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WEEKLY EDITION

Cyberspace Vision for a Shared Future Unveiled

Edited by LIN Yuchen

China pledged to continue international cooperation to promote Internet development and regulate online activities, according to a white paper titled *Jointly Build a Community with a Shared Future in Cyberspace* released by the State Council on November 7.

Multiple achievements have been made within China, the paper noted, including boosting the digital economy, materializing a clean and sound online environment, and increasing the legal framework for cyberspace, laying solid foundations for building a community with a shared future in cyberspace.

By 2021, the value of China's digital economy had reached 45.5 trillion RMB, accounting for 39.8 percent of GDP. 98 percent of all poverty-stricken villages had access to fiber-optical services by the end of 2020.

Telecom and online fraud, online pyramid selling, cyberbullying, and online privacy infringements are all being eradicated through laws. Complementing these are legal information publicity events like National Cybersecurity Week and National Constitution Day, aimed at raising public legal awareness in cyberspace literacy and morality, especially among teenagers.

Being an active participator in the UN process of cyberspace governance, China has made efforts for stronger cybersecurity cooperation. *See page 2*

Rendezvous & Docking Completed



China's cargo spacecraft Tianzhou-5 completed a fast automated rendezvous and docking with the combination of the space station Tiangong, after being launched from the Wenchang Spacecraft Launch Site in south China's Hainan province on November 12. (PHOTO: XINHUA)

Editor's Pick

Wetlands Protection: China's Approach

By LU Zijian

The 14th Meeting of the Conference of the Contracting Parties to the Ramsar Convention on Wetlands (COP14), was held in China's Wuhan and Switzerland's Geneva from November 5 to 13.

It was the first time for China to host the meeting since the country joined the Convention 30 years ago. The great strides China has made in wetlands protection are phenomenal.

Wetlands well protected

With 56.35 million hectares of wetlands, China ranks first in Asia and fourth in the world in terms of area covered. There are 901 national wetland parks, over 600 wetland nature reserves, and 64 wetland sites, which are listed on Wetlands of International Importance by the Convention.

China also has 13 cities accredited by the Convention as Wetland City, which is the largest number in the world.

For the past decade, more than 3,400 wetlands protection and restoration projects have been conducted, and over 800,000 hectares of wetlands increased and restored.

Nearly 700 more species of animals and plants have been seen in China's first national wetland park, Xixi National Wetland Park in Hangzhou, in east China's Zhejiang province.

Twenty years ago, the water quality was rather poor in Xixi, but a comprehensive protection project was soon initiated. By dredging, diverting sewage tube and biological treatment, the water environment has been significantly improved. Now, the overall water quality of Xixi is kept at Class III, whereas the qual-

ity in the core area remains Class II.

Another example is that the number of several rare and endangered waterfowl exceeds one percent of their global population in Minjiang River estuary wetland in southeast China's Fujian province, which is regarded as one of the areas with the most abundant offshore marine species at the same latitude in the northern hemisphere.

Efforts from both government and people

The achievement mentioned above is part of a much deeper process.

A total of 97 policies and regulations at both national and provincial levels have been released since 2012, establishing a primary policy system for wetlands protection. In particular, China's first law on wetlands protection took effect in June. *See page 4*

World Laureates Forum Calls for Inclusive Science

By WANG Xiaoxia

The world is facing new challenges, and science can meet and solve them, said Roger Kornberg, president of the World Laureates Association (WLA) and 2006 Nobel Prize laureate in chemistry.

Kornberg made the remarks at the opening ceremony of the fifth World Laureates Forum (WLF) on November 6 in Shanghai, where 60 decorated scientists, including 27 Nobel Prize winners gathered to discuss the future of science and its role in tackling development issues.

Five years on, the WLF has been playing an active role in promoting basic science, advocating for international cooperation, and is committed to the development of youth.

Kornberg stressed that basic science is fundamental to the solution of practi-

cal issues, and the WLA hopes to enhance people's awareness of this field through the establishment of the WLA Prize. The two inaugural laureates were unveiled this year and awarded with 10 million RMB (about 1.38 million USD) each.

The prize went to Michael I. Jordan, professor at UC Berkeley, "For fundamental contributions to the foundations of machine learning and its application," and German biochemist Dirk Görlich "For key discoveries elucidating the mechanism and selectivity of protein transport between the cytoplasm and nucleus."

International cooperation is essential for machine learning and artificial intelligence to prosper and realize their vision, said Jordan, who along with many participants at the forum called for open

and inclusive science.

Wan Gang, chairman of the China Association for Science and Technology, called on scientists around the world to accelerate integrated innovation in basic sciences, strengthen inclusive governance and enhance open cooperation in science and technology.

Over the past five years, the WLA has grown to 162 members, including 68 Nobel laureates, covering 80 leading laboratories and research institutions in 25 countries.

On November 4, the permanent venue of the WLA Forum was unveiled in Shanghai's Lin'gang Special Area, along with an international R&D community. In the community, international joint laboratories are also under construction, which will provide a platform for young scientists to flourish.

China to Develop Next-gen BDS

By LIN Yuchen

China is confident of making breakthroughs in the next-generation BeiDou Navigation System (BDS), making it smarter and more integrated for comprehensive, spatiotemporal applications, according to Ran Chengqi, director general of the China Satellite Navigation Office speaking on November 4.

A white paper titled *China's BeiDou Navigation Satellite System in the New Era* was published by the State Council Information Office on that date, outlining the country's vision in further developing BDS.

"Our goal is to have a spatiotemporal system fully completed by 2035," said Ran, adding that "at that time whether we are underwater, indoors, in the sky, or in deep space, BDS would be available safely and reliably."

BDS, in the years ahead, will create its own smart and distinctive system, providing decimeter-level positioning and navigation services to users worldwide, according to the paper.

The quality and scope of such services that include short message communication, ground-based and satellite-based augmentation, and international search and rescue will be improved. BDS is the world's first navigation satellite system to provide short message communication service on a global scale, the paper noted.

Multiple other innovations including the enhanced batch production capabilities of BDS were also introduced. It is expected that in two and a half years, the system would send 18 rockets carrying 30 satellites into orbit.

All core technologies are developed independently by China, such as hybrid constellation, inter-satellite links, and signal structure, said the paper.

The first stands out as it makes China the first country to adopt a hybrid navigation constellation in medium and high earth orbits, which by complementing each other, offers both wider service areas that can cover the globe and good anti-shielding capabilities.

Reaching a world-leading level, BDS embodies the vision of sharing its development achievements with people all over the world, contributing to building a global community of shared future and making the world a better place to live, according to the paper.

WEEKLY REVIEW

Optimizing COVID-19 Response in China

China released a circular on further optimizing the COVID-19 response on November 11, announcing 20 prevention and control measures. The new measures include cutting the COVID-19 quarantine period for close contacts and inbound travelers, and secondary close contacts will no longer be identified.

Perennial Rice Successfully Developed

In cooperation with domestic and overseas researchers, scientists from Yunnan University successfully developed a kind of perennial rice which can be harvested for eight consecutive harvests over four years. The yield of perennial rice nearly equaled the annual rice in the first four years.

BeiDou Recognized for Use in GMDSS

The International Maritime Organization (IMO) adopted China's BeiDou Message Service System as the third operator to provide tracking systems for ships in the Global Maritime Distress and Safety System (GMDSS) at the 106th meeting of the Maritime Safety Committee held in London between November 2 to 11.

73.5 Bln USD Tentative Deals Signed at CIIE

Increasing by 3.9 percent year-on-year, a total of tentative deals worth of 73.5 billion USD were signed during the fifth China International Import Expo (CIIE) which concluded in Shanghai on November 10.

International Cooperation

Cross-border Cooperation Focused by Global Young Scholar

By TANG Zhexiao

Focusing on the role of international sci-tech organizations playing in promoting interdisciplinary and cross-border joint research, and innovative development among global young scientists, Global Roundtable for Young Scientist Scholar 2022 was held in Wenzhou, east China's Zhejiang province on November 11.

Main topics of the Roundtable ranged from youth sci-tech innovation and cross-border cooperation, sustainable development and application of science and technology innovation, as well as youth responding to global challenges.

At the opening ceremony, Luo Hui, director general of Department of International Affairs, China Association for Science and Technology, said the Roundtable has built a communication platform for young scientists around the world and played an exemplary role.

China has been devoting to cooperation with international scientific organizations. According to Luo, nearly 1,000 Chinese scientists work in major international organizations currently, promoting global sci-tech cooperation. *See page 4*



The Global Roundtable for Young Scientist Scholar 2022 was held in Wenzhou, east China's Zhejiang province on November 11. (PHOTO: World Young Scientist Summit)

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