



# Capacity Building and Cooperation plan in UN Regional Centre (RCSSTEAP) China

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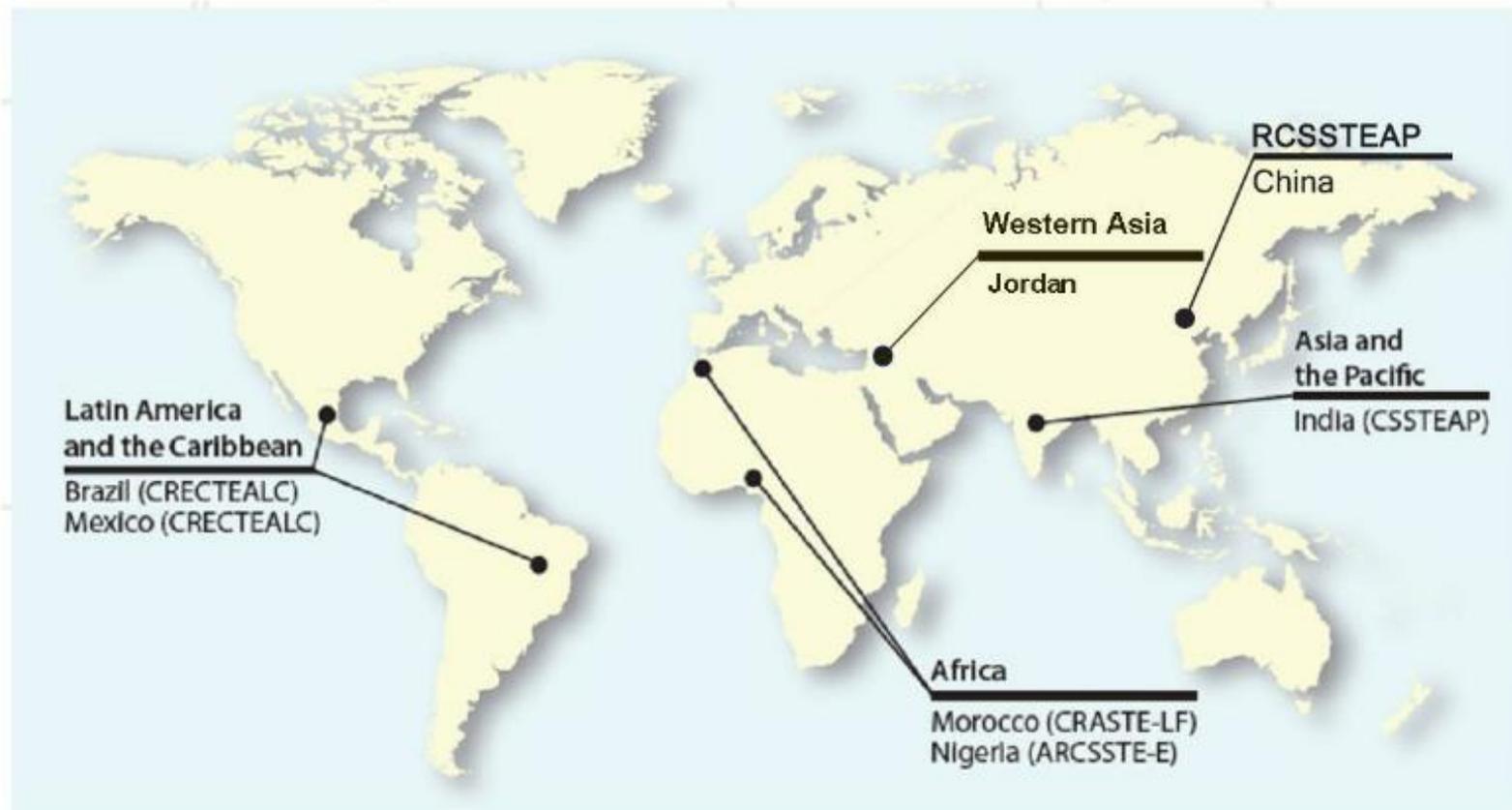
**1** **Background**

**2** **Major Work in 2015**

**3** **Programs in 2016**

**4** **Way Forward**

# Current Regional Centre for Space Science and Technology Education (affiliated to the United Nations)



# Status of RCSSTEAP



联合国附属空间科技教育亚太区域中心

Regional Centre for Space Science and Technology Education in Asia and the Pacific(China)

(Affiliated to the United Nations)



Algeria



Argentina



Bangladesh



Bolivia



Brazil



China



Indonesia



Pakistan



Peru



Venezuela

Ten Contracting Parties

# Support from Host Country

- Ministry of Industry and Information Technology provide operating expenses for the center
- Ministry of Education set up special Government Scholarship for Space Technology Application program.
- National Space Administration has taken the center the first choice for international space cooperation in the field of education and training.

# RCSSTEAP Main Work in 2015

Jan.

- Signed cooperation agreement with Shenzhou Institute of China Academy of Space Technology

Apr.

- Training program on Satellite Navigation Technologies was held

Jun.

- "Painting Exhibition on China's Space Exploration in Vienna International Center

Jul.

- 25 postgraduates graduated and granted the Master's Degree on space technology applications

Aug.

- Recruited 42 postgraduates on space technology applications

Sept.

- Training programs on "Earth observation technologies for earthquake damage and loss assessment" and "Space law and policy" were held at Beihang University

Oct.

- "RCSSTEAP No.1" Micro-Satellite Project Initiative was officially launched

# Newsletter

工作通讯  
NEWSLETTER

No.1 2015年  
创刊号  
总第001期  
交流·推广·合作



NEWSLETTER

No.1 2015年  
The First Issue  
Serial No.001  
Exchange·Promotion·Development



工作通讯  
NEWSLETTER

No.2 2015年  
第002期  
总第002期  
交流·推广·合作



NEWSLETTER

No.2 2015年  
The Second Issue  
Serial No.002  
Exchange·Promotion·Development



# Degree Programs in 2016

## Postgraduate Degree Education Programs

- Global Navigation Satellite System (GNSS) -2016
- Remote Sensing and GIS (RS &GIS) -2016
- Space Law and Policy -2016

# Degree Programs in 2016

## Global Navigation Satellite System (GNSS)

Core Courses	Class Hrs.
GNSS Reference System	18
Principle of Global Navigation Satellite Systems	32
GNSS Navigation Signal	18
GNSS Receiver Principles and Design	32
GNSS/INS Integration Navigation	32
Global Satellite Navigation System Applications	18
Satellite Navigation Data Processing	32
GNSS Experiment	18
GNSS New Technologies	18

System level

User level

Applications level

Operational level

- Duration:  
9months + 1 year

09/2016 — 06/2018

# Degree Programs

## Capacity Building in GNSS



BeiDou Satellite Navigation System  
Exhibition Hall ( Located at Beihang  
Aerospace Museum)



GNSS Smart Classroom



北斗/GNSS simulator  
for test and evaluation

Experiment equipment

# Degree Programs

## Remote Sensing and GIS (RS &GIS)

Core Courses	Class Hrs.
Remote Sensing Image Visual Interpretation	16
Geographic Information System: Theory and Application	48
Physical Principles of Remote Sensing	32
Introduction to Photogrammetry	18
Remote Sensing Image Processing and Software Application	48
Remote Sensing Test and validation Workshop	16
Case Studies in the Applications of RS & GIS	18
Geographic Information System: Design and Practice	32
Natural Disaster Remote Sensing	18

Duration:

9 months + 1 year

09/2016 — 06/2018

# Degree Programs

## Capacity Building in RS&GIS



Ground Station for Remote Sensing  
Satellite Data Receiving



Remote Sensing & Geographic  
Information System Lab



Distance Education &  
Video Conference Lab

# Degree Programs

- **Space Law and Policy -2016**

Core Courses	Class Hrs.
Basic concepts of international law and space law	32
National Space Policy	16
National Space Legislation	32
Legal Issues related to RS&GIS	16
Legal Issues related to Satellite Communication	16
Legal Issues related to GNSS	16
Space commercialization and the development of Space Law	16
Policy and Legal Issues on Peaceful Use of Outer Space	4
Soft Law and new trend of Space Law	4
UNPSA and related legal Issues	4
Hot Topics on Space Technology Applications	4

Duration:

9 + 6 months

09/2016 — 12/2017

# Degree Programs

## Space Law and Policy

### Faculty and Academic Staff

- The experts will come from the related University and research institution, and the most famous space law research institution, including McGill University Institute of Air and Space Law, Cologne University Institute of Air and Space Law, Leiden University International Institute of Air and Space Law, etc.

# Short Training Programs

Will focus on the following topics:

- Beidou/GNSS technology and applications
- RS-GIS application on disaster management
- Small Satellite Technology

Jointly organize with our partners APSCO, UNSPIDER Beijing Office, BeiDou Office, NDRCC, CAST, SAST, etc.

# Way Forward

- To prompt students/faculty exchange and teaching resource sharing among the UN Regional Centres
- To deepen cooperation and development in education and research among our member countries to facilitate the “RCSSTEAP No.1 Small Satellite Project”
- To Build an online education environment for Space application education
- ... ..



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# Thank you for your attention

联合国附属空间科学与技术教育亚太区域中心（中国）  
Regional Centre for Space Science and Technology Education in Asia and the Pacific(China)  
(Affiliated to the United Nations)