

International Frameworks for Cooperation in Space Activities

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I Introduction 1. background

[various fields of international law]

Long discussion on the legal nature of “international cooperation” on a concrete subject-matter (economic, development, humanitarian, environment, etc.) under customary international law.

[International space law]

[consensus]

space activities a tremendous success through “international cooperation”

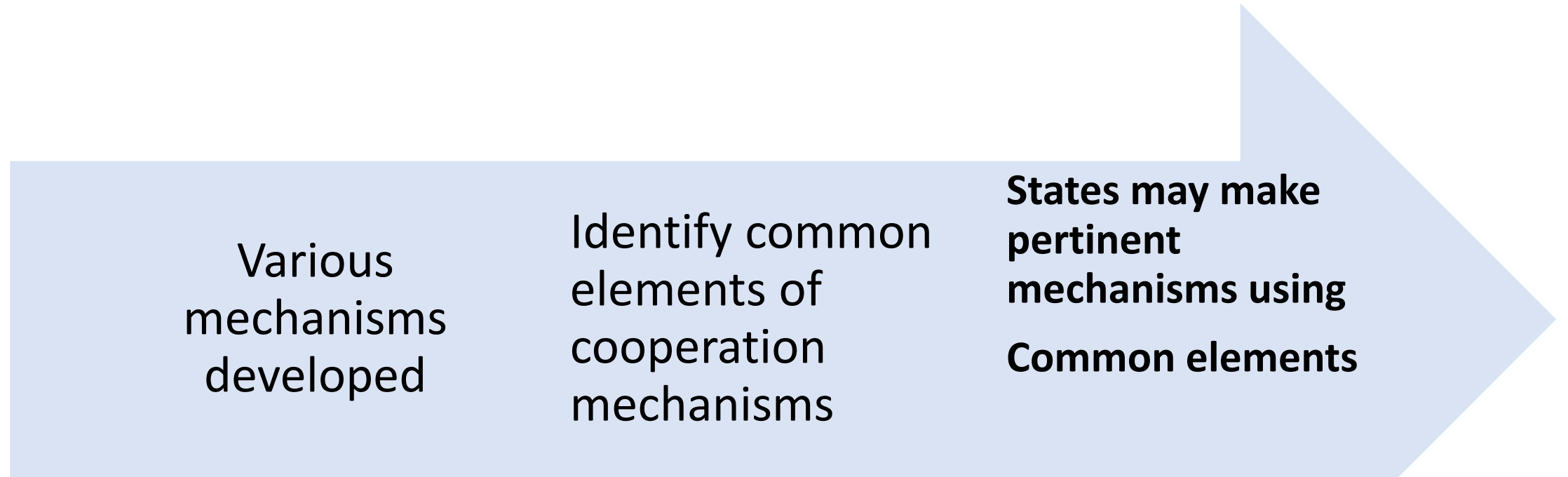
less discussions on the legal nature of “international cooperation”.

Instead, more efforts have been made to develop various international mechanisms for cooperation depending on the subject-matters and participants.

2. Cooperative mechanisms in the 1996 space benefit declaration

- States are **free to determine** all aspects of their participation in international cooperation (para.2)
- 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)

3. COPUOS/LSC “Review of international mechanisms for cooperation in the peaceful exploration and use of outer space” multi-year agenda item (2013-2017)



A/AC.105/C.2/112
(13 April 2017)

II 2019 -2020 space cooperation agreements for African States (examples)

1. Bilateral governmental space cooperation agreements

2019

11 June Tunisia- India (MOU)

2020

13 Aug. Nigeria- India (MOU)

15 Oct. Kenya- Italy

(Cooperative Agreement on Luigi Broglio Space Center)

2. Space Agency-space agency agreements

2019

28 Feb. SANSА(South Africa)- CNES

14 Mar. ESSTI (Ethiopia)- CNES (framework agreement)

2020

14 Jan. EgSA (Egypt)- CNES (framework agreement)

20 Feb. SANSА-NASA agreement (deep space communication research)

28 May SANSА-NASA agreement (deep space network
ground station)

25 Aug. ESSTI announced the on-going ET-SMART-RSS project with
China

3 Regional Agreement (1)

2-4 Dec. 2019 8th African Leadership Conference

African Leadership Conference →
African Space Leadership Conference
(ASLC)

31 States participated

Oct. 2021 9th ASLC to be held in
South Africa

Dec. 2019 cooperation on AfDev-Sat
announced.

Botswana, Ghana, Kenya, Morocco,
Nigeria, Sudan and Uganda

(2) 17 Nov. 2020 BRICS 12th Summit Moscow Declaration

South Africa

19. We underline the importance of ensuring safety and security of outer space activities and use of outer space for peaceful purposes as well as to prevent an arms race in outer space. We emphasize the urgent need to negotiate a legally binding multilateral instrument that could fill the gap in the international legal regime applicable to outer space, including on the prevention of the placement of weapons in outer space and the threat or use of force against outer space objects. We stress that practical Transparency and Confidence-Building Measures (TCBMs), including such as the "No First Placement" initiative, may also contribute towards this goal. We reaffirm that TCBMs should complement, but not substitute for, effective legally binding regime for outer space.

20. We reiterate the importance of the strict adherence to the principles established in the Outer Space Treaty in order to contribute to the sustainable and peaceful use of outer space for the benefit and in the interests of all countries. We reaffirm the need to carry on activities in the peaceful exploration and uses of outer space in accordance with international law, including the Charter of the United Nations, to preserve outer space for future generations. The application of relevant space technologies for peaceful purposes will be a tangible contribution to the achievement of the Sustainable Development Goals. We underscore the importance of further BRICS cooperation in the area of remote sensing satellites.

21. We emphasize the need to ensure the long-term sustainability of outer space activities, including in the context of the safety of space operations. We welcome, in this respect, the adoption by the **United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS)** at its 62nd session of the report with 21 guidelines for the long-term sustainability of outer space activities, and we commit to contribute to the Working Group established to address this issue and operationalisation of its agreed structure and work programme.

4. Space cooperation with the UN Office for Outer Space Affairs (UNOOSA)

“Access to Space for All” program to contribute to the **UN Sustainable Development Goals (SDGs)**, especially Goal 4 "Quality Education" and Goal 9 "Industry, Innovation, and Infrastructure."

e.g.

- Provision of the launch opportunity (launch vehicle or release facility)

KiboCUBE (Japan, JAXA) 2015 -2021

Satellites for **Kenya and Rwanda** under this project

Vega rocket (Italy, Avio company)

Application form, various procedures are in the OOSA site

III Characteristics of cooperation agreements

1. bilateral agreements (summary)

[Majority of cooperation agreements]

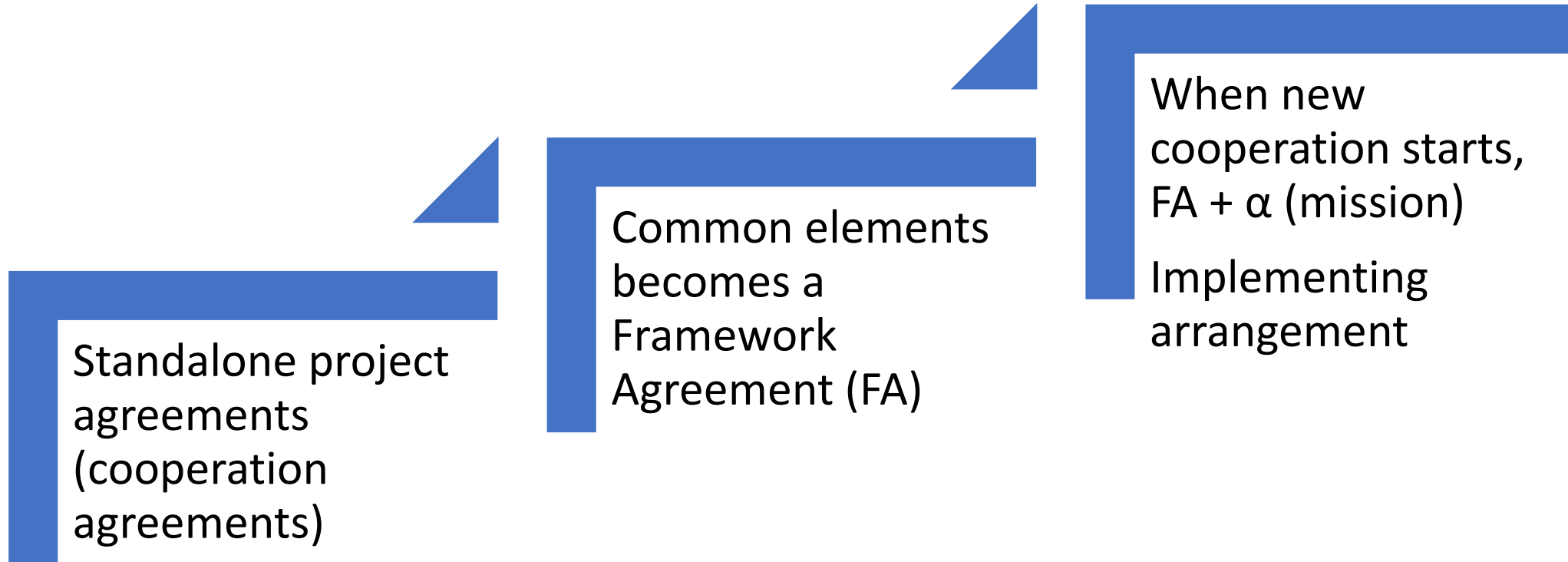
1 Bilateral agreements

government- government and/or space agency- space agency

2 [subject-matters have been enlarged] space exploration; earth observation; use of the facility; recently SSA.

3 When bilateral cooperation deepens  combination of **the framework agreement+ implementing arrangement/agreement** starts.

2. Development of cooperative mechanisms



3. Combination of the FA and IA (1) structure

Combination of:

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

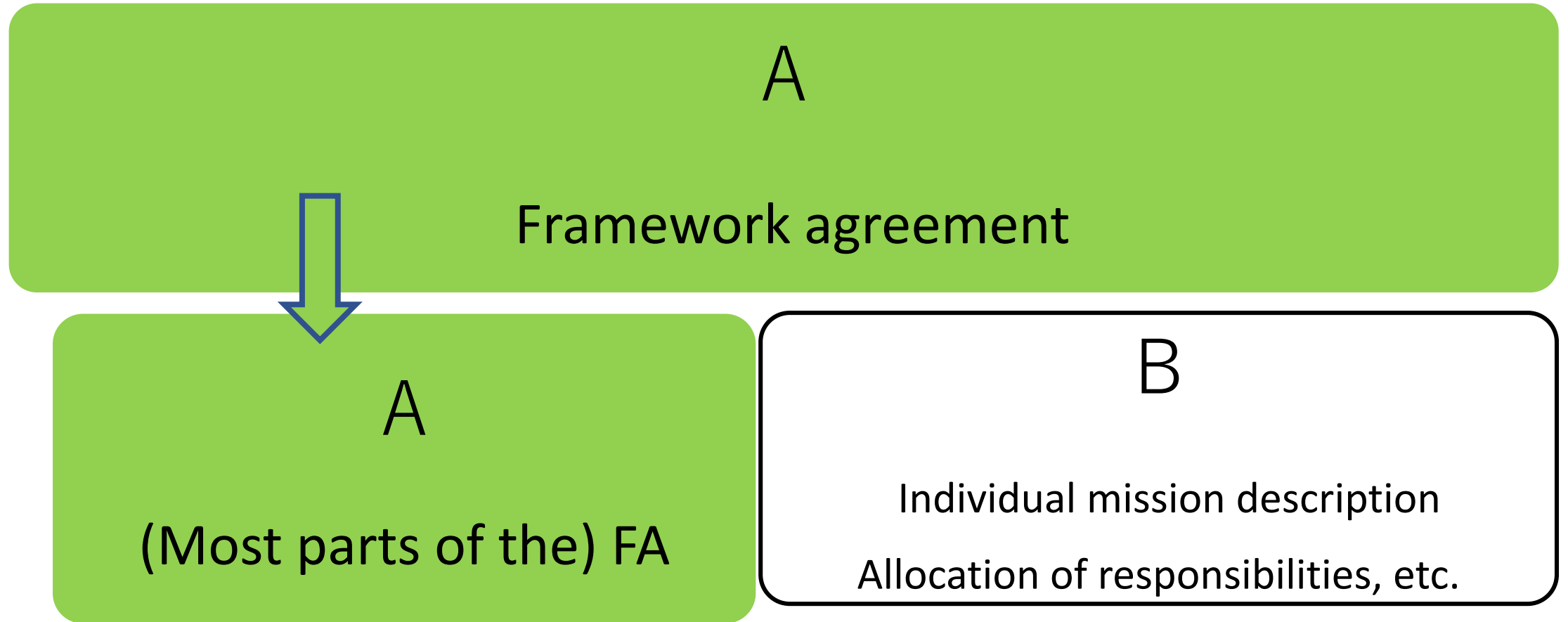
Basic legal principles

Implementing Arrangements/Agreements (IA) non-legally binding

- mission description and allocation of the responsibilities of each party +

Basic legal principles

(2) implementing arrangements = A + B



(3) Basic Elements of the FA

- Purpose
- Definitions
- Scope of cooperation
- Cooperating agencies
- Implementing Arrangements/Agreements or MOUs (to adopt in the future)
- Financial arrangements

Each party will bear the costs of discharging its respective obligations

Each party's obligation is subject to the availability of appropriated funds.

(cont'd)

- Waiver of customs, duties and taxes;
- Scope of transfer of goods and technical data, safeguards to prevent to misuse them
- Scope of the release of the results and public information

- Protection of the intellectual property rights (IPR) (patents, copyrights, trade secrets, etc.)

- *Cross-Waiver of Liability;*

- Consultation and settlement of disputes
- Final clauses

“subject to national laws”

A space project may generate enormous damage for which States may be unable to estimate the total amount of liability to be claimed by the other Party. To remove this uncertainty, this special schemes of allocation of risks is needed.

4. Implementing Arrangements (1) basic elements

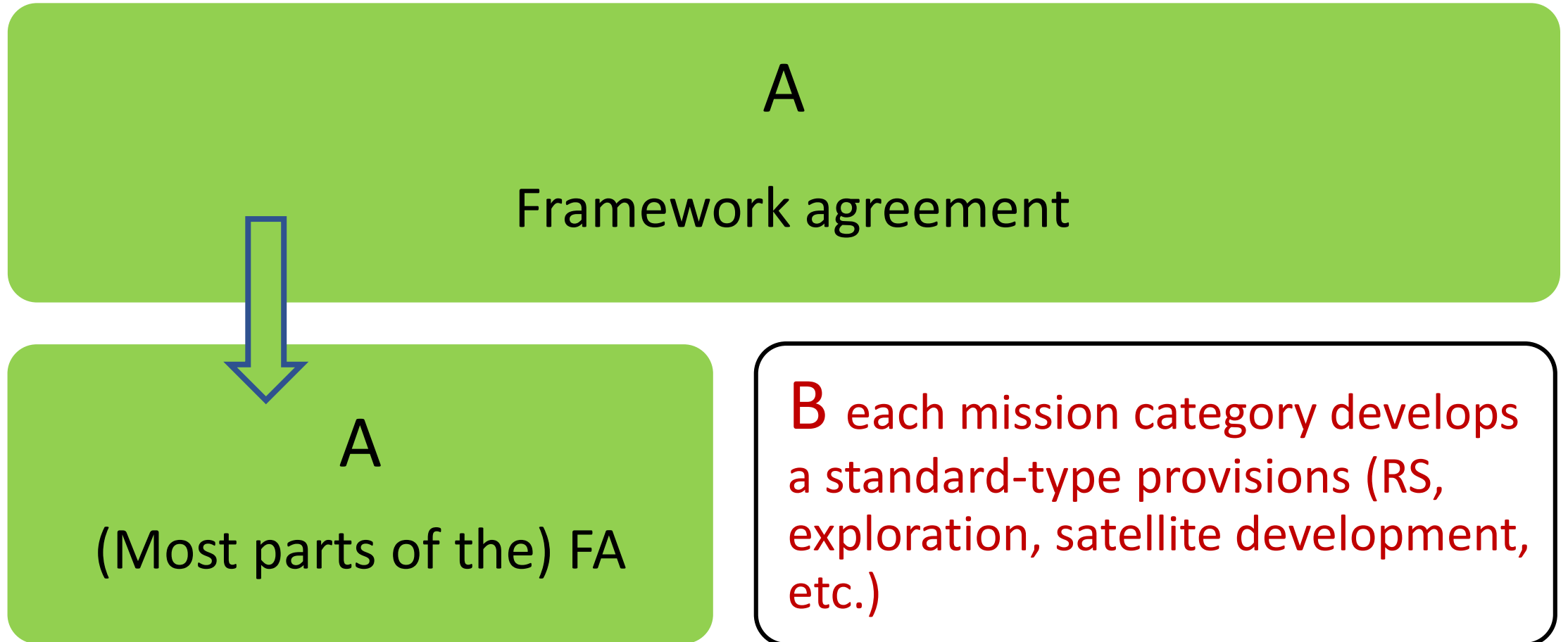
Reiterate from the FA

- Allocation of rights in resulting data
- Financial arrangements
- Customs, duties, fees, taxes and movements of goods
- Entry and exist of personnel
- Transfer and exchange of goods and data
- Release of results and public information



- Mission description
- Responsibilities of the parties
- Management and Governance system (in case of a big project)
- Investigation of mishaps
- Consultation and dispute resolution
- Ownership of equipment
- Registration of space objects (in case of a big project)
- Reference to the FA
- Jurisdiction and control (in case of a big project)
- - Final clauses

(2) implementing arrangements = A + B



5 multilateral cooperation mechanisms

(1) summary

-legally-binding

- through international organizations

*universal UN and UN family organizations

*regional ESA, APSCO, **AFSA**

-the number is much smaller than the bilateral agreements

The most significant example
ISS/IGA

-non-legally binding

-through international fora

*universal GEO, CEOS, international disaster charter, ICG, etc.

*regional APRSAF, Space Conference of Americas, **the African leadership conference on space science and technology for sustainable development**

(2) 1998 Int'l Space Station (ISS)

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**

B= Blue letters
Often found in
the bilateral IA

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**

A = Red letters
Found in the bilateral FA

(3) The structure of ISS Agreement $A = A + [B+C]$

ISS/IGA

A

(FA) Arts. 1, 3, 4, 15-16,
18-19, 21, 23, 25, 27 & 28.

B (IA)

Arts. 5-10

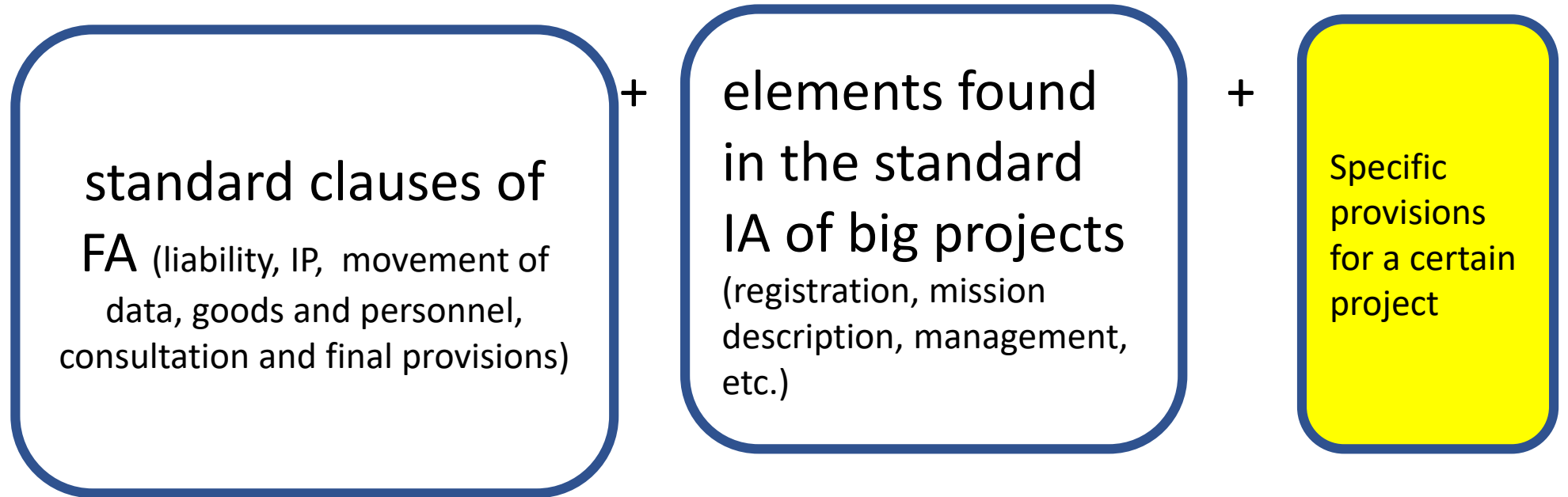
C

ISS specific
Provisions

(4) Formula to make a cooperation treaty

Formula

Treaty $\hat{=}$



This formula could be used for a big hardware multilateral cooperation project.

IV Concluding Remarks

To effectively enter a bilateral/multilateral cooperation project:

1. Make the most of the UN and regional fora
 - i) participate in the UNOOSA programs
 - ii) to become a member of the COPUOS
 - iii) become a party to the UN treaties on outer space
 - iv) participate in regional space conferences/gatherings
2. Find a valuable theme/subject to cooperate for solving Earth/space problems
3. Raise awareness to be a responsible member (governmental agencies or non-governmental entities) of space cooperation projects