



北京航空航天大学  
BEIHANG UNIVERSITY

# ARC

**Alliance of Regional Centres  
Affiliated to the United Nations**

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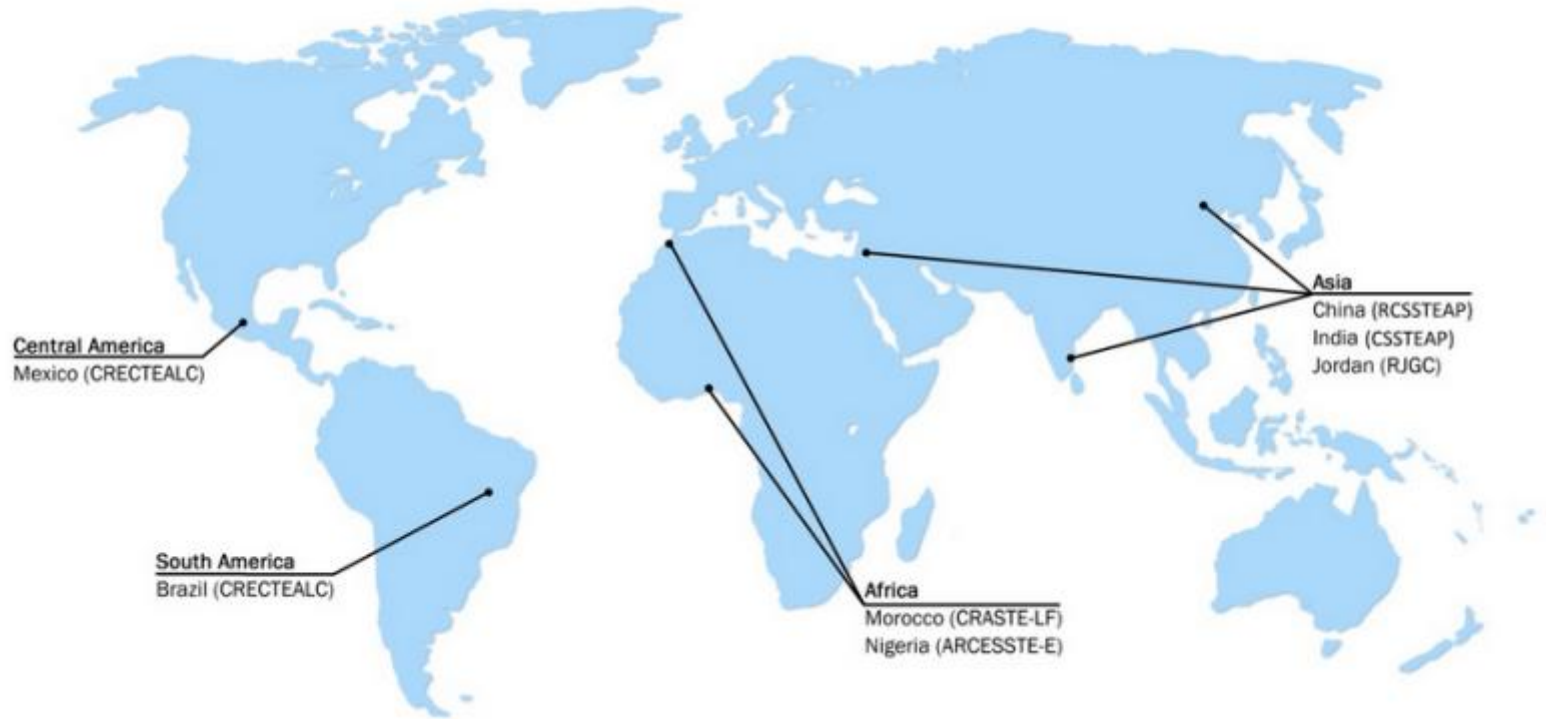
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October 30, 2017 Samara, Russia

## *Objectives of the Regional Centres (Re: A/AC.105/749 & A/AC.105/782)*

*In order to translate the recommendations of the Committee and the General Assembly into an operational programme, the Programme on Space Applications initiated a project aimed at the establishment of regional centres for space science and technology education at existing research and higher education institutions 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)



CSSTEAP India  
(inaugurated in  
1995)

CRASTE-LF  
Morocco  
(inaugurated in  
1998)

ARCESSTE-E  
Nigeria  
(inaugurated in  
1998)

CRECTEALC  
Mexico and Brazil  
(inaugurated in  
2003)

RCSSTEWA /  
RJGC Jordan  
(inaugurated on 29  
May 2012)

RCCSTEAP China  
(inaugurated in  
2014)

*The initial programmes of each centre focused on the following four core disciplines:*

- remote sensing and geographic information systems;*
- meteorological satellite applications;*
- satellite communications and ge positioning systems;*
- space and atmospheric sciences.*

*With the increasing demand for space applications, the following core disciplines were added:*

- global navigation satellite systems;*
- basic space science and technology (Micro-satellite technology);*
- space law and policy, etc.*

*Co-organized with UNOOSA the Meeting of the Directors of the UN Regional Centres held on 13-14 June, 2017, Room C0431, Vienna International Centre. It was proposed to establish an **ARC- Alliance of Regional Centres**.*



# 1

## **Vision**

Down to the earth while aiming high.

## **Missions**

The missions are to promote the development of space technology applications by enhancing exchanges and further maximizing advantages of the UN Regional Centres and to coordinate with the Capacity Building Network which is proposed by UNOOSA.

It is suggested to establish the Alliance of UN Regional Centres which will be a sustainable resource sharing platform and further improve overall capability of all the UN Regional Centres.

## Membership

The membership of the Alliance shall comprise Regular, Associate and ex-officio members. The Regular Members of the Alliance shall be: ARCSSTE-E, CRASTE-LF, CRECTEALC, CSSTEAP, RCSSTEWA, RCSSTEAP - China.

The United Nations Office for Outer Space Affairs (UNOOSA) shall participate be an ex officio member of the Alliance.

National and international educational entities and space agencies, non-governmental organizations, and private sector entities that have signed cooperation agreements with any Regular Member of the Alliance shall be Associate Members of the Alliance.

# 3

## Governance

The Coordination Board of the Alliance will consist of one representative of each of the Regular Members and of the UNOOSA, the latter acting in an ex officio capacity.

The Chair of the Coordination Board will be a Regular Member of the Alliance who will be selected by consensus by the Alliance and serve for a period of (2 or 3 years ?). Thereafter, the post of Chair of the Coordination Board will rotate among its Regular Members.

Each Regular Member shall provide the name and contact details of its Principal and Assistant member to the Chair of the Coordination Board.



# 4

## **Meetings of the Alliance**

The Alliance shall meet at least once a year at a location determined at the end of the previous meeting. Invitations to participate in a meeting will be issued by one of the Regular Members or by UNOOSA.

All Regular and Associate Members and UNOOSA shall be invited to participate in the Meetings of the Alliance.

# Proposed Joint Actions

- Joint Book Series on Space Technology Applications
- Joint Publishment of Annual Report 2017 of RCs
- Joint Publishment of Best Practice and Success Stories of RCs to Celebrate the UNISPACE+50
- Joint Exhibition in June 2018



*It makes life better.*

# Logo Design

## Idea 001

- The main part of the ARC logo is the abbreviation of “Alliance of Regional Centres” with the earth;
- The three tangent ellipses are used as the outer circle. Three kinds of colors represent vitality (green), the sky (blue) and the sun (red), which symbolize that the alliance will bear the responsibility for the benefit of the earth;
- The lines represent the trajectories which show the outer space.



Alliance of Regional Centres

001-01



Alliance of Regional Centres

001-02

# Logo Design

## Idea 002

- The main part of the ARC logo is the abbreviation of “Alliance of Regional Centres” with the earth;
- The element of rainbow represents the diversity of the alliance.



Alliance of Regional Centres

002-01



Alliance of Regional Centres

002-02



Alliance of Regional Centres

002-03



Alliance of Regional Centres

002-04

# Logo Design

## Idea 003

- The main part of the ARC logo is the abbreviation of “Alliance of Regional Centres” with the earth, and the olive-branch.



# *Joint Report 2018*

## **Regional Centres: History and Future**

# Regional Centres: History and Future

Each UN Regional Centre is supposed to prepare materials based on its own development within twenty (20) pages (including text and pictures). It is advised that the materials related to the following four (4) parts should be provided:

- **Introduction**

In this part, it is advised to give a general introduction of the Centre including the date of establishment, objectives, vision, mission, organizational structure, etc.

- **Big Events**

In this part, it is advised to list the historic moments in the development of the Centre.

- **Education and Training Programmes**

In this part, it is advised to give a profile of the degree programmes and short training programmes offered at the Centre, the situation of student cultivation, etc.

- **Outreach**

In this part, it is advised to show the outstanding activities organized by the Centre, including international exchanges and student activities.





*Introduction to the UN Regional Centre  
in China (RCSSTEAP)*



# 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(中国)



Algeria



Argentina



Bangladesh



Bolivia



Brazil



China



Indonesia



Pakistan



Peru



Venezuela

- **The Establishment of RCSSTEAP:** November 17, 2014
- **Mission:** Promoting the peaceful use of space technologies for the benefit of all humankind.
- **Vision:** Openness, Innovation, Inclusiveness
- **Principle:** Down to the Earth while Aiming High

**2013.2**

Application  
Making a proposal at the 50<sup>th</sup>  
session of Scientific and Technical  
Subcommittee of UN COPUOS

**2013.9**

Passing Evaluation Mission by  
UNOOSA Expert Group (experts  
from Greece, India, Iran, Japan,  
Mexico, Pakistan)

**2014.6**

Attending the Director  
Meeting of UN-Regional  
Centres as an observer

**2014.9**

Organizing International Space  
Education Forum at the 65<sup>th</sup>  
International Astronautical  
Congress (IAC), Toronto

**2014.11**

The Inauguration Ceremony  
The 1<sup>st</sup> Meeting of the Governing  
Board

**2013.6**

Approved by the Subcommittee  
of COPUOS at the 56<sup>th</sup> session of  
COPUOS

**2014.3**

Approved by the State  
Council of China

**2014.7**

Organizing a training course  
for Morocco (CRASTE-LF)

**2014.10**

Signing agreements with  
contracting parties

# Inaugurated on Nov. 17, 2014



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)



Ten Contracting Parties

# The 1<sup>st</sup> Governing Boarding Meeting



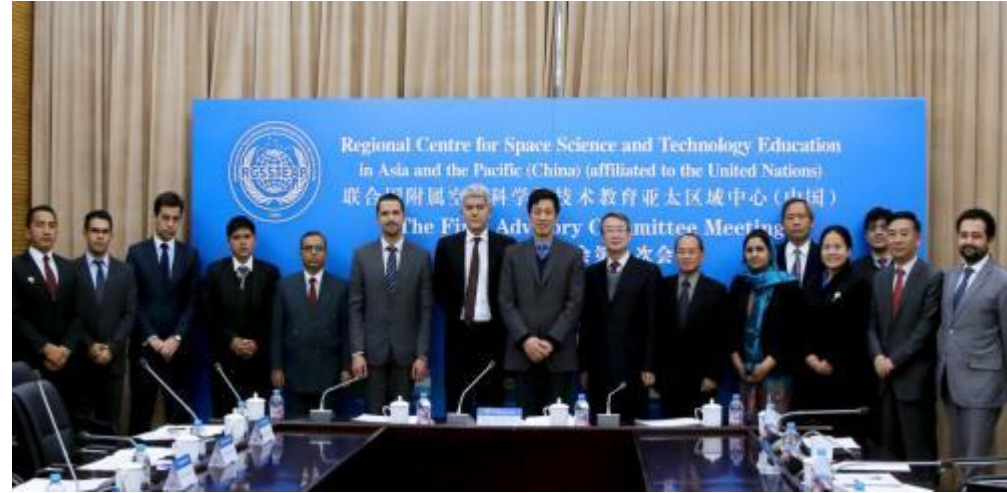
November 17<sup>th</sup>, 2014 in Beijing

# The 2<sup>nd</sup> Governing Boarding Meeting



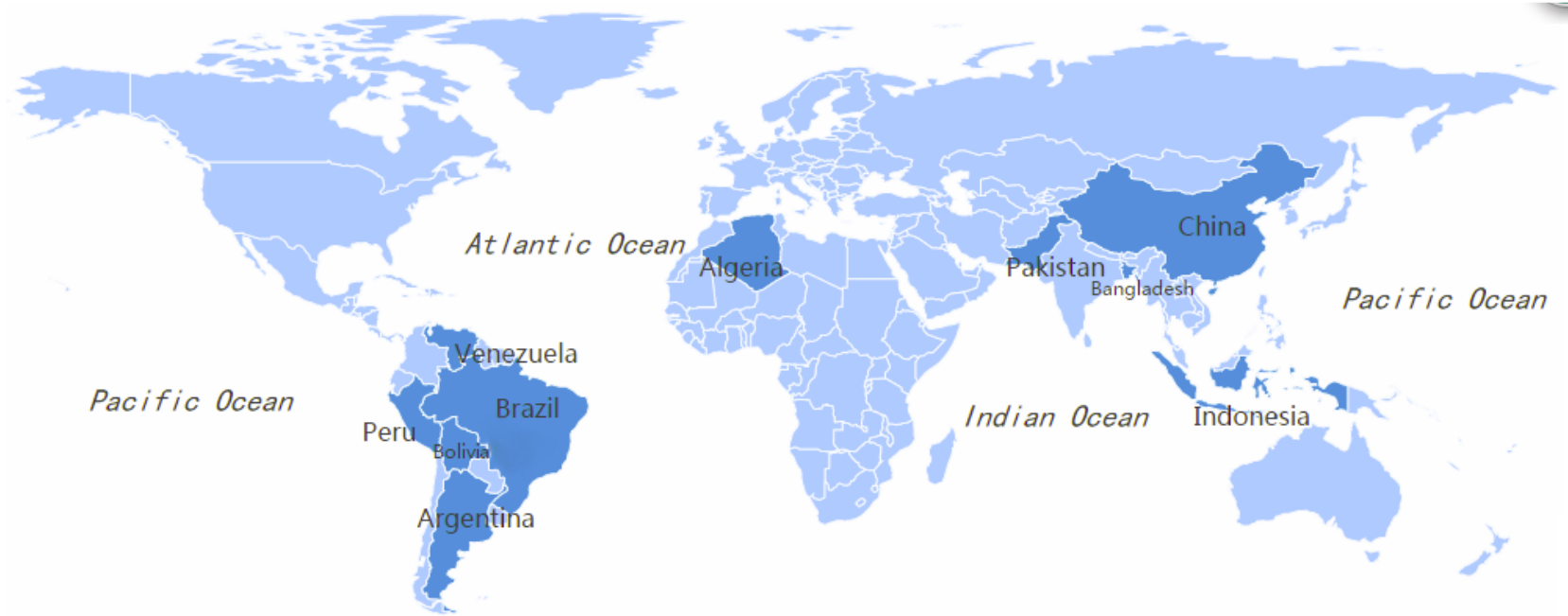
November 28<sup>th</sup>, 2015 in Beijing

# The 1<sup>st</sup> Advisory Committee Meeting



December 6, 2016 in Beijing

# Map of the Member States



China



Algeria



Brazil



Bolivia



Pakistan



Peru



Venezuela



Indonesia



Argentina



Bangladesh

# The 1<sup>st</sup> Forum on Space Technology Applications



CNSA



Algeria



Bangladesh



Bolivia



Brazil



China



Indonesia



Pakistan



Peru



Venezuela

December 6, 2016 in Beijing



# 2017 New Year Reception



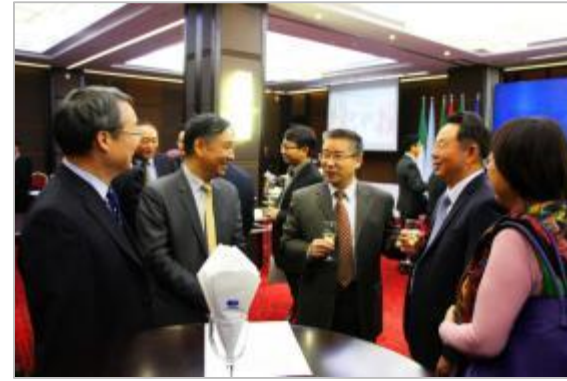
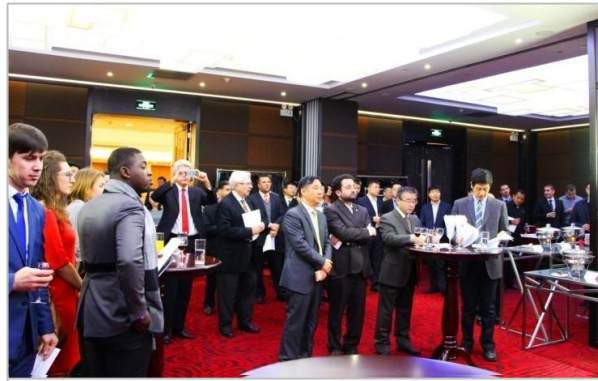
Mr. TIAN Yulong  
Secretary General of CNSA



Mr. XU Huibin  
President of Beihang University

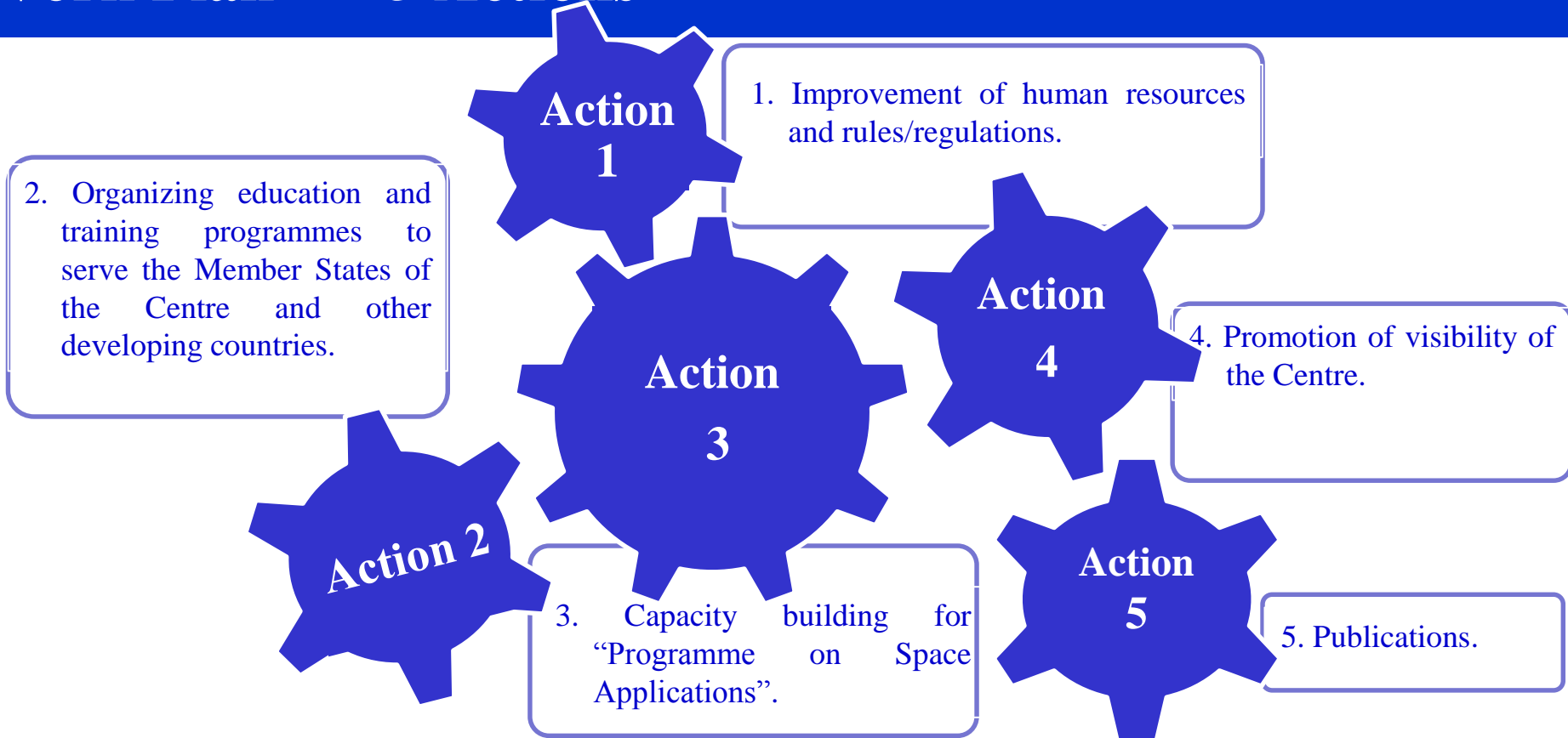


Mr. Jose Raimundo Braga Coelho  
President of Brazilian Space Agency



December 5, 2016 in Beijing

# Work Plan — 5 Actions



# Degree Programs in 2015

## Master's Programs

Year	Research Direction	Participants	Counties
2015	Global Navigation Satellite System (GNSS)	6	5
2015	Remote Sensing and Geographic Information Systems (RS&GIS)	7	6
2015	Basic Space Science and Technology(Micro-satellite Technology)	10	7

Participants in total: 23

## Doctoral Program

Year	Research Direction	Participants	Counties
2015	Space Technology Applications	10	6

# Short Training Programs in 2015

No.	Topic	Date	Participants	Counties
1	Global Navigation Satellite Technology and Application	Apr. 19-29	43	16
2	Remote Sensing Technology and Application	Sept. 14-22	30	20
3	Space Law and Policy	Sept. 17-25	38	12

**Participants in total: 111; Countries in total: 26**

# Degree Programs in 2016

## Master's Programs

Year	Research Direction	Participants	Countries
2016	Remote Sensing and Geographic Information Systems (RS&GIS)	15	11
2016	Global Navigation Satellite System (GNSS)	11	10
2016	Space Law and Policy	10	7

Participants in total: 36

Duration: Sept. 2016 - June 2018

## Doctoral Program

Year	Research Direction	Participants	Countries
2016	Space Technology Applications	13	9

Participants in total: 13

Duration: Sept. 2016 - Sept. 2019

# Short Training Programs in 2016

No.	Topic	Date	Participants	Countries
1	China Remote Sensing Technology and Data Applications	Mar. 20-30	46	13
2	International GNSS Seminars "GNSS Courses for Curious Minds"	May 8-20	31	15
3	BeiDou Technology and Its Applications	Jul. 11-30	37	15
4	Global Navigation Satellite Systems	Aug. 8-13	83	7
5	Space-based Technologies for Flood and Drought Monitoring and Risk Assessment	Sept. 22-27	28	19
6	The "Belt and Road Initiative" Spatial Information Corridor Engineering Application	Oct. 14-16	45	16
7	Navigation and Positioning Satellite System Design	Oct. 31-Nov. 8	31	12

**Participants in total: 301; Countries in total: 43**

# Degree Programs in 2017

## Master's Programs

Year	Research Direction	Participants	Countries
2017	Remote Sensing and Geographic Information Systems (RS&GIS)	14	9
2017	Global Navigation Satellite System (GNSS)	11	7
2017	Micro-satellite Technology	15	9

Participants in total: 36

Duration: Sept. 2017 - June 2019

## Doctoral Program

Year	Research Direction	Participants	Countries
2017	Space Technology Applications	11	7

Participants in total: 13

Duration: Sept. 2017 - Sept. 2020

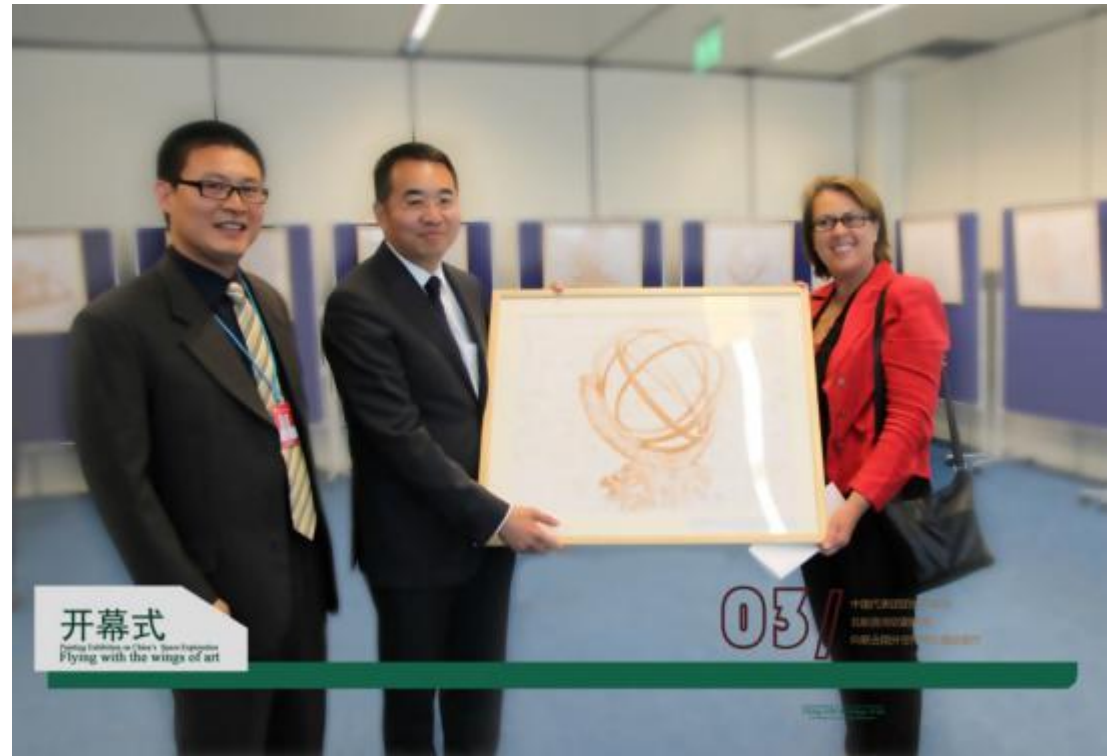
# Short Training Programs in 2017

No.	Topic	Date	Participants	Counties
1	Seminar on BeiDou Satellite Navigation Technology	Feb. 22-24	51	3
2	International Seminars on Positioning and Navigation Technologies	May 9-11	40	6
3	The First Summer Camp of the APSCO Student Small Satellite Project	Aug.14-Sept.1	47	8

**Participants in total: 138; Countries in Total: 17**



# Drawing Exhibition on China Space Exploration



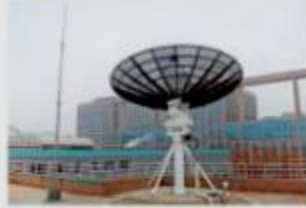
June 17, 2015

# Graduation Ceremony in 2016



**RCSSTEAP**

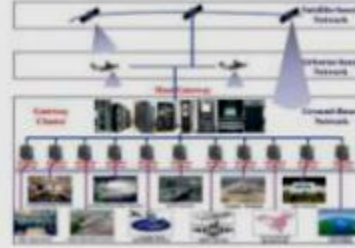
# Educational Facilities



RS&GIS



GNSS



Micro-Satellite Technology

SATCOM

Space Law and Policy



中国航天

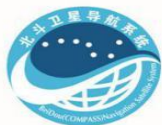
China Great Wall Industry Corporation

China Academy of Space Technology

China Centre for Resources Satellite Data and Application

Shanghai Academy of Spaceflight Technology

China Academy of Launch Vehicle Technology



BeiDou Navigation Satellite System

UniStrong  
合众思壮

Beijing UniStrong Co., Ltd.

北斗星通  
BDStar Navigation

Beijing BDStar Navigation Co., Ltd.

ChinaRS 中科遥感

ChinaRS Geoinformatics Co., Ltd.



Beijing Aerospace TITAN Technology Co., Ltd.



Twenty First Century Aerospace Technology Co., Ltd.



APSCO  
ASIA-PACIFIC SPACE COOPERATION ORGANIZATION



民政部国家减灾中心



UN-SPIDER  
Beijing Office



International Centre on Space Technologies for Natural and Cultural Heritage under the auspices of UNESCO

NSSC  
中国科学院国家空间科学中心  
National Space Science Center . CAS



Space Debris Observation and Data Application Center  
China National Space Administration



National Satellite Meteorological Center



Institute of Remote Sensing and Digital Earth



National Astronomical Observatories Chinese Academy of Sciences



National Time Service Center

- 中心以“开放、创新、包容”为理念，不断扩大合作、创新发展。

The Centre, sticking to the vision of "Openness, Innovation, and Inclusiveness", is continuously expanding cooperation with innovative development.

*So far, we have cultivated **215** graduate students from **23** countries majoring in Space Technology Applications, among whom **122** students from **16** countries are now studying at Beihang University, the host institution of the Centre.*

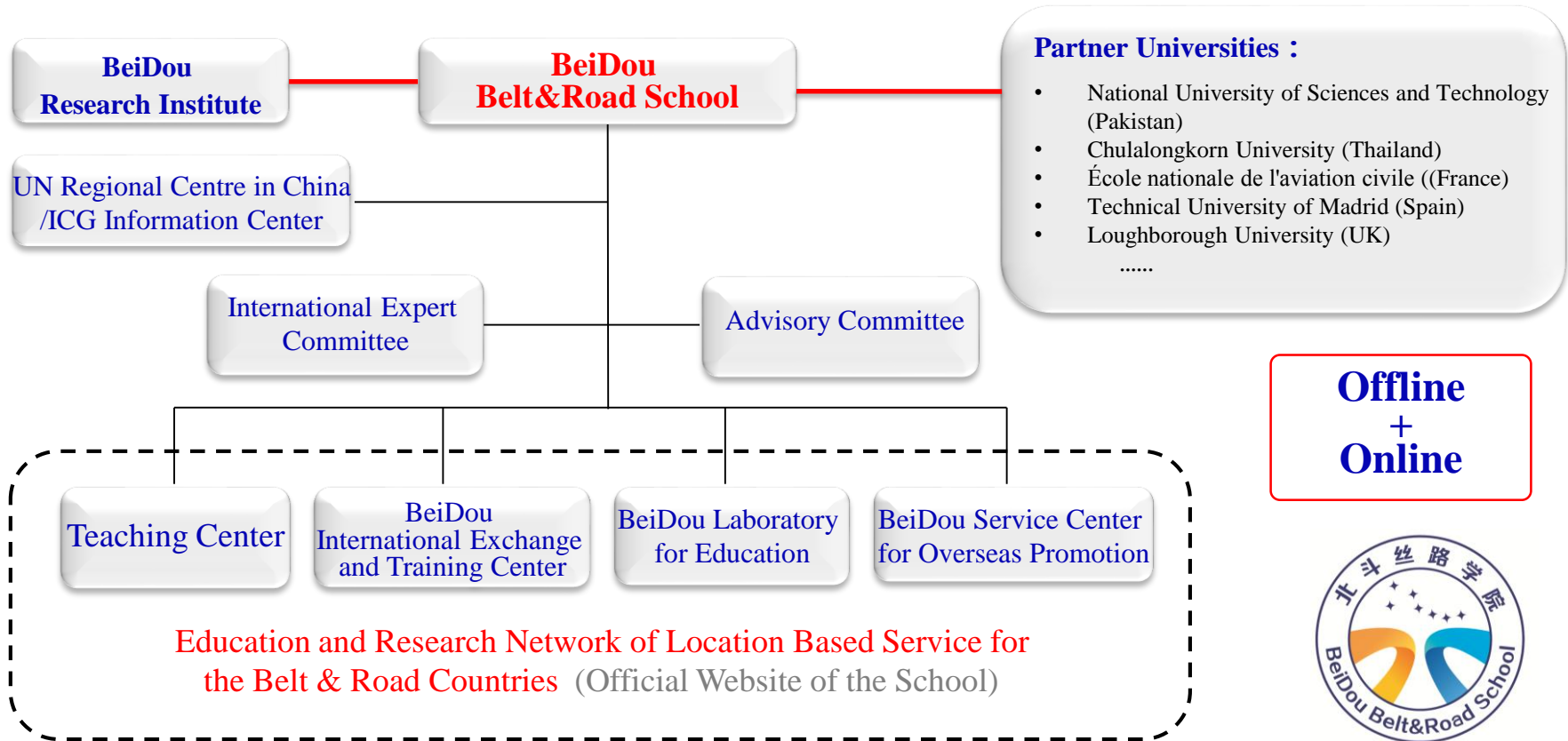
*In addition, the Centre has organized more than **20** short training programmes together with APSCO, UNSPSIDER Beijing Office, ENAC, Las Engineering and Technology School of Ohio University, China Satellite Global Services Alliance and other partners, in which **550** students from **54** countries have participated.*

# Visit to the other Regional Centres



*66 countries among the 6 Regional Centres*

# Aciton in 2017: BeiDou Belt&Road School





*Signing Memorandum of Understanding on the  
Establishment of BeiDou Belt&Road School*

Between Beihang University (China) and National University of Science and  
Technology (Pakistan)



*Visit to Chulalongkorn University, Thailand*



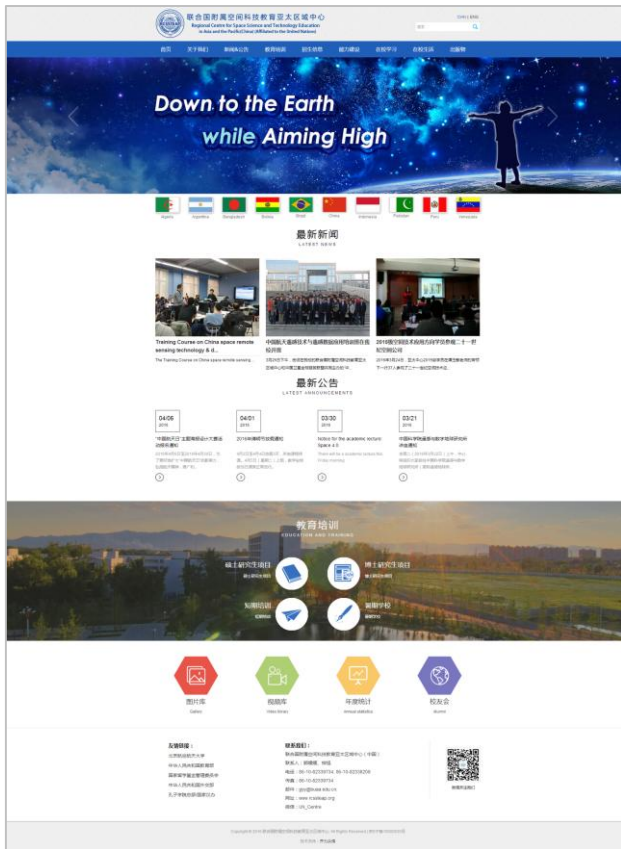
**北斗丝路学院**  
BeiDou Belt&Road School



# The Centre



# Website and WeChat of the Centre



WeChat: UN\_Centre



WECHAT

Website: <http://www.rcssteap.org>



WEBSITE

# Publications

Home / Publications / Newsletter

## Newsletter

Total

2016

2015



The Fourth Issue of 2015



The Third Issue of 2015



The Second Issue of 2015



The First Issue of 2015



# Down to the Earth while Aiming High



Algeria



Argentina



Bangladesh



Bolivia



Brazil



China



Indonesia



Pakistan



Peru



Venezuela



**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)



Beihang University, the first aerospace university established in 1952 in China, has been engaged in international space education with the support of CNSA since 2000.

Schools	31
State Key Laboratories	8
Undergraduate Programs	57
Master's Programs	144
Doctoral Programs	49
Students	29,211
Undergraduates	15,620
Graduates	13,591
International Students	2,083
Faculty & Staff	3,885



# QUICK FACTS

## Main Campus

located in Zhongguancun Science Park,  
Haidian District

At the heart of higher learning and  
technology development

30-min drive from Tian'anmen Square

## Shahe Campus

Changping District, 100 hectares

27km away from the main campus

## Doudian Campus

Fangshan District, 53 hectares

