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Cape Town Declaration Adopted at 1st BRICS Science, Technology and Innovation Ministerial Meeting

The first BRICS Science, Technology and Innovation (STI) Ministerial Meeting, held in Cape Town on February 10, issued the Cape Town Declaration. It reaffirmed the vision on strengthening the BRICS partnership in a pragmatic way and gave substantial support to all the calls expressed in previous BRICS Summits to intensify cooperation in the spheres of science, technology and innovation.

The Declaration identified main areas for cooperation under the BRICS STI framework and agreed to, as a first step, establish five thematic areas, which are: (a) climate change and natural disaster mitigation; (b) water resources and pollution control; (c) geospatial technology and its applications; (d) new and renewable energy and

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energy efficiency; and (e) astronomy. It also proposed that the BRICS Memorandum of Understanding on Cooperation in Science, Technology and Innovation be signed on the occasion of the Sixth BRICS Summit in Brazil in 2014.

With the theme "a strategic partnership in science, technology and innovation for equitable growth and sustainable development", the meeting was held in line with the mandate of Durban Declaration released at the fifth BRICS Summit in South Africa last March. The ministers of BRICS nations or their representatives briefed the meeting on their respective STI policies and outcomes, and identified priority areas and mechanisms for STI cooperation within the BRICS framework.

Wan Gang, Minister of Science and Technology, briefed the participants on latest progress in China's innovation-driven strategy and proposed that BRICS nations should reinforce cooperation in basic science and frontier technology, open major research infrastructure, enhance STI dialogue and share best practices and support young scientist exchange and training programs.

(Source: Xinhua News Agency, February 12, 2014)

First EU-China Innovation Cooperation Dialogue Held in Beijing

The first EU-China Innovation Cooperation Dialogue was held at the Great Hall of the People on November 21, 2013, based on a joint statement signed by Wan Gang, Minister of Science and Technology, and Máire Geoghegan-Quinn, EU Commissioner for Research, Innovation and Science on September 20, 2012.

Minister Wan Gang and Mr. Johannes Hahn, EU Commissioner for Regional Policy, addressed the Dialogue. Mr. Zhang Laiwu, Vice Minister of Science and Technology and Mr. Rudolf STROHMEIER, Deputy Director General, EU DG Research and Innovation, co-chaired the Dialogue. The Dialogue saw the participation of EU and Chinese high-level government representatives and stakeholders in the innovation-related field.

The role of innovation is highlighted with talks on China's innovation-driven strategy and EU's policy to build an Innovation Alliance. Both sides believe innovation is an important means to spur sustainable development and cope with economic and social challenges. The two sides exchanged views on innovation policies and discussed ways to enhance cooperation on research and innovation.

The two sides welcomed the launch of a new flagship initiative on food, agriculture and biotechnology, to ensure substantive joint research and innovation activities on selected priorities of common interests to be supported.

Minister Wan hoped that the Dialogue could promote exchanges between scientists, particularly young people.

Johannes Hahn noted that China's ongoing

urbanization is an opportunity for EU-China innovation collaboration. EU has always been paying great attention to regional investment, and adopted various approaches for innovation based on local conditions. He believed that new progress will be made in research and innovation under EU-China Sustainable Urbanization Partnership.

Both sides agreed that innovation should be at the core of their strategies to address challenges brought about urbanization. Both will support collaboration in areas of mutual interests such as city planning, green transportation, green technology and renewable energy.In respect of industrial innovation, a framework for cooperation will be reached to promote closer collaboration among enterprises, universities and research institutes for those industrial cluster with mutual economic and strategic interests between EU and China.

To pursue further the objectives of the Innovation Cooperation Dialogue, the two sides agreed to set up an Expert Task Force on Innovation Cooperation to identify and promote successful practices in the EU and in China, and to report on the EU-China Joint S&T Steering Committee Meeting and the next Innovation Cooperation Dialogue. The second meeting of the Innovation Cooperation Dialogue will take place in Europe in 2014.

(Source: Science and Technology Daily, November 22, 2013)

Vice Minister Cao Jianlin Attends 10th GEO Plenary Session and 3rd GEO Ministerial Summit

The tenth GEO Plenary (GEO-X) and third GEO Ministerial Summit were held in Geneva, Switzerland from January 15 to 17, 2014. Approximately 600 delegates attended the Plenary Session and the Summit, representing 42 GEO member countries and 36 international organizations. 33 ministers and vice ministers from four GEO co-chairs-China, the US, the EC and South Africa, and other member countries. Mr. Cao Jianlin, GEO co-chair and Vice Minister of Science and Technology of China, headed a Chinese delegation to participate in the event. Vice Minister Cao delivered a keynote speech at the opening ceremony and presided over the adoption of the Geneva Declaration.

GEO-X was co-chaired by Vice Minister Cao, other co-chairs from the U.S., the EC and South Africa, and the director of GEO Secretariat. China was once again elected as GEO co-chair, represented by Vice Minister Cao. On the afternoon of January 15, an exhibition was held by Chinese side to showcase latest progress in earth observation and navigation technologies and products developed with the support of China's national research programs, including remote sensing products of global land surface parameters and land cover, ChinaGEOSS and CO_2 monitoring satellites, etc. China presented some technologies/products to GEOSS as part of its contribution to GEO, and proposed to boost cooperation with other GEO members and participating organizations. This was applauded by GEO Secretariat and participants.

At the opening ceremony of the Ministerial Summit, Vice Minister Cao made a keynote speech on behalf of all GEO members in the Asia-Pacific region. He noted that by participating actively in earth observation activities under the framework of GEOSS, GEO members in the Asia-Pacific region, such as China, Japan, South Korea, India, Thailand and Australia, have

improved their capabilities in the regard. More earth observation data has been shared within the region, and the launch of more earth observation satellites has been in the pipeline. GEO members and relevant international organizations are increasing collaboration in the use of earth observation data. GEO members, the EC and participating organizations have worked together to make GEOSS an irreplaceable way to sustain the Planet.

This Summit is a milestone in GEO's history. It is an important initiative to put into effect Beijing Declaration adopted at the second GEO Ministerial Summit in 2010, and heralds a new stage in GEO's development in the coming decade.

(Source: MOST, February 17, 2014)

China Keeps Good Momentum in SKA

The Square Kilometer Array (SKA), an international mega-science project, is planning to build the world's largest aperture synthesis radio telescope. With the approval of the State Council in September 2012, the Ministry of Science and Technology (MOST) is representing China in carrying out SKA Project, responsible for the coordination of related domestic activities and international negotiation on the project. In December 2012, the first meeting of the inter-ministerial coordination group was held to review the overall work plan, including target, mission and coordination measures.

Last year, representatives from MOST, the Chinese Academy of Sciences, National Natural Science Foundation, China Electronics Technology Group and other agencies attended various meetings of the SKA Organization, and joined the SKA work package consortia as well as negotiations on key issues. In the meantime, two expert panel meetings and 10 symposia on SKA were organized in China, and the second inter-ministerial coordination group meeting was convened in December. With the joint efforts of all parties, China has achieved marked progress in the following aspects:

1. Research tendering and team building

SKA launched the research tender in 2013, with the bidding document announced on March 11 and the tender finished in October. MOST was actively engaged in organizing related negotiations and encouraging bidding by Chinese institutions and enterprises. After getting involved in six work packages successfully, MOST appointed the implementation agencies and project leader for each package, set up domestic research teams and made an arrangement of research tasks. Now the research and studies are well underway.

2. Participating in key negotiations

SKA started negotiations on key issues in 2013, including observatory and hosting agreements, funding model and governance structure. China participated in the negotiations, and proposed constructive suggestions on SKA development and management based on its experience in international mega-science projects.

For example, China's suggestion of establishing an intergovernmental organization for governance structure was widely accepted by SKAO and the majority of its members.

3. Nominating management staff to SKAO

The number of SKAO staff was expected to increase from 20 to 60 in 2013, and three rounds of global recruitment had been launched. MOST encouraged the Chinese institutes to nominate qualified candidates to compete for the positions, and one Chinese applicant had been appointed Head of Policy Development.

4. Funding SKA activities

To ensure sound progress of SKA activities in China, the Ministry of Finance and MOST have decided to create a special funding for international organizations in the annual budget for science and technology, so as to support the participation of Chinese researchers in SKA.

In 2014, MOST will continue its work through the inter-ministerial coordination group, encourage domestic institutes to participate in SKA work packages and apply for funding, build a professional research team for the project, and upgrade China's research capacity by incorporating SKA technologies with domestic observatory facilities.

(Source: Department of International Cooperation, MOST, March 21, 2014)

Progress of China Participating in GIF

GIF (Generation IV International Forum) is a major multilateral cooperation mechanism in nuclear energy, with members including the US, Russia, EURATOM, Switzerland, Canada, China, Japan, South Korea and South Africa etc. In November, 2006, then-Minister of Science and Technology Xu Guanhua signed the GIF Charter on behalf of the Chinese government. In November 2007, then Foreign Minister Yang Jiechi signed the Framework Agreement for International Collaboration on Research and Development of Generation IV Nuclear Energy Systems. As the government bodies in charge, MOST and China Atomic Energy Authority have been organizing the participation of relevant departments in this international mega-research project.

GIF is mainly dedicated to joint research in 6 types of Generation IV nuclear reactors with the greatest potential – SFR, LFR, GFR, SCWR, VHTR and MSR. In October 2008 and March 2009, China respectively participated in the work related to VHTR and SFR. In June 2011, Minister of Science and Technology Wan Gang on behalf of the Chinese government, signed to extend the GIF Charter indefinitely. In August 2011, China Nuclear Energy Association was entrusted to run the GIF Liaison Office. In May 2013, GIF 35th Policy Group Meeting and 29th Expert Group Meeting were held in Beijing.

On March 4, 2014, the meeting of China participating in GIF was held in Hefei, Anhui Province. About 40 representatives from MOST, CAEA, NNSA, specialized agencies, universities, nuclear power companies and nuclear energy associations attended the meeting.

Officials from MOST Department of International Cooperation updated the audience on how MOST and CAEA organized and coordinated the participation of Chinese research institutes in GIF. Representatives from GIF briefed on China's participation in GIF as well as

the 2014 work plan. Chinese experts gave a snapshot of GIF expert group and the SAIP.

With regard to research, representatives from Institute of Nuclear and New Energy Technology of Tsinghua University and China Institute of Atomic Energy respectively updated the attendees on the cooperation progress of VHTR and SFR under the GIF framework. Attendees from Nuclear Power Institute of China, China Nuclear Power Technology Research Institute and School of Nuclear Science and Engineering of Shanghai Jiaotong University briefed on the progress and research of SCWR. Shanghai Academy of Applied Physics CAS and Institute of Nuclear Energy Safety Technology CAS introduced respectively the research progress of MSR and LFR as well as the progress of GIF. Relevant sides also discussed the 2014 priorities and problems.

After the meeting, attendees paid a site visit to the Institute of Nuclear Energy Safety Technology CAS.

(Source: Department of International Cooperation, MOST, March 21, 2014)

2014 Meeting of China-IEA S&T Collaboration Held in Beijing

On January 10, 2014, the 2014 Meeting of China-IEA S&T Collaboration was held in Beijing. Over 50 delegates from research institutes participating in the implementation Agreements(IAs) of IEA attended the meeting. Mr. Chen Linhao, Deputy Director General from MOST Department of International Cooperation, attended the meeting and delivered his remark. There were also participants coming from National Energy Association and China Coal Research Institute.

In 2001, MOST signed a MOU with IEA, participating in relevant activities of CERT as an observer. MOST has been responsible for organizing domestic agencies to participat in activities of IAs of IEA. Up to now, Chinese research institutes have joined 19 IAs of energy technology cooperation, including Clean Coal Center (CCC), Fluidized-Bed-Combustion (FBC), Multiple Phase Flow (MPF), Enhanced Oil Recovery (EOR), PV power System (PVPS), Hydro Power, Wind Energy, Soar PACES, Ocean Energy System (OES), Solar Heating and Cooling (SHC), and so on. In 2013, China joined another two IAs. Chinese research institutes also joined IAs like Hydrogen, HEV and ETSAP.

Mr. Chen Linhao pointed out that Chinese research institutes have joined 19 IAs covering fossil fuel, renewable energy, energy end-use and fusion energy. As a result, a comprehensive international S&T cooperation platform has been built, laying a solid foundation for the international science community to approach global energy challenge. In the coming years, China will further participate in IAs of IEA, coordinate with domestic agencies and institutions as well as share international resources; ensure successful holding of IA meetings, and expand its influence in China. Moreover, research institutes participating in IAs of IEA should support the work of the Liaison Office and its affiliated website.

At the meeting, relevant organizations and the Liaison Office respectively reviewed the work in 2013 and introduced the work plan in 2014. Attendees made in-depth discussions on how to further align domestic forces and share international resources.

(Source: MOST, January 29, 2014)

TBMA Signed between ITER Organization and CNDA

On February 13, 2014, an Extraordinary Council Meeting of the International Thermonuclear Experimental Reactor (ITER) project was held at its headquarters in France. Council members from the seven parties, namely China, EU, the US, Russia, Japan, South Korea and India, jointed the meeting together with officials of the ITER Organization. Dr. Cao Jianlin, Vice Minister of Science and Technology and Head of the Chinese delegation attended the meeting.

During the extraordinary meeting, Mr. Osamu Motojima, Director General of the ITER Organization and Mr. Luo Delong, chief representative of the Chinese domestic agency, inked the Agreement on Helium-Cooled Ceramic Breeder Test Blanket Module, which made China the first of the six participating parties of TBM to sign such agreements, marking a new milestone for the progress of tritium producing technologies and equipment.

As one of the three goals in engineering development of the ITER project, TBM holds the key for verifying tritium production in the reactor and tritium self-sustaining, and the ITER facility will provide a good testing platform as the first of its kind. Based on the requirements of fusion DEMO, China's ITER-TBM project will carry out helium-cooled ceramic breeder test blanket experiments, prove tritium self- sustaining and energy extraction technology to support commercial fusion plants in the future.

The signing of TMB agreement by Mr. Osamu Motojima and Mr. Luo Delong

(Source: MOST, February 26, 2014)

Chinese Expert Appointed MAC Chair of ITER Council

Mr. Tian Jiashu, Deputy Chief Engineer of China National Nuclear Corporation, assumed the Chair of the Management Advisory Committee (MAC) of the International Thermonuclear Experimental Reactor (ITER) Council.

ITER is so far the largest international research cooperation project in the world. The ITER Joint Implementation Agreement was signed in May, 2006 among China, EU, India, Japan, Russia, the US and South Korea. The project will upgrade science and technology collaboration between China and the rest of the world, and drive forward domestic fusion energy research and development.

MAC is established under the ITER Council to advise on strategic management and administrative issues during the implementation of the ITER project. The 13th Council Meeting held in November 2013 approved the nomination of the Chinese domestic agency and appointed Mr. Tian as the Chair of MAC for the year 2014.

(Source: MOST, March 13, 2014)

China and Pakistan sign MOU on Small hydro Technology Joint Research Center

On February 19, under the witness of Chinese President Xi Jinping and Pakistani President Mamnoon Hussain, Vice-minister of Science and Technology Wang Weizhong and Federal Minister for Planning and Development Ahsan Iqbal signed a MOU on small hydro technology joint research center at the Great Hall of the People.

China and Pakistan will build the center based on equality and mutual benefit. The center will facilitate high-level cooperation research, encourage exchanges and fostering of S&T personnel, boost technology transfer, and enhance Pakistani capacity in hydro power technology, thus contributing to a long-term and stable S&T collaborative relationship between the two countries.

(Source: MOST, February 28, 2014)

(Editor's Note: All news in the issue are translated from Chinese texts for your reference. They are subject to checks and changes against official release of original Chinese or English texts.)