015/CRP.15)

WG recalled:

the final report could serve as an important contribution to:



2017 50<sup>th</sup> anniversary of the OST  
2018 UNISPACE + 50

# Year 4 (2016)

- continues to examine responses received from Member States,
- reviews the report by the Secretariat
- begins drafting its report.

Belgium, Poland, Thailand, Turkey and WMO (A/AC.105/C.2/109)

France and Japan  
(A/AC.105/C.2/2016/CRP.18)

Draft Report of the WG  
(A/AC.105/C.2/2016/CRP.14)

### 3. Mechanisms favoured by States: (1) Criteria of international cooperation

1 legally-binding ; non-legally binding

2 universal (global), multilateral, bilateral

3 through international organizations either (IGO or NGO)

4 through international fora, etc.

## (2) Mechanisms favoured by States: bilateral

Combination of:

**Framework Agreements (FA)** legally-binding (=treaty)

- government-to-government or space agency to space-agency
  - **basic legal principles** in bilateral space cooperation in general
- adopted even without an immediate specific project.

**Implementing Arrangements/Agreements (IA)** legally non-binding

- space agency to space agency or between other specific governmental agencies
- mission description and allocation of the responsibilities of each party + **basic legal principles**

### (3) Basic Elements of the FA

*-Purpose*

- *Definitions* “**Related Entity**” for cross-waiver of liability

- *Scope of cooperation*

(Russian type: areas of cooperation and forms of cooperation)

- Cooperating agencies usually space agencies, but in some cases,  
joint committee, WG, etc.

- *Implementing Arrangements/Agreements* or *MOUs* to adopt in the future

- *Financial arrangements*

**Each party will bear the costs of discharging its respective obligations**

**The Parties’ obligations are subject to the availability of appropriated funds.**

(cont'd)

- *Customs duties and taxes* **subject to its respective country's domestic law;**
  - i) waive applicable duties and taxes related to the cooperation project.  
If duties and taxes are nonetheless levied, those will be borne by the other Party; and
  - ii) facilitation of the movement of goods
- *Transfer of goods and technical data*
  - i) transfer only those necessary to fulfill its respective responsibilities;
  - ii) comply with national laws and export control requirements.
- *Release the results and public information*  
specify what is and what is not widely-shared information to the general public and the scientific community.

(cont'd)

- *Intellectual property rights (IPR)*

Some FAs provide for detailed conditions on **patents** and **copyrights**.

Detailed conditions are often in the Annex of the FA. In some cases, rights and duties of the IPR are set out in the Implementing Arrangements/Agreements or even the Annex(es) thereto.

- *Cross-Waiver of Liability; liability and risk of loss*

each party waives any claim against the other party, employees and **related entities** of the other parties, etc.

- *Consultation and settlement of disputes*

- *Final clauses: entry into force; duration; amendment; termination, etc.*

## (4) FA with the US government-to-government

	Argentina	Canada	France	Norway	Russia	Sweden	Ukraine
Year of the signature (incl. that of the extending the agreement)	2011	2010	2007	2006	2007	2015	2008
Purpose	○	○	×	×	×	×	○
Definitions	○	○	×	×	×	×	○
Scope of cooperation	○	○	○	○	○	○	○
Implementing Arrangements	○	○	○	○	○	○	○
Funding/financial arrangements	○	○	○	○	○	○	○
Customs duties and taxes	○	○	One Article	One Article	One Article	One Article	○
Entry and exit of personnel	○	○					○
overflight	○	○					○
Intellectual property rights	○	○	○	○	○	○	○



(cont'd)	Argentina	Canada	France	Norway	Russia	Sweden	Ukraine
Transfer of goods and technical data	○	○	○	○	○	○	○
Cross-waiver of liability	○	○	○	Allocation of risks ○	○	Allocation of risks ○	○
Publication of public information and results	○	○	○	×	○	×	○
Registration of space objects	○	○	○	×	○	×	○
consultations	One	○	One	○	One	○	One
Dispute settlement	Article	○	Article	×	Article	×	Article
Existing rights and obligations (relationship to other agreements)	○	○	○	○	○	○	○
List of implementing arrangements/Annexes	×	○	×	○	×	×	×
Entry into force and duration	10 years	10	10	5 (10)	○	10	○
Amendments	○	○	○	○	×	○	○
Termination	○	○	○	○	○	○	○

## (5) FA with NASA space agency-to-space agency

	Brazil	Germany	India	Israel
Signed (incl. extending the agreement)	2010	2010	2007	2006
counterpart	AEB	DLR	ISRO	ISA
purpose	○	○	○	○
Definitions	×	○	○	○
Scope of cooperation	2 articles	○	○	○
Implementing Arrangements	○	○	○	○
Funding/financial arrangements	○	○	○	○
Customs duties and taxes	One	○	○	○
Entry and exit of personnel	Article	○	○	○
overflight		○	○	○
Intellectual property rights	○ Annex	○	○	○

(cont'd)

	Brazil	Germany	India	Israel
Cross-waiver of liability	×	○	○	○
Registration of space objects	×	○	○	○
Transfer of goods and technical data	×	○	○	○
Publication of results and public information	×	○	○	○
Consultation and dispute settlement	○	○	○	○
Continuing obligations	○	×	○	○
Amendment	○	○	○	○
Entry into force and duration	10	10	10	10
Termination	○	○	○	○

## (6) FA with Russia government-to-government

	Australia	Brazil	Germany	Mexico	ROK	Spain
Signed (incl. extending the agreement)	2007	2010	2001	1996	2004	2006
Purpose	○	×	○	○	○	○
Definition	×	×	×	×	×	○
Applicable law	○	○	○	○	○	○
Cooperative organizations	○	○	○	○	○	○
Areas of cooperation	○	○	One	○	One	○
Forms of cooperation	○	○	Article	○	Article	○
Complementary agreements	×	○	×	○	×	×
Working Groups	×	○	×	×	×	×
Financing	○	○	○	×	○	○
Intellectual property	○	○	○	×	○	○

(cont'd)	Australia	Brazil	Germany	Mexico	ROK	Spain
Exchange of information and hardware	○	○	One	×	○	○
Protection of property	○	○	Article	×	○	○
Liability	○	○	○	×	○	○
Customs regulation	○	×	○	×	○	○
Export control	○	×	○	×	×	○
Assistance to the activities of personnel	○	○	○	×	○	○
Economic and industrial types (forms) of activity	○	○	○	×	○	○
Settlement of disputes	○	○	○	×	○	○
Final provisions: duration	10 years	10	5	10	10	10
Attachment (intellectual property (IP); IP and confidential information	○	Annex IP	○	×	○	○

# (7) FA with France

(cont'd)	Algeria	Brazil	China
	2006	1997	1997
Purpose	○	○	○
Applicable law; relationship with other agreements	○	○	○
Area of cooperation	○	○	○
Forms of cooperation	○	○	○
Designation of the space agency as a competent body	○	○	○
Joint Committee (JC) (set broad directions for cooperation) to be established	○	×	×
Implementing Agreements to be made by the JC	○	○	○
Intellectual Property (IP) detailed rules in the Annex	○	○	○
Transfer of Information and data	○	○	○
Financial arrangements	○	○	indirect
Entry and exit of personnel; customs, duties and taxes	○	○	○
Liability (cross-waiver of liability)	○	×	×

(cont'd)	Algeria	Brazil	China
Promotion of the Industrial and commercial cooperation	○	○	○
Cooperation on legal questions of mutual interest	×	×	○
Settlement of disputes (negotiation, arbitration procedures)	negotiation	Negotiation, etc.	○
Amendment	○	○	○
Duration	10	10	5
Annex (Intellectual Property)	○	○	○

# (8) FA: Brazil and China (1994)

Preface history of the bilateral cooperation

Art. 1 purpose

Art. 2 scope of the cooperation: CBERS, satellite launch and other projects

Art. 3 forms of cooperation

Art. 4 implementing agencies: space agencies and bilateral WG

Art. 5 the use of the local facilities on a reciprocal basis

Art. 6 facilitation of the entry and exist of the personnel of the other Party

Art. 7 entry into force

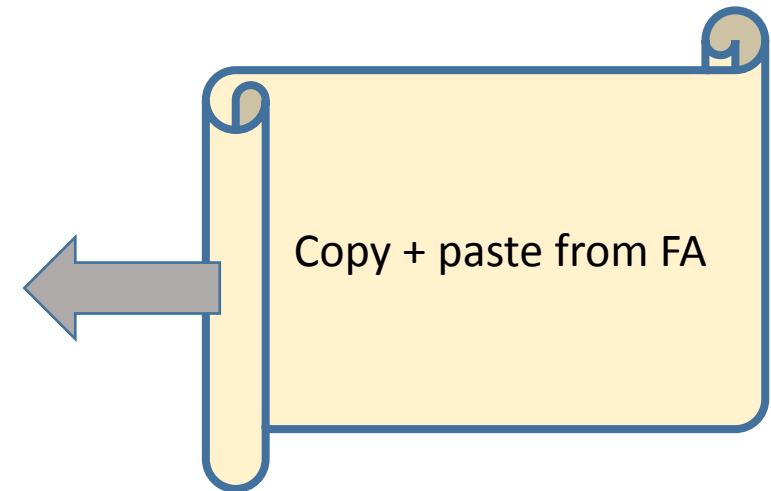
Art. 8 duration 5 years; termination, etc.



# (9) Basic Elements of the Implementing Arrangements

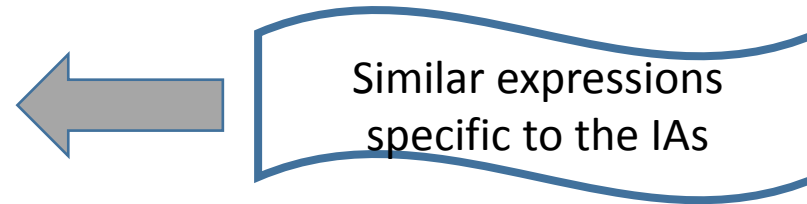
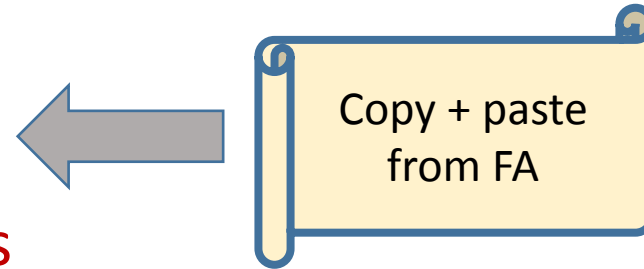
Usually between space agencies:

- Mission description
- Responsibilities of the parties
- Management and Governance system (a relatively big project such as planetary exploration involving the construction of space probes and its launch and operation)
- Allocation of rights in resulting data
- Financial arrangements
- Customs, duties, fees, and taxes as well as movement of goods
- Entry and exist of personnel



# (cont'd)

- Transfer and exchange of goods and data
- Release of results and public information
- Customs clearance and movement of goods
- Investigation of mishaps
- Consultation and dispute resolution
- Ownership of equipment
- Registration of space objects (when launch a space object is involved)
- Reference to the FA (when an IA does not reiterate some provisions already agreed in the FA)
- Jurisdiction and control (in case of a relatively big project to launch a space probe)
- Final clauses



# (10) IA as MOU for cooperation in the use of USGS

## Landsat sensing satellite data

model provision

identical provisions from the FA

	Argentina	Gabon	ESA	Japan	Norway	Saudi Arabia	South Africa	Thailand
	2013	2013	2012	2013	2013	2013	2013	2013
Purpose and scope of cooperation	○	○	○	○	○	○	○	○
Existence of the Framework agreement	○	×	×	×	○	×	×	×
Responsibilities of the parties (NASA 6; each space agency 14)								
International mission cooperation								
Science and applications development								
User service arrangements								
Financial arrangements and legal authorization								
Duties, fees, and taxes								
Entry and exist of personnel								

Model provisions commonly used in the IA

**Borrowed provisions from the FA**

model provision

Same provisions from the FA

	Argentina	Gabon	ESA	Japan	Norway	Saudi Arabia	South Africa	Thailand
Laws, warranties, rights, and liability								
Exchange of technical information								
Consultations and settlement of disputes								
Entry into force, duration, and termination								
Annex I: definition of terms								
Annex II: Landsat 8 Annual Access fee agreement								

Model provisions commonly used in the IA

IA = description of the mission concerned + standardized provisions of the IA + borrowed provisions from the FA

# (11) IA for various scientific cooperation with NASA

	ESA	Germany	Indonesia	India	Italy	Japan	Norway	Sweden
Year of the conclusion	2012	2012	2012	2012	2011	2013	2011	2011
Subject of cooperation	Solar orbiter	EO	EO	EO	Juno mission	Astro-H	Planetary observation	nanosat
Purpose, scope and objectives	○	○	×	○	○	○	○	○
Mission description	○	○	○	○	○	○	○	○
Definitions (related entities, etc.)	○ RE	×	○ RE	○	×	○ RE	×	×
Responsibilities	○	○		○	○	○	○	○
Management/governance	○	×	×	○	○	○	×	×
Financial arrangements		○		×			×	×
Points of contact	×	×	○	○	○	○	○	○
Liability and risk of loss	CWL	×	×	×		CWL	CWL	×
Transfer of goods and technical data		○		×				○
Intellectual property rights		○		×				

(cont'd)

	ESA	Germany	Indonesia	India	Italy	Japan	Norway	Sweden
Release of results and public information	○	○		×				
Investigation of mishaps		×		×			×	×
Consultation and dispute resolution		×		FA			×	×
Reference to the FA	×	×	×	○	×	×	○	○
Customs clearance and movement of goods		×	×	×			×	×
Ownership of equipment		×	×	○	○	○	×	×
Registration of space objects	○	×	×	×	○	○	×	×
Jurisdiction and control	○	×	×	×	×	×	×	×
duration	8 years	5	5	5	8	7	10	10
Amendment and termination								

# 4 A Multilateral Mechanism selected by States

## (1) ISS three-tier mechanism

A number of implementing arrangements concluded between space agencies: **made when new rules are needed**

MOU between NASA and corresponding space agencies (government of Japan): **day-to-day mission responsibilities and management**

ISS Intergovernmental Agreement (ISS/IGA) **basis for this specific project**

# 1998 ISS/IGA

1 objects and scope

2 international rights and obligations

3 definitions

4 cooperating agencies

5 Registration; jurisdiction and control

6 ownership of elements and equipment

7 management

8 detailed design and development

9 utilization

10 operation

11 crew

12 transportation

13 communications

14 evolution

15 funding

16 cross-waiver of liability

17 liability convention

18 customs and immigration

19 exchange of data and goods

20 treatment of data and goods in transition

21 intellectual property

22 criminal jurisdiction

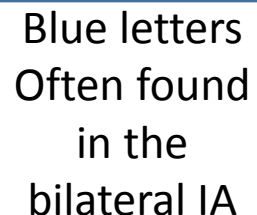
23 consultations

24 space station cooperation review


25 entry into force

26 operative effect as between certain parties

27 amendments; 28 withdrawal



Blue letters  
Often found  
in the  
bilateral IA



Red letters  
Found in the  
bilateral FA



## (2) Characteristics of the ISS/IGA

Formula

ISS/IGA  $\hat{=}$

standard clauses of FA  
(liability, IP, movement of data,  
goods and personnel,  
consultation and final  
provisions)

+

elements found in  
the standard IA of  
big projects  
(jurisdiction, registration,  
mission description,  
management, etc.)

This formula could be used for the next multilateral bit exploration project, e.g., the one to be generated from the ISEF consideration

Contents of such elements would differ depending on the projects

# 5 Conclusion: possible contributions for tomorrow

## (1) Guidelines on the long-term sustainability for outer space activities

12 Guidelines agreed in June 2016

Guideline 25 and 26 are relevant to international cooperation

25 Promote and support capacity-building with emerging space programmes (regional and international), on mutually acceptable basis.

26 Raise awareness of space activities

Depending on the area of cooperation, typical IA for that specific area could be made available for cooperating countries/organizations through the possible assistance of the UNOOSA based on the final report of the International Mechanisms for cooperation in 2017.

## Conclusion (2) UNISPACE + 50 (2018)

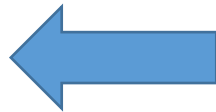
**UNISPACE+50** is an opportunity to strengthen unified efforts at all levels and among all relevant stakeholders in shaping the **global space governance**.

Space Economy

Space Society

Space Accessibility

Space Diplomacy



The result of the International mechanisms for cooperation could be a contribution to promote these 4 pillars.