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*Enhance the understanding and
subsequent use of space technology for peaceful purposes*

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NEWSLETTER

No.1

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The First Issue
Serial No.001

Exchange · Promotion · Development

RCSSTEAP

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

联合国附属空间科学与技术教育亚太区域中心 (中国)

Contents

A Brand New Start (Preface)	3
Special Focus	7
Inauguration Ceremony	7
Governing Board	13
Media Coverage	17
Review of the Main Activities of the Application	18
A Proposal on Establishing a New Regional Centre was Made	18
Terms of Reference for the Evaluation Mission for a New Regional Centre Issued by UNOOSA	19
UNOOSA Experts Conducted an Evaluation Mission to Beihang University	20
Attended the Meeting of Directors of the UN Regional Centres as an Observer	24
Paid a Visit to the African Regional Centre for Space Science and Technology Education in Morocco (affiliated to the United Nations)	25
Organized the Global Networking Forum(GNF) on International Space Education for the 65th International Astronautical Congress (IAC)	26
Roadmap of the Application	27
Map of UN Regional Centres	28
RCSSTEAP(China) Activities	29
Served with all Member States and Keep in Touch with Members of GB	29
Participating in the UN/CNSA/APSCO Workshop on Space Law	29
Participating the 2014 Academic Conference of CSA/CISL	30

New Year Reception for International Students of Participants	30
New Centre Signed a Cooperation Agreement with China Academy of Space Technology of CASC	31
Picture Exhibition of Space Technology Application	31
Educational Training Programs	32
Degree Programs	32
Overview	32
Advantages and Features	33
Professional Visits	34
Foreign Experts	36
Short Training Programs	37
UN-SPIDER Training Course	37
The First Online Training of APSCO	38
Capacity Building	39
Logo Design	39
Infrastructure	41
Teachers Recruitment	43
Volunteers Recruitment	44
Publications	45
Annual Work Plan for 2015	46

RCSSTEAP

A Brand New Start (Preface)

In the expectation and excitement, the Regional Centre for Space Science and Technology Education in Asia and the Pacific (China) (affiliated to the United Nations) was established at Beihang University on November 17, 2014. It is a milestone for International Space Education of China and also a brand new start.

A review of the whole process reminds us a lot.

Due to UN initiatives and promotion, the Regional Center for Space Science and Technology Education comes into being.

In 1968, the first United Nations conference on the Exploration and Peaceful Use of Outer Space (UNISPACE) took place in Vienna, Austria. United Nations Office for Outer Space Affairs (UNOOSA), in accordance with the conference decisions, proposed the *Program on Space Applications* in 1971.

The second and third UNISPACE conferences were held respectively in 1982 and 1999 to further expand the application of this program, in which suggestions were proposed that training courses should be carried out for the demands of developing countries to enhance the application of Space Science and Technology and promote international cooperation among regions as well as the development of space science and technology in developing countries.

United Nations General Assembly, in resolution 45/72 of December 11, 1990, approved the proposal by Committee on the Peaceful Uses of Outer Space (COPUOS) that "... the United Nations should take a lead, with the active support of its specialized agencies and other international organizations, in establishing regional centres for space science and technology education in [...] developing countries." (A/AC. 105/456)

United Nations General Assembly Resolution 50/27 of December 6, 1995 consented to another proposal by COPUOS that these centres be established on the basis of affiliation to the United Nations as early as possible. Since then, such Centers have been set up in Asia and the Pacific (India 1995, Jordan 2012), Africa (Nigeria 1998, Morocco 1998), Latin America and the Caribbean (Brazil and Mexico 2003).

According to the suggestion of UNOOSA, Chinese government has shown active participation in Asia-Pacific Multilateral Cooperation in Space Technology and Applications (AP-MCSTA) since 1992. Chinese government has engaged in the application since 1995 when the United Nations launched the Regional Centre for Space Science and Technology Education.

In 2001, the 6th Asia-Pacific Conference on Multilateral Cooperation in Space Technology and Applications was held in Beijing. The Asia Pacific Multilateral Cooperation Secretariat was established. The office of AP-MCSTA was set up at Beihang University.



With the support of national authorities, over the past decade Beihang University has engaged in the preparatory work for the establishment of the Centre. In 2001, three dedicated research reports on the demand for space technology and applications in the Asia-Pacific region were completed, and by 2004 the International Space Education Centre was established. In 2006 (with the approval of the China Ministry of Education) Beihang University initiated the *Master Program on Space Technology Applications* for international students, and in 2013 the enrollment of a Doctoral Program began. By July 2014, the University had admitted into these programs a total of 120 students from 14 countries, and 50 of them had graduated with a Master's degree. In addition, the International Space Education Centre also launched many short-term training programs covering multiple related fields, including remote sensing, satellite communications, satellite navigation and basic space technology (with a special focus on small satellites).

Beihang established the education and training base for space technology and applications, and also developed several bases for internships and practiced with various partners, including China Aerospace Science and Technology Corporation, the Institute of Remote Sensing and Digital Earth (RADI), and the Chinese Academy of Sciences (CAS). We also organized dozens of academic visits and exchanges, receiving expert panels. As a result, Beihang University now has a comprehensive system for educational affairs and quality assurance that enables us to meet the need of talents in the field of space science training in the Asia-Pacific region. Numerous experts in space education have been recruited both at home and abroad, and an extensive network for international exchanges and cooperation has been established.

With the strong support of the Ministry of Foreign Affairs and the Ministry of Industry and Information Technology, the Chinese delegation made a statement on the proposal of a new regional education centre for space science and technology affiliated to the United Nations at Beihang University at the 50th Session of the Scientific and Technological Subcommittee of COPUOS (held on February, 2013). At the 56th session of COPUOS held on July, 2013, the proposal was endorsed, and on September, 2013 Beihang University accomplished the evaluation organized by UNOOSA with the conclusion of "Offered or Satisfactory" (OS). Just a few months later, on March 17, 2014, Premier Li Keqiang approved the establishment of the New Centre at Beihang University.

According to the requirements of UNOOSA, the Regional Center established the Governing Board and the Advisory Committee. Mr. Xu Dazhe, the Administrator of CNSA, was appointed as the Chairperson of the Governing Board. Mr. Huai Jinpeng, the President of Beihang University was appointed as the Director of the Advisory Committee. Prof. Mr. Tao Zhi, the Vice President was appointed as the Director of the Regional Centre. Mr. Weng Jingnong from International School was appointed as the Deputy Director of the New Centre. The member states included Algeria, Bolivia, Brazil, China, Indonesia, Pakistan, Peru and Venezuela.



As the unique institution affiliated to the United Nations among universities in China, the Centre will fully allocate the academic resources and educational infrastructure of Beihang University, and take this opportunity to establish a domestic mechanism to facilitate the operation of the Centre. With the strong support of Chinese government, the Centre will contribute to the implementation of the UN Programme on Space Applications promoted by UNOOSA, and enhance the education and application of space science and technology in its member states and other developing countries.



Looking at the sky, time flies with the shift of the position of stars.
Forging ahead, a decade of hard works yields fruits.

We would like to express our heartfelt gratitude to the officials from United Nations Office for Outer Space Affairs, Ministry of Foreign Affairs, Ministry of Industry and Information Technology, China National Space Administration, Ministry of Education, China Scholarship Council and China Satellite Navigation Office for your tremendous support.

It has taken more than a decade to achieve what we have now, from the conception, design, preparation, application, evaluation, to establishment despite twists and turns. Where there is a will, there is a way. We owe gratitude to many colleagues and friends and that special moments in the whole process deserve to be cherished forever. As the first issue of the Newsletter, it mainly covered the past achievements. This preface embodies our gratitude and commemoration, and is also for the benefit of exchanges and promotion and development.

At the end of the year, wish you all the best.

Special Focus

Inauguration Ceremony

RCSSTEAP(China) was Established at Beihang University

Regional Centre for Space Science and Technology Education in Asia and the Pacific (China) (affiliated to the United Nations) was established at Beihang University on November 17, 2014. The inauguration ceremony was attended by Mr. Xu Dazhe, Deputy Minister of Industry and Information Technology (MIIT) and Administrator of China National Space Administration (CNSA), Ms. Simonetta Di Pippo, Director of the Office for Outer Space Affairs (UNOOSA), representatives from eight member states of the Centre (Algeria, Bolivia, Brazil, China, Pakistan, Indonesia, Venezuela and Peru) for the first meeting of the Governing Board, Party Secretary of Beihang University Mr. Hu Lingyun, the President of Beihang University Mr. Huai Jinpeng and the Vice President Mr. Tao Zhi. It was also attended by representatives from Ministry of Foreign Affairs, Ministry of Civil Affairs, Ministry of Environmental Protection, China Meteorological Administration, State Oceanic Administration, Chinese Academy of Sciences, China Manned Space Engineering Office, China Satellite Navigation Office, China Scholarship Council, China Aerospace Science and Technology Corporation, China Aerospace Science & Industry Corp., Peking University, Beijing Institute of Technology, Asia-Pacific Space Cooperation Organization and Embassies of relevant countries. Before the inauguration ceremony began, Minister of MIIT Mr. Miao Wei met with representatives from member states of the Centre for the first meeting of the Governing Board. The ceremony was hosted by the Vice Administrator of CNSA Mr. Wu Yanhua.



As the first Chairperson of the Governing Board, Mr. Xu Dazhe signed the *Cooperation Agreement Between the United Nations and the Centre for Space Science and Technology Education in Asia and the Pacific* at the ceremony with Ms. Simonetta Di Pippo, Director of UNOOSA, marking the official step of affiliating to the United Nations. Afterwards Ms. Simonetta Di Pippo and Mr. Xu Dazhe unveiled the plaque for the Centre.





On behalf of Ministry of Industry and Information Technology, Mr. Xu Dazhe congratulated the Centre on its establishment in his address. He mentioned that China had been actively engaged in supporting work related to the UN Programme on Space Applications, especially the cooperation on space science and technology and educational training program in Asia-Pacific region. The Centre would mobilize education resources from home and abroad in the field of space science and technology in order to enhance the education level of space science and technology in this region. He hoped this platform would help share Chinese experience in space exploration and bring benefits to the developing countries in the Asia-Pacific region from the perspective of space technology.



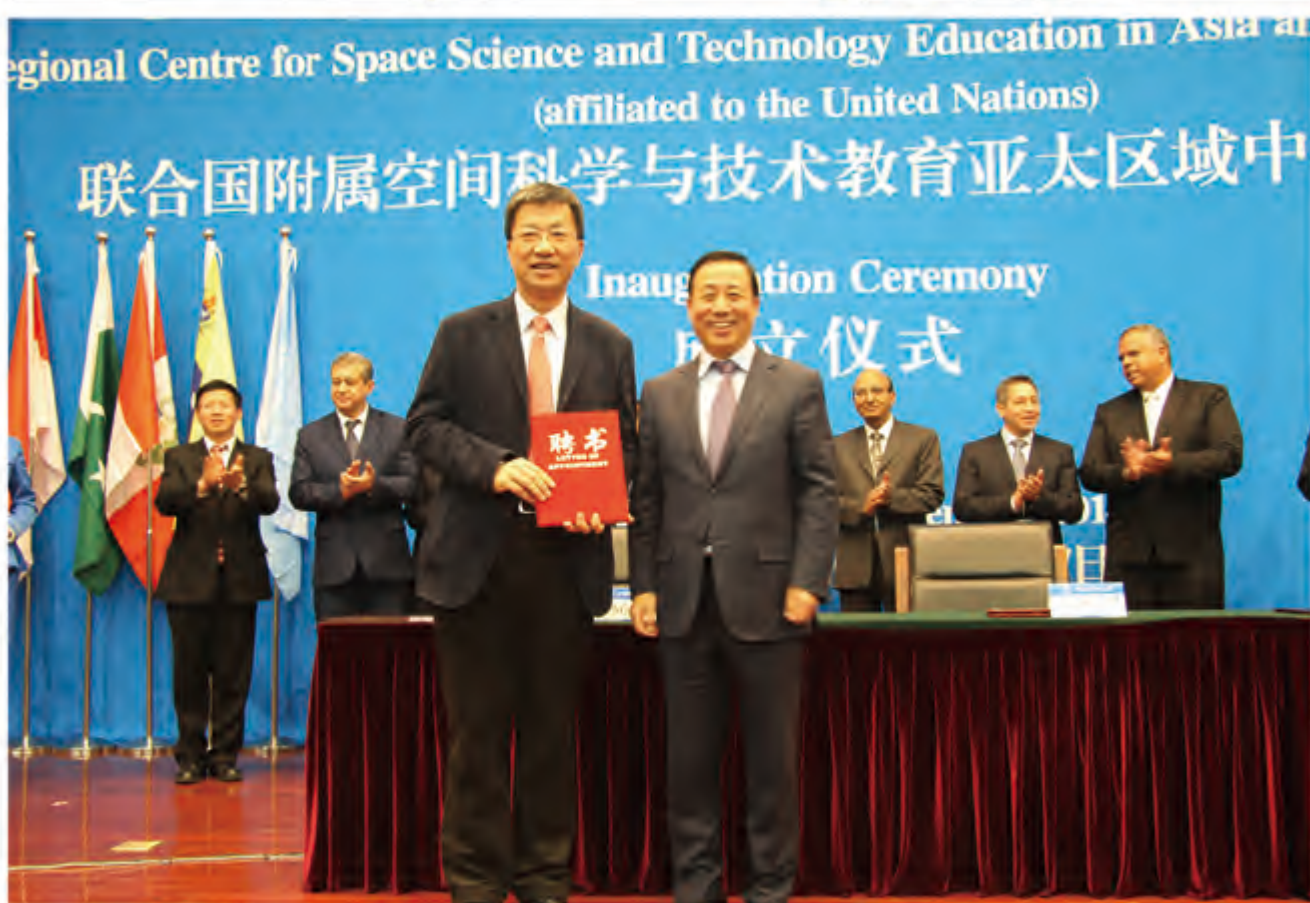
In an address to the ceremony, Mr. Huai Jinpeng, the President of Beihang University, expressed that as the host institution of the Centre, with the strong support from the Chinese government and the guidance of UNOOSA, Beihang University would, fully utilize distinct disciplinary advantages and solid infrastructure for international education of Beihang University, and integrate advanced education resources from partners both at home and abroad to build a world-class institute for space science and technology education and an influential platform for the exchange and cooperation on space science and technology in this region. The Centre would fulfill the need of exploration and peaceful use of outer space for each country, enhance the education level and application capacity of space science and technology in its member states and other developing countries, and make substantial contribution to the implementation of Programme on Space Applications proposed by UN Committee on Peaceful Use of Outer Space (COPUOS).



In her speech, Ms. Simonetta Di Pippo suggested that UNOOSA was committed to promoting international cooperation on peaceful use and exploration of outer space. She also congratulated the Centre on its official affiliation to the United Nations and expressed her gratitude for the efforts China had made in building the Centre.

The Centre is one of the UN programs on space applications under the framework of UNOOSA, aiming at improving the application of space science and technology in developing countries. Chinese government has been actively engaged in and supporting work related to UN Programme on Space Applications, especially the cooperation on space science and technology and educational training program in Asia-Pacific region. As the host institution of the Centre, Beihang University has actively engaged in the application and preparatory work, yielding fruitful results.

The Inauguration Ceremony was held after the first meeting of the Governing Board of the Centre. According to the rules of procedures, the Governing Board appointed the President Mr. Huai Jinpeng as the Director of the Advisory Committee, the Vice President Mr. Tao Zhi as the Director of the Centre, and Mr. Weng Jingnong from International School of Beihang University as the Deputy Director of the Centre. The Governing Board also reached decisions on important matters, including 2015 work plan and financial arrangement.



Governing Board

The Governing Board of RCSSTEAP(China) Held its First Meeting

The first meeting of the Governing Board of Regional Centre for Space Science and Technology Education in Asia and the Pacific (China) (affiliated to the United Nations) was held at Beihang University on November 17, 2014. The Governing Board included members from Algeria, Bolivia, Brazil, China, Indonesia, Pakistan, Peru and Venezuela. Before the first meeting, Mr. Miao Wei, the Minister of Industry and Information Technology, met with Ms. Simonetta Di Pippo, Director of the Office for Outer Space Affairs (UNOOSA) and representatives from eight member states. Group pictures were taken to mark the occasion.



As the first chairperson of the Governing Board, Mr. Xu Dazhe, the Administrator of China National Space Administration (CNSA) hosted the meeting. The Rules of Procedure of the Governing Board, the Establishment and Operation Programme of the Centre and the Annual Work Plan for 2014 to 2015 were reviewed and approved in the meeting. The preliminary time for next meeting of Governing Board was set.



Media Coverage

The Establishment of RCSSTEAP(China) at Beihang University Received Widespread Media Coverage

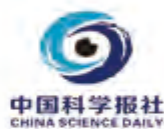
Regional Centre for Space Science and Technology Education in Asia and the Pacific (China) (affiliated to the United Nations) was established at Beihang University on November 17, 2014. It will seek international cooperation on the basis of Chinese achievements in space exploration as the sixth regional centre for space education affiliated to the United Nations. The New Centre at Beihang University is the only institute for space education in China set by the United Nations. As Deputy Minister of Industry and Information Technology and Administrator of China National Space Administration, the Chairperson of the Governing Board for the first meeting Mr. Xu Dazhe signed the Cooperation Agreement Between the United States and the Regional Centre for Space Science and Technology Education in Asia and the Pacific (China) at the ceremony with Ms. Simonetta Di Pippo, Director of UNOOSA, marking the official step of affiliating to the United Nations. Over ten media groups, including Xinhua News Agency, CCTV, People's Daily, Guangming Daily, China Daily, Science and Technology Daily, Chinese Science News, China Education Daily, China Youth Daily and China Aviation News, covered the ceremony.



人民日报



科技日报



中国教育报



中国青年报

Review of the Main Activities of the Application

A Proposal on Establishing a New Regional Centre was Made

The Scientific and Technical Subcommittee of the Committee on Peaceful Uses of Outer Space held its 50th session at Vienna from February 11 to 22, 2013. In this session, Dr. Li Guoping, the Director of CNSA, made a proposal on establishing a new regional centre for space science and technology education in East Asia and the Pacific at Beihang University in China as the head of Chinese delegation. Dr. Weng Jingnong made a technical presentation on the hosting work. The presentation focused on three questions, i.e. why we need to establish a new regional centre, where should we establish it and how to establish it, expressing China's views and giving a comprehensive introduction on the achievements of the space education in China over the past decade as well as offering a detailed establishment & operation programme. The delegates of Asia-Pacific Space Cooperation Organization (APSCO) and 12 countries, including Argentina, Brazil, Canada, Chile, Iran, Iraq, Malaysia, Nigeria, Pakistan, Philippines, Russia and Vietnam, made conference statements to support the proposal of the Chinese government delegation.

The Paragraph 45 of the Report of the Scientific and Technical Subcommittee (A/AC.105/1038) provided that *the Subcommittee welcomed a proposal by Chinese government to establish a new Centre at Beihang University in Beijing under the United Nations Programme on Space Applications. The Subcommittee noted that the Office for Outer Space Affairs would facilitate an evaluation mission in this regard.*



Terms of Reference for the Evaluation Mission for a New Regional Centre Issued by UNOOSA

The Committee on the Peaceful Uses of Outer Space (COPUOS) held its 56th session in Vienna from June 12 to 21, 2013. In the report of the COPUOS of 2013(A/68/20), the COPUOS endorsed the annual report of the Scientific and Technical Subcommittee and *“noted with satisfaction that an evaluation mission facilitated by the Office for Outer Space Affairs to Beihang University in Beijing would take place in September, 2013, in accordance with the proposal by the Government of China to establish a regional centre for space science and technology education (A/AC.105/1038, para. 45). The Committee further noted that a meeting had been held on the margins of its present session to develop and agree on the terms of reference for the evaluation mission, which are contained in conference room paper A/AC.105/2013/CRP.21/Rev.1.”*

On the margins of the session, a special meeting was held on June 14, 2013 to discuss the evaluation mission for the proposed new regional centre for space science and technology education. The meeting was attended by representatives of China, Greece, India, Iran (Islamic Republic of), Japan, Mexico, Pakistan, Russian Federation, Saudi Arabia and Switzerland. Ms. Mazlan Othman, the Director of UNOOSA chaired the meeting. The representatives discussed the draft terms of reference for the evaluation mission to assess the capacity of Beihang University to serve as a host of a regional centre for space science and technology education prepared by UNOOSA, and agree on the formation of the evaluation experts, the terms of reference for the evaluation mission, evaluation method and the date. Mr. Cheng Jiwei, the Deputy Party Secretary of Beihang University, Mr. Cao Zhiheng, the Deputy Director-General of MIIT of China, and Mr. Takao, UN Expert on Space Applications also attended the meeting.



UNOOSA Experts Conducted an Evaluation Mission to Beihang University

From September 28 to 29, 2014, the UNOOSA sent an Evaluation Mission to evaluate whether Beihang University has the capacity to serve as a host institution of the regional centre for space science and technology education. The Evaluation Mission members included the experts in the field of space science and technology nominated by the space agencies of Greece, India, Iran, Japan, Pakistan, Russia and Mr. Werner BALOGH, Programme Officer of UNOOSA and Mr. Sergio CAMACHO, Expert on Mission of UNOOSA.

The Evaluation Mission heard the report entitled “Proposed New Regional Centre for Space Science and Technology Education (affiliated to the United Nations)”, presented by Dr. Weng Jingnong, then visited some relevant laboratories including the National Key Laboratory of CNS/ATM, the Satellite Navigation Laboratory, the Micro-Satellite Technology Laboratory, Beijing Air and Space Museum, Beidou Satellite Navigation System Exhibition Hall. The Evaluation Mission also visited some existing educational facilities, international students dormitory and dining halls of Beihang University.

After its closed-door working meeting, the Evaluation Mission provided feedbacks concerning 33 items under 13 categories parameters one by one and addressed inquiries on some questions. Dr. Huai Jinpeng, the President of Beihang University, Dr. Tao Zhi, the Vice President of Beihang University, head of the International School of Beihang University, the representatives of MIIT, CNSA and MFA answered the inquiries. The experts expressed their satisfaction on replies and gave OS (Offered or Satisfactory) on all 33 items under 13 categories.

The Evaluation Mission concluded that the Chinese Government and Beihang University were able to provide all the support necessary for the Centre’s successful establishment and sustained operation. The Centre would be an important contribution to efforts in capacity building in space science and technology education and would complement the efforts on-going in the existing regional centres for space science and technology education, affiliated to the United Nations. The Evaluation Mission also recommends the acceptance of the offer of the Government of China for the establishment of the Regional Centre to be hosted at Beihang University and that it should subsequently seek to be affiliated to the United Nations.





Evaluation Mission to Beihang





Attended the Meeting of Directors of UN Regional Centres as an Observer

On June 13, 2013, United Nations Office for Outer Space Affairs (UNOOSA) convened a meeting of directors of the Regional Centres for Space Science and Technology Education (affiliated to the United Nations) in each region and program directors of the section of Programme on Space Applications. The meeting was hosted by Mr. Takoo TOI, the general manager of the Programme on Space Applications. Ms. Simonetta Di Pippo, the new Director of UNOOSA, addressed in the meeting, emphasizing the importance of this meeting and how practical and urgent it was to promote this program.

Mr. Takoo TOI introduced the accomplishments of the Programme on Space Applications since it was proposed in 1971, and pointed out that he had witnessed an increase in new development trends in space technology applications in the past five years after the last meeting in 2009. Afterwards directors of the section of Programme on Space Applications of UNOOSA gave briefs on each newly-emerging application direction, such as climate change, disaster management, environmental protection, biodiversity/ecosystem, water resource management, global navigation satellite systems, global health, space policy and law, basic space science, space medicine/ biology and small-satellite technology. Directors from India, Mexico, Morocco and Nigeria presented the overviews of their centres and the main educational training programs carried out recently.

Mr. Weng Jingnong attended the meeting as an observer. Inspired by the meeting, Mr. Weng "observed a lot, learnt a lot", deepening the understanding of UN Programme on Space Applications and the development of each regional centre. Given that, we should always keep abreast of the times and encourage innovation at work.



Paid a Visit to the African Regional Centre for Space Science and Technology Education -in French Language (affiliated to the United Nations)

At the invitation of Prof. Abderrahmane TOUZANI, the director of ICG Information Center and African Regional Center for Space Science and Technology Education-in French Language and with the support of Beidou Navigation Satellite System Office, four experts from Beidou International Exchange and Training Center paid a four-day visit to Rabat (the capital of Morocco) for Beidou/ GNSS short-term training and exchange, namely, Mr. Weng Jingnong, the Vice Dean of International School of Beihang University, Prof. Yang Dongkai and Dr. Zhang Bo from the School of Electronic and Information Engineering of Beihang University, and Dr. Shen Jun, the Deputy Director of International Cooperation Research Center of China Satellite Navigation Office.

During the exchange, the delegates discussed with the Dean of Mohammadia School of Engineering of Mohammed V University and Director of National School of Mines, and signed the cooperation agreement. The delegation also visited the Office of Cultural Affairs of Chinese Embassy in Morocco to enhance mutual understanding.



Organized the Global Networking Forum (GNF) on International Space Education for the 65th International Astronautical Congress (IAC)

Beihang University and Chinese Society of Astronautics jointly planned and launched the Global Networking Forum (GNF) on International Space Education for the 65th International Astronautical Congress (IAC). The theme of GNF was "International Space Education Change and Challenge". Experts from United Nations Office for Outer Space Affairs (UNOOSA), Space Generation Advisory Council (SGAC), Asia-Pacific Space Cooperation Organization (APSCO) and Beihang University were invited to deliver reports on the forum, and to discuss current situation and achievements of international space education as well as opportunities and challenges ahead. Delegates from America, Austria, German, Switzerland and China all aired their views and contributed to a very informative discussion.

Mr. Yang Junhua, the Secretary General of Chinese Society of Astronautics and Mr. Tao Zhi, the Vice President of Beihang University, addressed the forum. Mr. Weng Jingnong, the Vice Dean of International School of Beihang University chaired the forum.

During the session, Mr. Tao Zhi, the Vice President of Beihang University met with Ms. Simonetta Di Pippo, the Director of the Office for Outer Space Affairs (UNOOSA), and held pleasant conversation. Ms. Simonetta Di Pippo readily accepted the invitation to the first meeting of the Governing Board and the Inauguration Ceremony for the Centre at Beihang University on November 17, 2014.

In addition, Mr. Tao Zhi, the Vice President visited Mr. Xu Weiya, the Education Consul from Education Office of the Consulate-General of the PRC in Toronto, discussing the talent recruitment in details. He also called on Mr. Cui Dingjun, the head of Alumni Association in Toronto, sending kind regards to all Beihang University alumni. The president of École Polytechnique Fédérale de Lausanne (EPFL) and Mr. Tao Zhi fully shared views on subjects such as exchanges of students and staff, and formulated the next work plan.



the 50th session of Scientific and Technical Subcommittee of UN Committee on the Peaceful Uses of Outer Space (COPUOS)
Presented a statement and technical report

Jun.

The 55th session of COPUOS
Chinese government's proposal was approved. The revised TOR of evaluation missions were issued

Sept.

Evaluation Mission by UNOOSA to Beihang University
(Offered or Satisfactory) on all 33 items under 13 categories

Mar.

The State Council of China approved the proposal to establish the Centre at Beihang University

Jun.

The 56th conference of COPUOS
Attend the meeting of the directors of regional centres

Jul.

Paid a visit to the Centre in Morocco
Delivered lectures for Master's program on Beidou/GNSS

Sept.

Attended the 65th International Astronautical Congress (IAC)
Organized the Global Networking Forum (GNF) on International Space Education

Oct.

Signed agreements with member states
8 member states in total

Nov.

the Inauguration Ceremony of the Centre

Director of UNOOSA and Chairperson of the Governing Board signed the Cooperation Agreement Between the United Nations and the New Centre

The 1st Meeting of the Governing Board of the Centre

Chairperson: Administrator of CNSA Mr. Xu Dazhe
Director of the Advisory Committee: the president of Beihang University Mr. Hual Jinpeng
Director of the Centre: vice president of Beihang University Mr. Tao Zhi
Deputy Director of the Centre: Mr. Weng Jingnong

2015

Better Future.....

Roadmap of the Application

2013

2014

Map of UN Regional Centres



RCSSTEAP(China) Activities

Serve with All Member States and Keep in Touch with Members of Governing Board

Currently, there are eight member states for the New Centre, i.e. Algeria, Bolivia, Brazil, China, Indonesia, Pakistan, Peru, Venezuela. Providing services to the member states is one of the main objectives of the Centre.

The office of the Centre has established a basic database of all members of the Governing Board (GB) nominated by member states, and assigned one staff to keep in close contact with the members of the Governing Board (GB) of the Centre. The meeting documents have been sent to all members of GB by E-mail before the first regular meeting and then the feedbacks of the members to the meeting documents were collected. The Centre also booked air tickets and accommodation for the members so as to attend the meeting of GB and actively communicated with the members of GB to understand what the members need. The Secretary of GB dispatched the Minutes of the first meeting of GB and information feedback sheets to all members of GB in order to understand the demand of member states in the field of space science and technology education. The Centre will carry out its activities in accordance with the requirements and recommendation of the Chairperson and other members of GB.

In addition, with the support of Chinese government, the Centre will offer a certain amount scholarships for Master's Degree and Doctoral Degree to the students from the member states each year. The Centre will offer at least three short training programmes on space technology application to the members states each year.

Participating in the UN/CNSA/APSCO Workshop on Space Law

UN/CNSA/APSCO Workshop on Space Law was held at Beijing Friendship Hotel from November 11 to 20, 2014. The title of the workshop is "the Role of National Space Legislation in Strengthening the Rule of Law". The representatives of space agencies and experts and scholars from more than 30 countries and international organizations discussed in depth and exchanged the opinions on some hot issues focusing on the development of space law and policy, the enhancement of national space legislations and so on.

On behalf of the Centre, Associate Prof. Dr. Gao Guozhu, the Co-Director of Beihang University Institute of Space Law, gave a presentation on "Space law teaching at Regional Centres for Space Science and Technology Education (affiliated to the United Nations): the Case of the Centre(China)".

RCSSTEAP

Participating the 2014 Academic Conference of GSA/CISL

The 2014 Academic Conference of Chinese Society of Astronautics & China Institute of Space Law was held at BTG Fragrant Hill Hotel. The conference discussed various hot issues in the field of space technology, space science and space applications through various forms including plenary lectures, seminars and symposiums. More than 200 experts, scholars and engineers from aerospace research institutes, enterprises and institutions, and universities discussed in depth and exchanged the opinions focusing on the hot issues, difficulties and key technology in the field of aerospace and space law. Dr. Gao Guozhu, Dr. Weng Jingnong and Ms. Guo Yuanyuan attended the conference as the representatives of the Centre. Dr. Gao Guozhu made a presentation on the issues of Chinese space legislation at the conference.



The New Year Reception for International Participants Majoring in Space Technology Application

On December 29, 2014, in an atmosphere of joy, the current international participants majoring in Space Technology Application gathered together to wish each other a happy new year and exchanged the learning experience gained and the feeling of life during the past year at Beihang University. In this reception, Prof. Dr. Weng Jingnong, the Deputy Director of the Centre gave a brief review on the principal activities of this semester. Ms. Guo Yuanyuan, the Project Executive, introduced the courses and pilot team projects at the end of this semester as well the detailed arrangement of the professional practices at the beginning of next semester for the students at all grade levels and all majors. At last, all participants took a group photo to mark the occasion and celebrated the New Year.



New Centre Signed a Cooperation Agreement with China Academy of Space Technology of CASC

The New Centre signed a cooperation agreement with Shenzhou college of China Academy of Space Technology of China Aerospace Science and Technology Corporation (CASC). Mr. Tao Zhi, the Director of the New Centre, and Mr. Li Ming, the Vice President of China Academy of Space Technology, attended the ceremony. The two parties will carry out in-depth cooperation on the construction of practical base, exchanges of faculty members, the sharing of teaching resources, enrollment and cross-cultural exchanges on the basis of each other's strength. It marked the first cooperation agreement since the Centre's establishment and a new milestone for the future cooperation.



For the purpose of implementing the working plan drawn by the Governing Board of the Centre, the officials of the Centre visited the Shenzhou college of China Academy of Space Technology, the National Disaster Induction Centre of China (NDRC), Institute of Remote sensing and Digital Earth of Chinese Academy of Sciences (RADI), International Centre on Space Technologies for Natural and Cultural Heritage under the auspices of UNESCO (HIST), China Centre for Resources satellite Data and Application, editorial office of *Space International and Satellite & Network* from November to December, 2014. The officials introduced the establishment process, the objectives and the 2015 work plan of the Centre to the above-mentioned units, discussed the main fields of mutual cooperation with them, and achieved multiple operational and pointed initial intent of cooperation with the leaders of the units. All sides unanimously believed that these communications were necessary and thus will play an important role to serve as a platform for space science and technology education.

Picture Exhibition of Space Technology Application

In order to propagate the education of space technology application and give the teachers and students of Beihang University an insight into the Regional Centre (RCSSTEAP), the Regional Centre planned to hold a photo exhibition of space technology education at Beihang University in late March.

This photo exhibition will graphically illustrate the establishment process and current situation of the Regional Centre, and introduce the developments of space technology application at home and abroad.

Educational Training Programs

Degree Programs

For the purpose of facilitating the UN Space Technology Application Programme and meeting the demands of the Asia-Pacific countries regarding space science and technology education, the Centre will offer degree and non-degree programs and will provide academic training and technology consulting in the field of space technology applications.

1. Overview

The degree programs of the Centre will include the Master and Doctoral programs. The curriculum of Master's program will be customized and designed in the modules by referring to the UN-recommended curriculum in combination with China's technical strength and advantages as well as the disciplinary features of Beihang University. Doctoral program will be carried out according to the regulation and requirements of Beihang University. International postgraduates will be awarded with the Graduation Certificate of Beihang University and Degree Certificate of the People's Republic of China when fulfilling the credits requirements and passing the thesis/ dissertation defense.

The major of the degree programs is space technology applications, including Remote Sensing and Geographic Information System (RS & GIS), Satellite Communication (SATCOM), Global Navigation Satellite System (GNSS), Basic Space Science and Technology, Space Law, and Meteorological Satellite Applications.

In 2006, Master Program on Space Technology Applications (MASTA) was offered. By July, 2014, a total of more than 120 participants from 14 countries have been enrolled and 50 of them have been awarded for Master's Degree. In 2013, Doctoral Program on Space Technology Applications (DOCSTA) started and 17 participants have been enrolled. (See Table 1)

Table 1: Numbers of the Participants on Space Technology Applications
Table 1-1: Master Program on Space Technology Applications (MASTA)

Year	Major	Participants	Country
2006	RS & GIS	14	Bangladesh, Indonesia, Iran, Mongolia, Pakistan, Peru, Thailand
2008	RS & GIS	11	Indonesia, Mongolia, Pakistan, Thailand
2010	RS & GIS	11	Indonesia, Iran, Mongolia, Pakistan, Peru, Thailand
2011	SATCOM	14	Bangladesh, Indonesia, Iran, Laos, Mongolia, Pakistan, Peru, Thailand
2012	GNSS	20	Indonesia, Iran, Mongolia, Pakistan, Peru, Spain, Thailand
2013	RS & GIS	10	Bangladesh, Indonesia, Iran, Mongolia, Pakistan, Peru, Sri Lanka, Thailand
2013	GNSS	13	Bangladesh, Indonesia, Iran, Mongolia, Pakistan, Peru, Thailand
2014	Basic Space Science and Technology (Micro-Satellite Technology)	4	Mongolia, Peru, Thailand
2014	GNSS	11	Indonesia, Mongolia, Pakistan, Peru, Thailand, Nigeria
2014	SATCOM	7	India, Spain, Venezuela, Bangladesh, Mongolia, Peru

50 participants have been granted the Master Degree.

Table 1-2 Doctoral Program on Space Technology Applications (DOCSTA)

Year	Discipline	Participants	Country
2013	Space Technology Applications	7	Iran, Mongolia, Thailand
2014	Space Technology Applications	10	Bangladesh, Iran, Mongolia, Peru, Thailand, Bolivia

The programs have received support from Chinese government. China National Space Administration (CNSA) provided the financial support to the nine-month courses study for the international post-graduates majoring in RS & GIS in 2006. For the purpose of promoting the education on space technology applications, the Ministry of Education of China (MOE) has been offering the Chinese Government Scholarship for International Postgraduates Programme on Space Technology Applications (CSC-STA) since 2008.

For the purpose of carrying out high-quality degree programs of the Centre, the demands of the Asia-Pacific countries will be taken into account with high priority in designing the curriculum. The Centre will take the advantage of technical strength of China in space technology applications to promote the ability of research and application of the participants. Lecturers and tutors shall have a good command of English language and are expected to have the overseas study or research experience. Besides lecturers and tutors from Beihang University, experts and professors from the partners can be invited to participate in the academic activities upon request of the Centre. The determination of the thesis/dissertation topic and pilot project topic will be encouraged to meet the specific demands of participants' home countries in space technology applications. Master Degree thesis can be completed either at the Centre or in home countries of the participants.

The establishment of the distant education system will be helpful in diversifying the teaching methods and sharing worldwide education resources via the Internet.

2. Advantages and Features

First, the Centre will take the creative mode of integrating the government funding, the university hosting, and the enterprises and institutions participation, which is beneficial for the long-term and sustainable development of the Centre.

Second, Beihang University together with its partners is creatively offering diverse majors in space science and technology and is having distinct advantages and professional features in the related majors, particularly in GNSS, Basic Space Science and Technology (Micro-Satellite) and Space Law, which will be an important complement to the other existing Centres.

Third, as the host institution, Beihang University has a good reputation and capability of international education, especially in the field of space technology applications. Over the past decades, Beihang University has accumulated an increasingly rich experience in the international education and also has trained a large number of excellent lecturers and administrative staff, which will be of great value to the Centre.

3. Professional Visits in 2014

No.	Site visit
1	National Disaster Reduction Centre of China (NDRC)
2	The Institute of Remote Sensing and Digital Earth (RADI), Chinese Academy of Sciences (CAS)
3	National Satellite Meteorological Centre (NSMC)
4	Twenty First Century Aerospace Technology Co., Ltd.
5	Beijing Air and Space Museum
6	China Centre for Resources Satellite Data and Application
7	International Center on Space Technologies for Natural and Cultural Heritage under the Auspices of UNESCO (HIST)
8	Centre for Earth Observation and Digital Earth, Chinese Academy of Sciences
9	National Time Service Centre, Chinese Academy of Sciences
10	Beijing UniStrong Science & Technology Co., Ltd

We would like to express our sincere gratitude to the leaders and comrades for your hospitality and great support!





4. Foreign Experts

From December 2 to 7, 2014, Prof. Klaus Schilling from University of Wurzburg in German visited Beihang University and taught the course Miniature Space System Design to international postgraduate students majoring in Space Technology Applications.



As a renowned professor at University of Wurzburg, Mr. Klaus Schilling is a member of International Academy of Astronautics (IAA), Academic Committee of Bavarian Research Foundation, Committee on Space Research of International Astronautical Congress (IAC)... and also the editor-in-chief of the international journal "Space Technology". He has won 8 international awards and published over 270 articles and monographs.

During his visit to Beihang University, Prof. Klaus Schilling delivered technical lecture to students and teachers from School of Astronautics, International School and School of Biological Science and Medical Engineering, and was warmly welcomed. He also visited laboratories in School of Astronautics, and communicated with students with regard to techniques.

The visit of Prof. Klaus Schilling to Beihang University is one of the important events of International Talent Introduction in 2014 of the Centre, which is also a vital part of UPS international development strategy (The Project of Introducing International Teachers). It is sponsored by Graduate School of Beihang University as a top priority.

Prof. Klaus Schilling is the first international expert who give lectures in the Centre since its establishment.

RCSSTEAP

Short Training Programs

1. UN-SPIDER Training Course

The United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER) Beijing Office, the National Disaster Reduction Centre of China, Beijing Normal University and Beihang University were jointly organizing the "International training course on Drought Monitoring and Assessment using Space-based Information" from September 18 to 22, 2014 at Beihang University.

A total of 22 participants from 17 countries from Asia and the Pacific attended the training programme.



RCSSTEAP

2. The First Online Training of APSCO

The first online training on "Manned Space Flight and Chinese Space Station" was conducted on December 22, 2014 in APSCO Education and Training Centre (ETC) of China located at Beihang University. Prof. Mr. He Linshu and Mr. You Hui from School of Astronautics of Beihang University attended the session as keynote speakers. The on-line training was attended by member states of APSCO namely Bangladesh, Bangladesh, Pakistan, Thailand and postgraduate students majoring in Space Technology Applications from the Centre.

The successful hosting of the first online training laid a solid foundation for the future programmes of APSCO ETC.



Capacity Building

Logo Design



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)

Features: All the components of this logo show great originality. The existing element from UN—olive leaf is moderately refined through gradient image processing. The mix of original UN symbol and distinct adjustment heighten the sense of layer, maximizing visual effects. The growing leaves suggest the healthy development of this Centre.
The logo design is impressive, informative and innovative.



Olive leaf: a symbol of peace and UN



Big Dipper: a symbol of galaxy, universe and space technology



Earth: a symbol of earth and UN

Other forms of Logo



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)

RCSSTEAP

Evolution of Logo



Applications of Logo (design sketch)



Infrastructure

As a host institution of the APSCO Education Training Centre (China) and BeiDou International Exchange and Training Centre, Beihang University is having very close cooperative relationship with the partners (relevant universities, research institutions and enterprises). Together with its partners, Beihang University is providing the high quality resources in the pilot project internships, co-supervision of thesis and dissertations, and professional visits, etc.

Twenty-seven schools of Beihang University will provide the Centre with the plentiful teaching and internship resources for space science and technology education. In the past ten years, such laboratories were founded as the Ground Station for Remote Sensing Satellite Data Receiving, RS & GIS Laboratory, BeiDou Satellite Navigation System Exhibition Hall, Micro-Satellite Technology Laboratory and Distance Education & Video Conference Laboratory.

Necessary facilities to the Centre will also be provided by the partners of Beihang University, such as the Institute of Remote Sensing and Digital Earth (RADI) of Chinese Academy of Sciences (CAS), the China Academy of Space Technology (CAST) and China Institute of Space Law. Furthermore, the New Centre will gain access to the equipment and facilities of National Space Science Centre (NSSC) of CAS, the China Satellite Communications Group Co. Ltd. and China Centre for Resources Satellite Data and Application (CRESDA), etc.



By now, Beihang University has made a special preparation for offices, teaching venues (more than 2,000 m²) and other facilities for the Centre. In addition, lecture halls, laboratories, internet and Wi-Fi services and libraries of Beihang University may be also shared with the Centre.

Beihang University will offer the accommodation for the participants of the Centre in the International Students Dormitory on the campus. Beihang University will also offer the housing for the academic and administrative staff. Guest experts can live in the hotels on the campus.

Teachers Recruitment

In order to build a world-class Regional Centre for Space Science and Technology Education, experts and scholars from home and abroad in the field of Space Technology Applications are warmly welcomed. Experts recruited will be provided with round-trip tickets and accommodation. In addition, Beihang University will offer experts perfect logistics service. The salary will be offered in accordance with standard of international organization and teaching certificate will be awarded.

Qualifications :

1. Love education, Professional behaviors with high level of integrity, righteous, meticulous, and exemplary
2. Great influence in relevant fields of expertise and good social reputation
3. International experts must have world-class academic achievements in one subject.
4. Ability to enrich and upgrade the teaching staff structure onfor Space Technology Applications, the overall teaching standard and guiding ability, and the education quality for students
5. Ability to promote exchanges and cooperation both at home and abroad
6. Ability to advance disciplinary development of the Centre, laboratory construction, scientific research, talent consultations, etc.
7. Good communication skills in English
8. Good health

Please contact us if you are interested.

Contacts: Ms. Guo Yuanyuan , Mr. Weng Jingnong
Tel: +86-10-82339734 , 82315990
Email: gyy@buaa.edu.cn, wengjn@buaa.edu.cn



Volunteers Recruitment

In order to build a world-class Regional Centre for Space Science and Technology Education, volunteers are warmly welcomed. Job Responsibilities: daily activities, coordinating and organizing, reception, editing, translation. This position can be either full time or part time. Necessary working conditions are provided.

The internship requires a minimal 3-month commitment. Volunteers will receive the Internship Certificate after the completion. The Centre will provide salary subsidy for volunteer during the internship. No accommodation provided.

Please contact us if you are interested.

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Publications

Catalogue of the Books Published by the Centre

No.	Title	Author
1	<i>Guidance Principle of Missiles</i>	Jiang Jiahe
2	<i>Computer Culture Foundation</i>	Li Ying
3	<i>China Today</i>	Sun Yan
4	<i>Finite Element Analysis in Engineering</i>	Cui Deyu
5	<i>Geographic Information System: Theory and Practice</i>	Tan Yumin, Xin Yu, Jia Weinan
6	<i>Contract Law</i>	Xiao Jianhua, Zhang Lu, Zhang Mingxin
7	<i>Application of ANSYS CFX in Convection Heat Transfer Numerical Simulation</i>	Sun Jining, Deng Hongwu, Luo Xiang
8	<i>Solid Ballistic Missile and Launch Vehicle Conceptual Design</i>	He Linshu, Xu Dajun
9	<i>Resonant Sensors</i>	Fan Shangchun, Guo Zhanshe
10	<i>Fundamentals of Aerospace Materials and Processes</i>	Zhang Yanhua
11	<i>Introduction to Matrix Theory</i>	Zhao Di, Li Hongyi
12	<i>Space Environment, Orbits and Spacecraft Systems</i>	He Linshu, You Hui
13	<i>Global Navigation Satellite System-Principle and Applications</i>	Wu Fali, Zhao Yan
14	<i>GNSS Principle Experiment</i>	Yang Dongkai, Liu Qingge
15	<i>National Disaster Management and Space Technology</i>	Li Sujun, Yang Siqian
16	<i>Structural Optimization of Flight Vehicle</i>	Huang Hai, ChenKunyan
17	<i>Nonlinear Analysis of Concrete Structures</i>	Ye Yinghua, Diao Bo



Annual Work Plan for 2015

According to the establishment and operation programme of the Regional Centre for Space Science and Technology Education in Asia and the Pacific (affiliated to the United Nations) (China) (hereinafter referred to as the "Centre"), there are such main Actions as construction of personnel team and system, education and training, capacity and condition building, influence enhancing, publication, and so forth. The working plan of 2015 hereof is as follows.

Action 1 Construction of personnel and system to facilitate the sustainable development of the Centre

1. Implementing personnel organization, clarifying responsibilities, and improving operation system of the Centre pursuant to the requirement of the board of directors and designated program.
2. Funding the construction and development of the Centre.
3. Promoting the implementation of annual working plan.
4. Establishing mid-and-long term developing program and setting up development fund.

Action 2 Organizing education and training to serve the Centre member countries and other developing countries

1. Postgraduate Degree Education Program
Directions/Majors: Satellite Navigation, Remote Sensing and Geographic Information System, Basic Space Science and Technology(Small Satellite).
Time of Enrollment: September, 2015
2. 3 international short-term training programs
Each member state will get 2 free quotas of candidates, including accommodation, tuition and registration fees. Other candidates shall pay the accommodation and registration fees. The round-trip tickets shall be paid by the candidates.
Training Topics: Beidou/GNSS application, remote sensing application, space law and policy, etc.
Training schedule:
April 2015 Beidou/GNSS application
August 2015 Remote sensing technology and application
October 2015 Space law and policy

Annual Work Plan for 2015

Action 3 Capacity building for Space Application Program

1. Completing the revision and issuing of postgraduate degree program introduction.
2. Establishing the website of the Centre (including the function of online application and education).
3. Building database of students/trainees and experts.
4. Planning to sign cooperation contracts with 5-8 well-known domestic international enterprises or research institutions. Establishing off-campus bases of internship and training for students/trainees.
5. It's planned to hire 2 domestic experts and 2 international experts to teach in the Centre and invite some experts from domestic cooperative companies to be part-time professors.
6. Organizing 2 symposiums of curriculum arrangement and teaching material development.

Action 4 Organizing activities for promoting visibility of the Centre

1. Participating in the International Aeronautical Congress Meeting in 2015.
2. Participating in the science subcommittee of COPOUS meeting in Feb. 2015.
3. Participating in the symposiums of UN Space Application Program for about 2 times.
4. Organizing a picture/photo show of the Centre on campus.
5. Offering lectures about popular space science and technology.

Action 5 Publications

1. Compilation of publicity material of the Centre.
2. Editing Newsletter (quarterly publication) of the Centre.
3. Editing annual report of the Centre.

Action 6 Other

1. Preparation of annual Governing Board meeting.
2. Other work assigned by the Governing Board.

Afterword

The heavy haze in Beijing recently begins to disperse. It is nice to overlook the clear outline of remote mountains on the outskirts of Beijing against the backdrop of a perfect blue sky. This winter is not as cold as usual and the snowy world people have expected is still yet to come. Again, the new year starts despite the chilly wind. The first issue of the Newsletter comes into being on the first day of new year.

Nearly a month of efforts has been made for the organization, data collection, column identification, editing and typesetting. Taken into consideration the target audience, style and design, we have attached great importance to the first issue of the thin Newsletter.

The first issue covers the whole process of the establishment of the Newsletter including the founding of high-level Governing Board, solemn inauguration ceremony, the display of educational training outcomes, the support from partners of the New Centre, the professional visits of participants, the new year's reunion of participants, the review of past work and the arrangement for the new year.

We hope the Newsletter will become a platform of exchanges and a gateway to Chinese international space technology education for the outside world. We also hope it will be a reminder of every step forward and facilitate the development of the New Centre.

The first step is always the hardest. 2015 marks the first year of the Regional Center since its establishment and also the first year of development. We will make steady progress in the implementation of "Peaceful Use of Space Technology" proposed by the United Nation through practical work to serve member states, so as to lay a solid foundation for future development. We are looking forward to the launch of national working mechanism led by China National Space Administration for Regional Center's development. Hope to receive continuous support from parties both at home and abroad.

For the next year, other columns will be included to cover activities organized by United Nations Office for Outer Space Affairs, other regional centres, member states and partners in regard to space education, so as to promote exchanges and cooperation.

Occasional errors are inevitable due to the limit of time and experience. Your advice would be warmly welcomed.

Best wishes for 2015.

Editor



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)