



Regional Centre for Space Science and Technology Education
in Asia and the Pacific(China) (Affiliated to the United Nations)

联合国附属空间科技教育亚太区域中心



Role of Regional Centres: A Perspective of Space Law and Policy

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I. Background

II. Short term program on space law(2015)

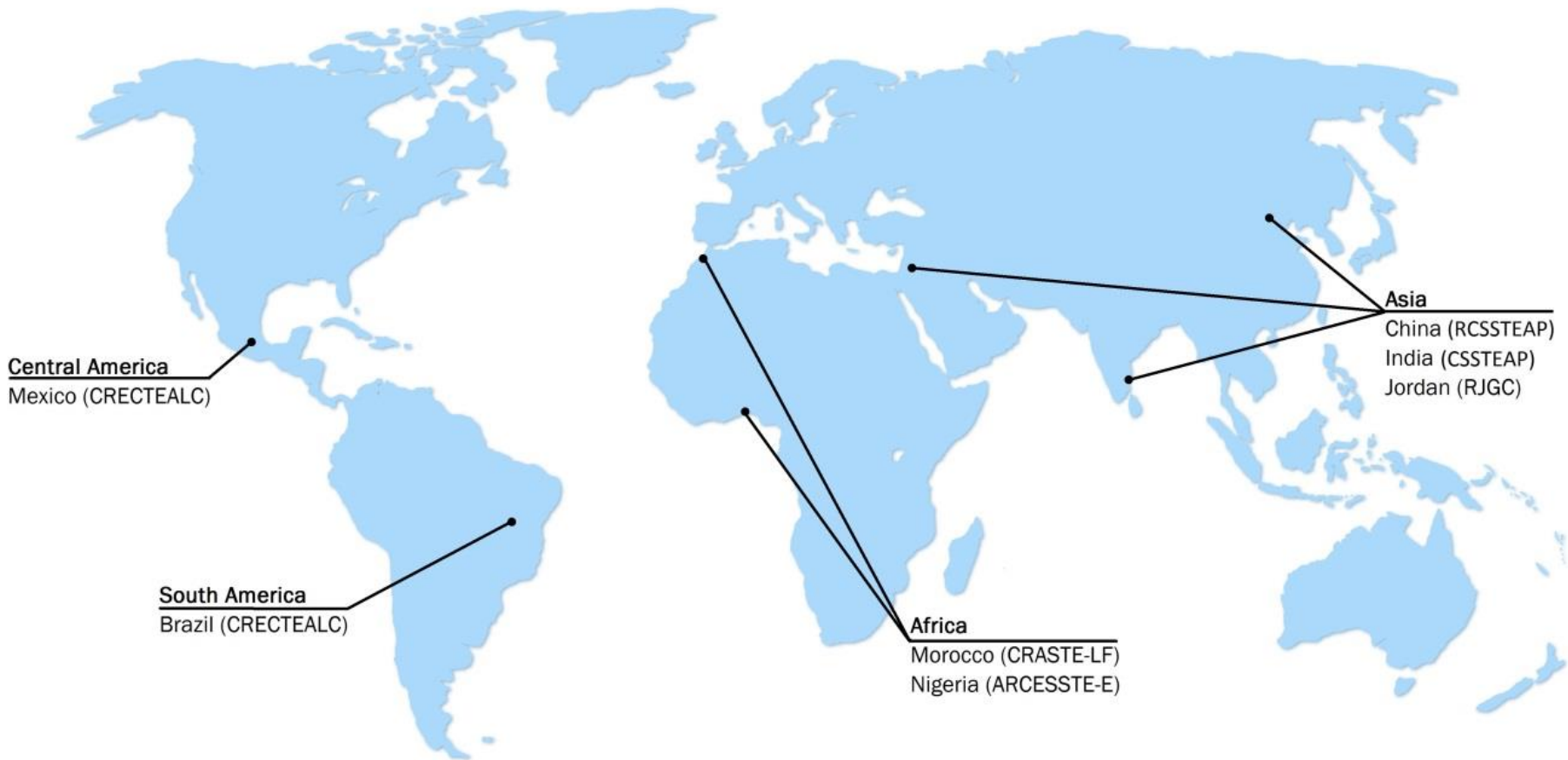
III. Master Program on space Law and Policy(2016)

IV. A brief Introduction on related courses

I. Background

- Following resolutions 45/72 and 50/27 of the UNGA, the Programme of Space Application defined objectives and an action plan for the establishment of regional centres in each region covered by the United Nations Economic Commissions: Africa, Asia and the Pacific, Europe, Latin America and the Caribbean, and Western Asia.

Regional Centres for Space Science and Technology Education
(affiliated to the United Nations)



A brief Introduction to RCSSTEAP

- The Regional Centre for Space Science and Technology Education in Asia and the Pacific(China) was established on November 17, 2014 in China. Its Predecessor is International space education Center of Beihang Univ.(2004) Purpose: to train the participants(Major in STA) from member states of APSCO. MASTA from 2006, DOSTA from 2012.
- The campus of the Centre is located at Beihang University in Beijing.
- Up to Now, RCSSTEAP has 10 member countries including **Argentina, Algeria, Bangladesh, Bolivia, Brazil, China, Indonesia, Pakistan, Peru, and Venezuela.**

Background

Main fields of Education and training in six RCs:

1. RS&GIS (CSSTEAP, CRASTE-LF, ARCESSTE-E, CRECTEALC, RJGC, RCSSTEAP)
2. Satellite Communication (CSSTEAP, RCSSTEAP)
3. Global Navigation (CSSTEAP, RCSSTEAP)
4. Small Satellite (RCSSTEAP)
5. Space Law and Policy (RCSSTEAP)

Background

- **What is Space Law?**
- Space law can be described as the body of law governing space-related activities. Space law addresses a variety of matters:
 - preservation of the space and Earth environment
 - liability for damages caused by space objects
 - settlement of disputes
 - rescue of astronauts
 - sharing of information about potential dangers in outer space
 - use of space-related technologies
 - international cooperation

Background

- 5 UN space treaties
- UNGA resolutions
- Soft Law LTS/TCBMs/ICOC/Guidelines
- National Space Legislation
- National Space Policy

Role of Capacity-building, training and education in space law

- Capacity-building, training and education in space law helps to promote international development and cooperation in space activities and provides the means for a deeper understanding of the interdependent roles of science, technology and law in this area.

- So far, space law has played a big role in the field of space technology application. Space law education have been taken into account by several regional centre for space science and technology education(affiliated to the United Nations) , especially by RCSSTEAP.

II.Short term program on space law(2015) 17-25 September 2015, Beijing

- The Program is one of the parts of working plan for 2015 of the RCSSTEAP
- Co-sponsored by RCSSTEAP, APSCO and Beihang University.
- In cooperation with UNOOSA
- Co-organized by Beihang University Institute of Space Law and China Institute of Space Law.

- The program was supported by the following governmental authorities, international organizations and Institutes:
- MIIT/CNSA
- UNOOSA
- IISL
- IASL of McGill Univ.
- IASL of Cologne Univ.
- CGWIC

purpose

(a) strengthening space law education at the regional and global level.

- (b) developing the skills and knowledge of participants

- (c) implementing and promoting UNPSA

- (d) conducting an useful trial to use the Education Curriculum on Space Law prepared by UNOOSA.

- (e) providing information related to national space legislation and policy for the participants;

- (f) promoting the exchange, understanding and cooperation in the areas of space law education.

Indented audience

- Postgraduate students
- PhD students
- Post-doctoral researchers
- Junior Engineers
- Any researchers who wish to broaden and enhance their knowledge and skills.

Lecturers

- Invited the most famous scholars from China and other countries
- 15 lectures from U.S., Canada, Sweden, France, Germany, P.R. China and H.K.



Mr. Arnel Kerrest



Mr. Stephan Hobe



Ms. Andrea J. Harrington



Ms. Joanne Gabrynowicz



Mr. Niklas Hedman



Mr. Li Juqian



Mr.Wang Guoyu



Ms.Wang Jilian



Ms. Wu Xiaodan



Ms.Xia Chunli



Mr.Zhang Zhenjun



Mr.Zhao Yun

Participants

- Nearly 40 participants from **Bangladesh, Brazil, China, Egypt, Indonesia, Mongolia, Pakistan, Peru, Thailand, Turkey, Venezuela** attended the training program.
- Participants also include young scholars from BUAA, BIT, CUPL, Beijing Institute of Space Science and Technology Information, China Academy of Launch Vehicle Technology and Ministry of Foreign Affairs.



Training Schedule

Date		Contents	Place
September 16 th (Wednesday)	8:00–24:00	Registration	Training Center of Beihang University
September 17 th (Thursday)	8:30–8:45	Registration	Conference Room No.8, Conference Center of New Main Building, Beihang University
	9:00–9:05	Introduce the Guests	
	9:05–9:15	Addressed by the representative of Asia– Pacific Space Cooperation Organization	
	9:15–9:25	Addressed by Secretary–General of China Institute of Space Law (Mr. Zhang Zhenjun)	
	9:25–9:35	Addressed by Dean of Law School of Beihang University(Mr. Long Weiqiu)	
	9:35–10:00	Group Photo & Tea Break	
	10:00–11:30	National Space Legislation (Li Shouping)	
	14:00–15:30	The Outer Space Treaty and the fundamental principles of space law (Yun Zhao)	
15:30–16:00	Tea Break		
16:00–17:30	Other UN space treaties: Liability Convention (Yun Zhao)		
8:30–10:00	Other UN space treaties: Registration Convention (Wu Xiaodan)	Room 505, International School	
10:00–10:30	Tea Break		
10:30–12:00	Soft law(ARES/LTS/TCBMs/ ICOC) (Wang Guoyu)		
14:00–15:30	National space policy (Zhao Haifeng)		
15:30–16:00	Tea Break		
16:00–17:30	Introduction to international law and space law (Li Juqian)		
September 19 th (Saturday)	8:30–10:00	Culture visit Aviation Expo / China 2015	China International Convention Center
September 20 th (Sunday)		Day–off	
September 21 st (Monday)	9:00–17:00	Technical visit APSCO Forum on Space Law	BIT
September 22 nd (Tuesday)	9:00–17:00	Technical visit APSCO Forum on Space Law	BIT

September 23 rd (Wednesday)	8:30–10:00	International law and other regulations applicable to RS&GIS(1) (Joanne Gabrynowicz)	Room 505, International School
	10:00–10:30	Tea Break	
	10:30–12:00	International law and other regulations applicable to RS&GIS(2) (Joanne Gabrynowicz)	
September 23 rd (Wednesday)	14:00–15:30	Satellite communications and applicable international law and other regulations (Xia Chunli)	Room 505, International School
	15:30–16:00	Tea Break	
	16:00–17:30	GNSS and applicable international law and other regulations (Armel Kerrest)	
September 24 th (Thursday)	8:30–10:00	Space Application and Space Law (Niklas Hedman)	Room 505, International School
	10:00–10:30	Tea Break	
	10:30–12:00	Space resource exploitation (Zhang Zhenjun)	
	14:00–15:30	Commercial space launch service (Wang Jilian)	
	15:30–16:00	Tea Break	
	16:00–17:30	Export control system for space–related product & technology (Andrea Harrington)	
	18:00–20:00	Reception Dinner for lectures	
September 25 th (Friday)	8:30–10:00	Commercial space tourism(S. Hobe)	Room 505, International School
	10:00–10:30	Tea break	
	10:30–12:00	Space environment protection (Wu Xiaodan)	
	14:00–15:00	International co–operation in the peaceful use of outer space(Zhou Wu)	
	15:00–15:30	Tea break	
	15:30–15:45	Addressed by the representative of lectures (Prof. Yun Zhao)	
	15:45–16:00	Addressed by the representative of participants TBD	
	16:00–16:10	Addressed by the representative of RCSSTEAP	
	16:10–16:30	Award the Certificates to Participants	
	18:00–20:00	Reception Dinner for participants	

Education Curriculum on Space Law



- Module 1.** Basic concepts of international law and space law
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- Module 2.** International law and other regulations applicable to remote sensing, geographic information systems, satellite meteorology and global climate activities
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- Module 3.** Satellite communications and applicable international law and other regulations
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- Module 4.** Global navigation satellite systems and applicable international law and other regulations
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Training Materials


- ***Collection of Presentations***
- ***National Legislation and Policy: Selected Texts***
- ***United Nations Treaties and Principles On Outer Space***
- ***Education Curriculum on Space Law***



United Nations
OFFICE FOR OUTER SPACE AFFAIRS


**United Nations
Treaties and Principles
On Outer Space,**


related General Assembly
resolutions and other documents




United Nations

V.10-53280 (E)



Please recycle 

RCSSTEAP/APSCO/BUAA 

Training Program on Space Law and Policy 

Sponsored by ..





APSCO

Co-organized by ..






CNSA

中国航天

Beihang University, Beijing, 17-25 September 2015



**UNITED NATIONS/NIGERIA WORKSHOP ON
SPACE LAW**

**“Meeting International Responsibilities and Addressing
Domestic Needs”**

Hosted by the Government of Nigeria

**National Legislation and Policy
Selected Texts**

21 -24 November 2005
Abuja, Nigeria

Opening Ceremony





2015 Space Law & Policy Forum





Closing Ceremony



III. Master Program on space Law and Policy(2016)

- RCSSTEAP has decided to set up a new Master Program on Space Law and Policy under MASTA in 2016.
- Currently, the Master Program has been started since September
- 13 participants funded by CSC/BUAA Scholarships were recruited from the member states of RCSSTEAP and APSCO.
- Mongolia(2), Pakistan(3), Brazil(1), Thailand(2), Nigeria(1), Bolivia(1), Venezuela(1), Turkey(1), Iran(1).

- **Professional background:**

Law(5), Telecommunication Engineerings(3), Economic Cooperation(1), Regional Development and Management(1), Management Science(1), Public management and Public Policy(1), Corporate Governance(1)

- **Employment Situation:**

National space Agency or Related Governmental Authorities(5)

Scientific Research Institute (2);University (1);Judicial Institute(1);

Regional Centre(1);Telecom Corporation(1); Law Firm(1)

Purposes and objectives

The program will focus on training professional talents who are familiar with space law and policy for countries in the Asia-Pacific region and other developing countries. The participants will master and fully utilize the knowledge of space law and policy, while have the necessary knowledge of space science, space technology and space application, so as to engage in the works with regard to research on space law and policy, legal consulting and management of space activities, national space legislation and international space cooperation.

- With the strong support of UNOOSA, Chinese Government, RCSSTEAP and APSCO, the Program will take advantage of global resources of space law and the advantages of the Regional Centre and its partner in the field of space science and space technology application, invite high level technical, policy and legal experts in related field from all over the world , and provide lectures, practice courses to ensure the participants to have a comprehensive understanding on the policy, law, management and technical knowledge related to space applications and make them the high-end talents so that they can provide the necessary strategic, technical, policy and legal support for the development of space applications in their home countries.

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Training Program

Phase I			
Course Study in China: 9 months (at Beihang University)			
(Leading to Course completion Certificate of Beihang University)			
	Module I	Module II	Module III
Formulation of an Individual Training Plan	Common Platform Courses	<ul style="list-style-type: none"> ● Major courses ● Academic Lectures ● Professional visits 	Pilot Project

Phase II				
Thesis Research: 6 months (in China or home country)				
(Leading to Master's Degree in Engineering)				
Thesis Survey and Thesis Proposal	Midterm Assessment	Academic Activities	Thesis Research	Thesis Defense

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Course Description

Lectures are conducted in English. The thesis is required to be written in English. Courses are organized into three modules as given above.

Educational Measures

- (a) Students and supervisors interact to confirm the supervisor and create the education program.
- (b) Platform courses are primarily instructed in lectures with self-study as supplement.
- (c) Major courses are instructed as lectures, self-study, and seminars.
- (d) practical research 8weeks (either in China or in students' home country, 4 weeks for law practice, 4 weeks for team report)

Testing Method and Requirement

- (a) Examination of platform/Major courses is performed in written form.
- (b) For Law practice, students are required to write Law practice reports, which should be evaluated by her/his supervisor.

Master Thesis

After completion of the 9 months core-course study at Beihang University, each participant is expected to finish a Master's thesis at Beihang University/in Homeland. The topic of the thesis is chosen by the participant, in consultation with his/her sponsoring organization and approval by the supervisor. The topic should be relevant to legal issues with regard to space technology application. It should also be accomplished to promote the ability of space application and cognition level in her/his home country. The evaluation will be mainly focused on the topic of the thesis, range of the writer's knowledge, value and prospect of the thesis, etc.

Award of Degree

- This program is carried out according to the regulations and requirements of Beihang University. Participants will be awarded with the Graduation Certificate of Beihang University and Master's Degree Certificate of the People's Republic of China when fulfilling the credits requirements and passing the thesis/dissertation defense.

9-month Course Study Schedule

No.	Item	Class Hrs	Credits	Remark	Semester	Lecturer
Module I Platform Courses						
PC1-1	Introduction to Space Technology Application	32	2	Compulsory	Fall	
PC3-1	Space Environment, Orbit and Spacecraft Systems	48	3	Compulsory	Fall	
PC3-2	Basic theory of law	32	2	Compulsory	Fall	
PC3-3	Space Technology and Space Economy	18	1	Optional	Fall	
PC4-1	Introduction to China and Chinese Language	54	3	Compulsory	Fall	
Module II Major Basic Courses & Major Courses						
MC2-1	Basic concepts of international law and space law	32	2	Compulsory	Fall	
MC2-2	National Space Policy	16	1	Compulsory	Fall	
MC2-3	National Space Legislation	32	2	Compulsory	Spring	
MC2-4	Legal Issues related to RS&GIS	16	1	Compulsory	Spring	
MC2-5	Legal Issues related to Satellite Communication	16	1	Compulsory	Spring	
MC2-6	Legal Issues related to space environment protection	16	1	Compulsory	Spring	
MC2-7	Space commercialization and the development of Space Law	16	1	Compulsory	Spring	
AL2-1	Hot Topics on Space Law I	16	1	Compulsory	Spring	
AL2-2	Hot Topics on Space Law II	16	1		Spring	
Module III Team Pilot Projects						
PP	Team Report/Law practice	8Weeks	8		Spring	

A brief Introduction on related courses

- PC3-2 Basic theory of Law
- One of Platform Courses
- Content: basic knowledge of law, two legal system, function of law and policy, international law and domestic law, etc.

MC2-1 Basic concepts of international law and space law

This course provides students with a basic reference framework for understanding legal principles and rules as well as fundamental legal issues pertaining to space activities. Students are familiarized with the key concepts, terminology and constructs of both international law and international space law as a specialized subdomain of international law.

Content: Introduction to international law; the Outer Space Treaty and the fundamental principles of space law; other space treaties and the General Assembly resolutions relevant to outer space.

MC2-2 National Space Policy

Space policy is the political decision-making process for, and application of, public policy of a state (or association of states) regarding spaceflight and uses of outer space, both for civilian (scientific and commercial) and military purposes. International treaties, such as the 1967 Outer Space Treaty, attempt to maximize the peaceful uses of space and restrict the militarization of space.

Space policy also encompasses the creation and application of space law, and space advocacy organizations exist to support the cause of space exploration.

U.S. Russia, China, E.U.

MC2-3 National Space Legislation

Space law also encompasses national laws, and many countries have passed national space legislation in recent years. The Outer Space Treaty requires parties to authorize and supervise national space activities, including the activities of non-governmental entities such as commercial and non-profit organizations. The Outer Space Treaty also incorporates the UN Charter by reference, and requires parties to ensure that activities are conducted in accordance with other forms of international law such as customary international law (the custom and practice of states).

More than 20 countries have enacted their national space law. The main contents of the laws include: authorization system, registration system, liability system, promotion of space activities.

MC2-4 Legal Issues related to RS&GIS

- This course provides students with an overview of the basic legal context and the key international rules and principles related to remote sensing and GIS
- 1 International law relating to remote sensing
- 2 National legislation on remote sensing

MC2-5 Legal Issues related to Satellite Communication

This course provides students with an overview of the basic legal context and the key international legal concepts, terminology, rules and principles related to satellite communications activities.

1. Overview of international law on satellite communications
2. Technical standards and national licensing
3. International trade in satellite communication services and global mobile personal communication services
4. ITU rules on radio frequency

MC2-6 Legal Issues related to space environment protection

This course provides students with an overview of the basic legal context and the key international legal concepts, terminology, rules and principles related to space environment protection.

IADC Space Debris Mitigation Guideline(2002)

UN Space Debris Mitigation Guideline(2007)

National technical rules related to space debris mitigation
nuclear power resource

MC2-7 Space commercialization and the development of Space Law

Students will have an understanding of the concepts of “commercialization” and “privatization”, and how they operate in the context of outer space activities.

Students should also be familiar with how the meaning of the terms “commercial” and “private” varies among States. Furthermore, in this context, students will be able to discuss different aspects of liability arrangements on reimbursement and insurance and the issue of registration at the national level.

Students will also be familiar with the role of national government agencies as potential instruments for both stimulating a State’s participation in space activities and for monitoring and regulating private participation therein

Thank you for your attention!

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