## IAA Study Group Status Report

## Responsible Commission: Commission 5 Space Policy, Law& Economies

**Study Number and Title:** 5.16 Study on International Legal and Policy Regimes for Space Natural Resources Exploitation and Utilization (SREU)

**Short Study Description** (repeat from Study Group Proposal):

Background: There's a research at the beginning of 2015, concluding that the mining of asteroids is a medium-term to long-term project (20 to 30 years) that requires a stepwise approach. Several private corporations had expressed interest in space resources Exploitation and Utilization of one kind or another. Besides, some relevant space programs were announced or carried on by some space agencies. On 25<sup>th</sup> March 2015, NASA announced the details of an asteroid-capturing plan. China is conducting its Moon and Mars missions. Several countries are working jointly on manned lunar and mars route maps. European Space Agency dropped a probe onto the surface of a speeding comet in 2014, which is well-known as the Rosette Mission. India's Mars Orbiter Mission successfully entered Mars' orbit in 2014. Japan' probe Hayabusa 2 also tried to extend its sampling device in preparation for scooping up material at the asteroid. Lunar and deep space exploration projects are becoming the spotlight for international space community.

Meanwhile, the sufficiency of the space legal framework is in debate. The Outer Space Treaty in 1967 is the cornerstone of international space law, together with the subsequent four treaties, the Rescue Agreement 1969, the Liability Convention 1972, the Registration Convention 1975 and the Moon Agreement 1979; it established the basic international space law framework. It never changes in the past decades.

On the other hand, it should be noted that technology is rapidly developing, thus the technical feasibility of asteroid mining is just a matter of time. The critical issue is whether we are prepared with the necessary legislative and instrumental base to do so. The legal and policy certainties are highly desired.

As to SREU, three questions should be taken into consideration: (1) Insofar as international law is concerned, it is not whether there is kind of property right under international law, but whether States under international law and the relevant treaties are permitted to allow this; (2) Whether private appropriation on space resources violate international law, by claiming ownership or by any other means; (3) Why an international mechanism for SREU is imperative, what should it be and to which extent it will impact on development of international space law and policy?

The above questions and beyond are supposed to be prospected and examined within this research framework.

## **Progress in past six months:**

Further Identified study group team members, including inviting some Chinese experts from space academies and institutions.

Organized the second seminar in China among Chinese experts and finalized the draft outline, which is supposed to be discussed and agreed between study group members. Regarding SG schedule, the preliminary goal of finishing the outline among all the members is to be the end of this year. And the Draft Preliminary Report plans to be finished by end of 2018.

(Goal 1: Convene SG, Consolidated outline with identified authors - by end of October 2017

Goal 2 Convene Full SG to review recommendations – by end of December 2017

Goal 3: Draft Preliminary Report (PR) - by end of December 2017

Goal 4: Circulate PR for response- by end of 2018

Goal 5: Finalize Preliminary Report by end of May 2019

Goal 6: Schedule meetings to expand PR-June-October 2019

Goal 7: Publish final Report - December. 2019)

**Website Study Information update:** (please give any update regarding Study Group Membership, documents, Study Plan and Schedule): Schedule: Planned to be finished in end of 2019.

**Issues requiring resolution?** (recommend approach): None.

**Product Deliveries on Schedule?** (If modified explain rationale):

The study has a few months delayed with respect to last September as the kick off point. SC report planned to be finished by end of 2019.

**Study Team Member Changes?** (List any Study Team Members that you wish to discontinue, and provide names plus contact coordinates of any Members you wish to add on the second page of this Study Update form.) Note: Complete contact information including email, tel. and fax must be provided for all additions. Only Members with complete contact information will be listed and receive formal appointment letters from the IAA Secretariat.)

Discontinue: 0. Add:2.

Name of person providing Study Group Status (Study Group Chair or Co-Chair): Chair LIU Jizhong. Status Report Date: August 23<sup>rd</sup>, 2017.

**Study Team Membership Changes** Effectivity Date: August 23<sup>rd</sup>, 2017. Add: YUAN Jie Institution: Institute of Space Law, Beijing Institute of Technology 411273106@qq.com

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