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The Future of ARRA and How to Meet the Challenges: the Role of UNCOPUOS Legal Subcommittee and UNISPACE+50

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Overview

I Characteristics of the ARRA

II What ARRA added to the OST?

III Challenge due to the different obligations of the States parties of the OST and ARRA

IV ARRA as an instrument to promote TCBM

V Conclusion: future tasks

I Characteristics of the ARRA

1 Regulations to return to normalcy on both human being and space objects:

Reasons for the international cooperation for rescue and return

- **personnel in a spacecraft (PS)** “sentiments of humanity”
- **space objects** the foundation of international cooperation less clear

Respect for the ownership?

For the scientific development (by the smooth fact finding of the failure of the operation) which would be beneficial for the exploration and the use of outer space as the province of mankind?

(cont'd)

2 More exacting obligations for international cooperation than other areas of international law

(1) PS: more exacting obligations to notify/inform, search and rescue PS in distress than the similar situations on the sea and air

*Air “Each contracting State undertakes to provide **such measures of assistance to aircraft in distress in its territory as it may find practicable---**” (Chicago Convention, Art.25)

*Sea “Every master is bound, **so far as he can do so without serious danger to his vessel, her crew and her passengers**, to render assistance to everybody, even though an enemy, found at sea in danger of being lost.” (Convention for the Unification of Certain Rules of Law respecting Assistance and Salvage at Sea, Art. 11); “Every State shall require the master of a ship flying its flag, **in so far as he can do so without serious danger to the ship, the crew or the passengers:** (a) to render assistance to any person found at sea in danger of being lost;---

(2) space objects: the obligation of the return is more exacting than other incidents in the territory of a sovereign State

(cont'd)

- 3 (Substantial) membership of an international intergovernmental organization (IO) as an entity to participate in space activity

- 4 Texts of the ARRA contain rich possibilities for the future application in various human and robotics activities in outer space
 - better notification/information exchange systems
 - detailed procedures to ask and provide assistance
 - concrete ways for national implementation of ARRA(participation of private companies in the exploration and new type of space activities)

II What ARRA added to the OST?

(1) in assisting human being on the Earth and in outer space?

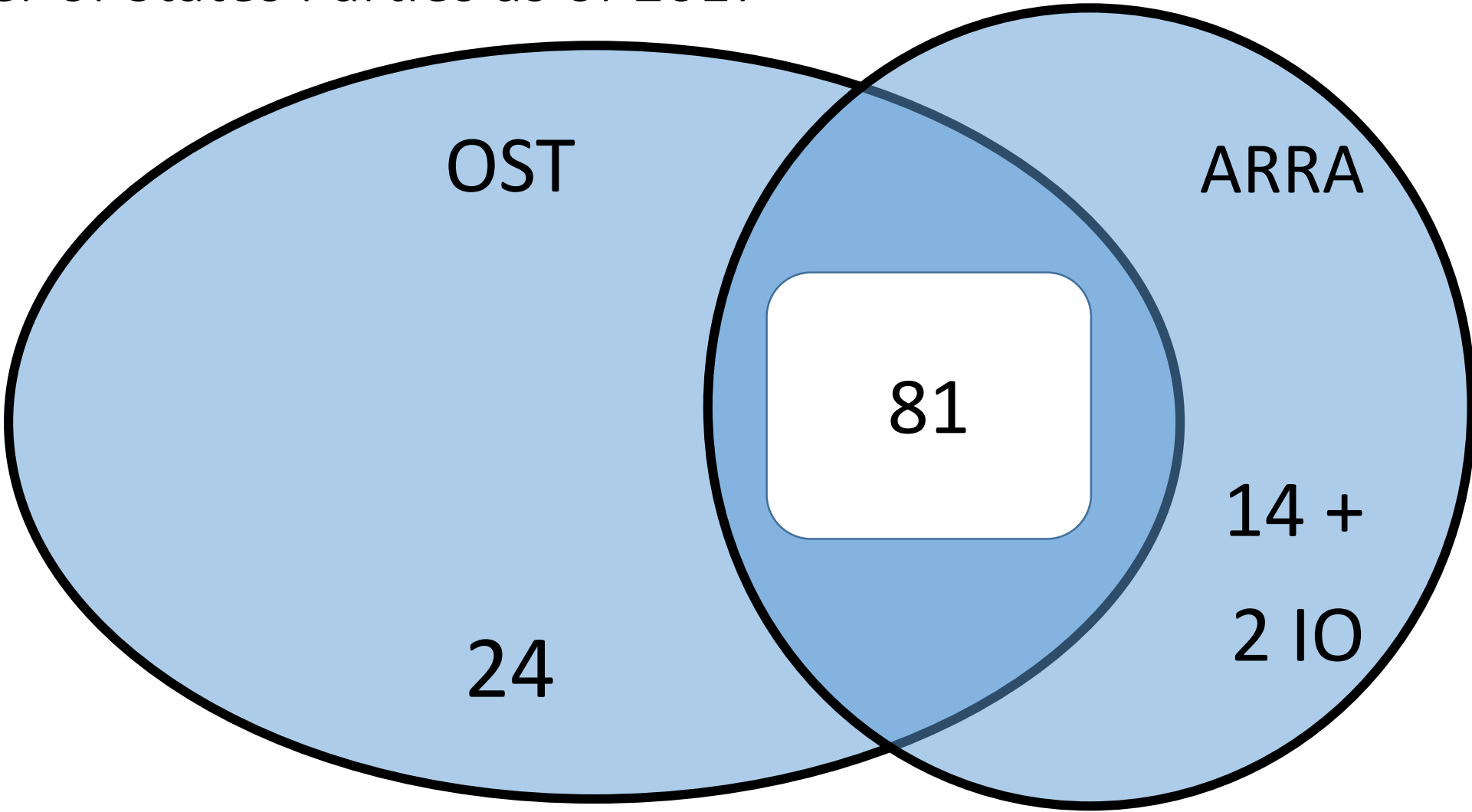
	OST		ARRA
Person to assist	astronauts	<	personnel in a spacecraft
Geographical scope to render assistance/rescue in distress	on the territory of a State Party + On the high seas Earth only	<	on the territory of a Contracting State + any area beyond national jurisdiction Earth and Outer Space
Geographical scope to notify/inform when knowing the distress, dangerous phenomena, etc.	dangerous phenomena to the life or health of astronauts Outer Space Only	<	obligation to notify and inform specific events on the Earth and in Outer Space
To whom astronaut/PS shall be returned?	State of registry of a space vehicle	<	to the representatives of the State/IO which is responsible for launching.

(2) in finding, recovering and returning space objects

	OST	ARRA
Technical term	Objects launched into outer space or component parts =?	space object or its component parts
Geographical scope of the obligation to return objects found and recovered by a Contracting State	Objects found beyond the limits of the State of registry Earth and Outer Space	Objects found beyond the territorial limits of the Launching Authority (LA) Earth and Outer Space/(Earth only)
To whom to notify/inform when knowing the return of objects launched into outer space	No reference	to LA and UNSG
To whom objects shall be returned?	State of registry <	to the representative of the State/IO which is responsible for launching.
Conditions to return objects	No reference	Upon the request of the LA

III Challenge due to the different obligations of the States parties of the OST and ARRA

1 Number of States Parties as of 2017



2 What are the issues?

- i) Different obligations incurred to the States Parties if they have ratified only one of the two.
- ii) If States are the Parties to both the OST and ARRA, there may be the cases it is unclear which provision of the two treaties shall apply in a specific case.
 - difficulty to find the *lex specialis* in a specific case
 - definition issue exacerbates this problem
 - paucity of the State practice (at least at first glance) → cannot mend this ambiguity by State practice

3 (1) Example: PS/astronaut is to be returned to?


OST: **astronauts** return to the State of registry of their space vehicle

ARRA: **PS** > (astronauts) return to the representatives of the LA

Astronaut X of Int'l Intergovernmental Organization (IO) A is launched from territory of State B by the rocket operated by State B and registered by State C. X was saved on the high seas by the ship having the nationality of State D. (A accepts the rights and obligations of the ARRA.)

i) D ratified only the OST  X is to be returned to C

ii) D ratified only ARRA, not the OST and member State of A




 X is to be returned to the representatives of LA. Which is LA in this case? Representatives of A, State B or State C?

ii) D ratified both the OST and ARRA  ?

3(2) Example: Space object return to the representatives of the LA or State of registry?

Satellite X (owned by a company Y established in State C) launched from the territory of State A by the rocket manufactured and operated by IO B, and registered by State C. Satellite X fell down in the territory of State D.

B requested that fragments of X be returned to the representative of B as LA. (B accepts the rights and obligations of the ARRA.)

- i) States D is the Party of the OST only.  X will be returned to C?
- ii) State D is the Party of the ARRA only.  X will be returned to the representatives of B.
- iii) State D is the Party to the OST and ARRA.
 X will be returned to B? or C?

4 Concepts to be clarified for the future application of the ARRA (1) astronauts and PS

scope of “personnel of a spaceflight”(PS)

Extending the scope in the age of commercial human space transportation

Human being (51 USC, § 50902 (7) \cong PS ? ($>$ astronaut ?)

$>$?

All human beings in outer space

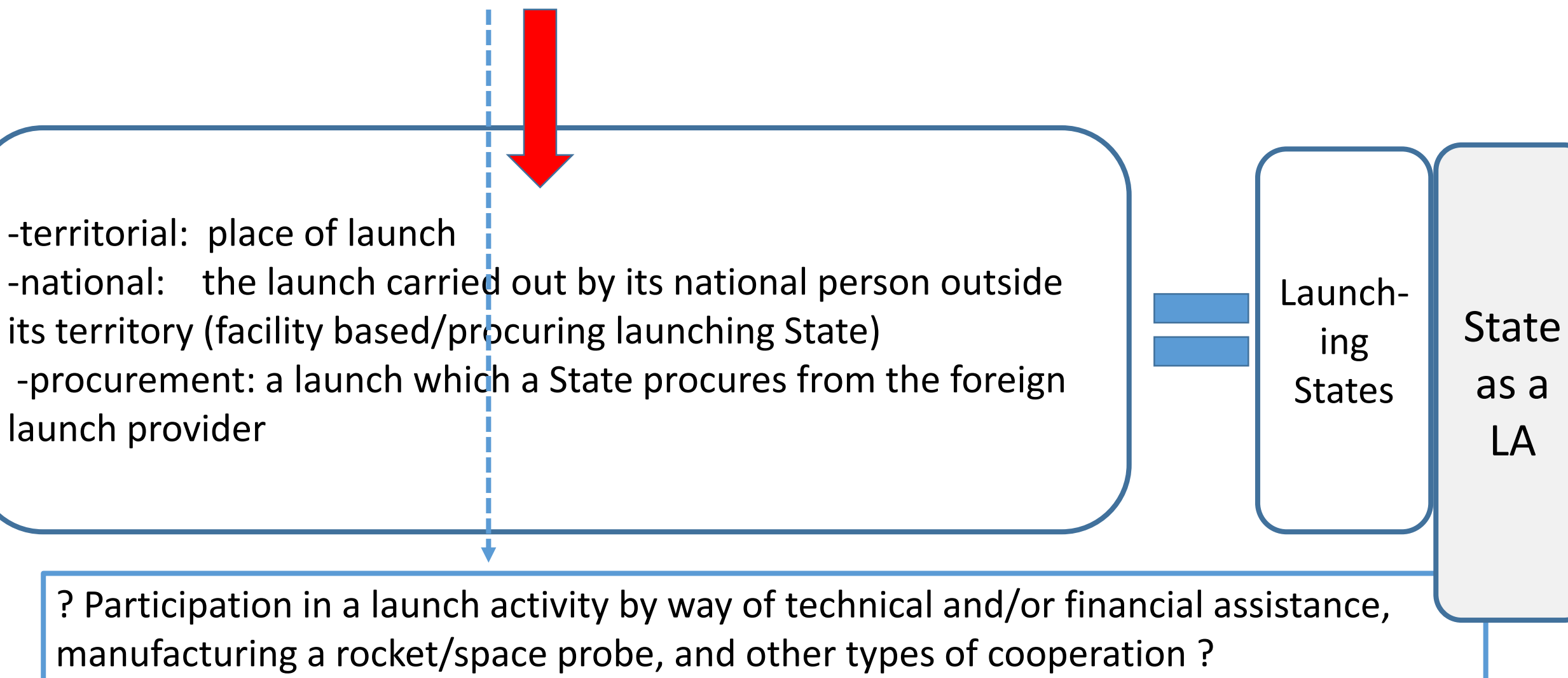
- envoys of mankind
- not necessarily envoys of mankind

All possible assistance

Reference of the maritime law,
disaster relief law, etc.

(2) What is “Launching Authority”?

A state or IO which is **responsible** for launching

- 
- territorial: place of launch
 - national: the launch carried out by its national person outside its territory (facility based/procuring launching State)
 - procurement: a launch which a State procures from the foreign launch provider

Launch-
ing
States

State
as a
LA

? Participation in a launch activity by way of technical and/or financial assistance, manufacturing a rocket/space probe, and other types of cooperation ?


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The issue of the IO as a LA is how to place IO in a launching State and registration frameworks

To solve this issues:

Legal aspects

- Liability issues The Liability Convention, Art. XXII
- Responsibility Issues OST, Arts. VI, XIII
- Registration The Registration Convention, Art. VII



Importance of accepting the rights and obligations of the UN space treaties (except OST)

(- Vienna Convention on the Law of Treaties between States and International Organizations or between International Organizations (1986)) (cf. GA Res on enhancing registration points out “3.(a) Due to the complexity of the responsibility structure in international intergovernmental organizations conducting space activities----”)

ii) Emotional barrier about the IO

- human space exploration conducted by IO

iii) Future issue in-orbit activities to be conducted by multinational private companies and IO as LA → national legislation and national implementation

5 The role of the COPUOS/LSC

1 promote mutual understanding among States Parties about the scope of i) astronauts/PS; and Launching State(s) and LA



- Thematic Priority (TP) 02- legal regime of outer space: current and future perspectives

2 Promote enhanced registration for States/IOs →further promote the acceding to the UN space treaties;



- TP 03- Enhanced information exchange on space objects and events

3 Consider the status of IO and various non-governmental entities (NGE) for future search, rescue, and return activities



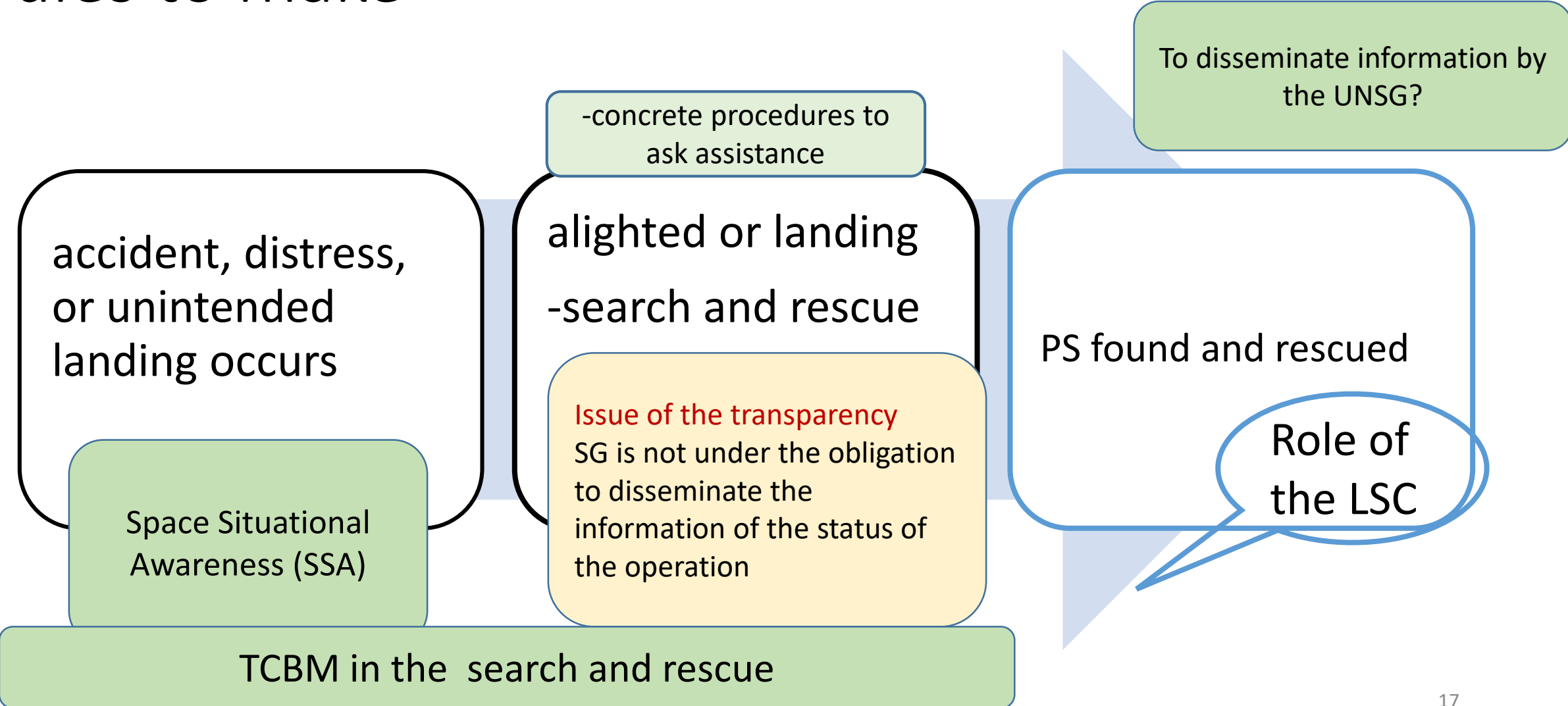
- TP01- Global partnership in space exploration and innovation

IV ARRA as an instrument to promote TCBM

1 obligation to notify/inform

Type of Contracting States	Obligations (red letters: obligations of LA)
States which have knowledge of accident, distress or unintended landing	-immediately notify to the Launching Authority (LA) and UNSG(SG); -immediately make a public announcement
State which has knowledge of the unintended landing of PS in its territory	-immediately take all possible steps; all necessary assistance (← LA: cooperation under the direction and control of the State when it is effective) -inform to the LA and UNSG the status of the operations
States which have knowledge that a spacecraft has alighted on the international areas	-extend its assistance: a) if they are in a position to do so and b)if necessary -inform to the LA and UNSG the status of the operations
States which have knowledge of SO returning to its own territory or international areas	- Notify the LA and UNSG

2 How better to fulfil the obligation to notify/inform rules to make



3 The role of the UNSG to promote TCBM

Transparency of the status of distress, the progress of the rescue operation will enhance security and safety of human space activities (scientific, commercial, military)



Reference of maritime salvage

“Every master is bound, so far as he can do so without serious danger to his vessel, her crew and her passengers, to render assistance to everybody, **even though an enemy**, found at sea in danger of being lost.” (Convention for the Unification of Certain Rules of Law respecting Assistance and Salvage at Sea, Art. 11)

2 fact-finding of accident, distress, unintended landing, etc. and archiving such information will contribute safe exploration and use of space

LSC can find mechanisms to notify/inform for space exploration and use

V Conclusion: future tasks

Further tasks of the COPUOS/LSC in line with UNISPACE+50 TPs

1 Finding concrete standards to authorize and continuously supervise NGE for assuring compliance with the ARRA

2 the issue of salvage expenses incurred for search and rescue in outer space

3 the issue of the return of space object (esp. in outer space): should it be always unconditional?

- space object violating the int'l law

- the commercial confidentiality and returning space object in the age of various commercial activities in outer space (space debris removal, space resource mining, etc.)