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WEEKLY EDITION

Hand in Hand, to Build a Shared Future

By QI Liming



The concept of building a community with a shared future for mankind was first put forward to the world by Chinese President Xi Jinping on March 23, 2013, while delivering a speech in Moscow State Institute of International Relations.

Over the past decade, the vision has responded to the common aspiration for peace, development and cooperation of people from all over the world, pointing out the fundamental path and direction for solving a global crisis.

To better maintain regional stability, promote cultural and people-to-people exchanges, and realize common development and prosperity, China has proposed and promoted the establishment of 10 regional communities with a shared future, including communities with a shared future of Shanghai Cooperation Organization, China-Africa, China-Arab, and China-Pacific Island countries.

In addition, China is willing to build a bilateral community with a shared future with other countries, and has signed action plans with Laos and Cambodia.

High-quality Belt and Road Initiative (BRI) is an important platform for China to promote the building of a community with a shared future for mankind. By March 2023, 151 countries and 32 international organizations had signed more than 200 cooperation documents on the building of BRI with China.

The vision includes shared security and common development, mutual learning among civilizations and cultural integration, and humans and nature coexisting in harmony. The key to building the community is "sharing."

First of all, we share a common destiny. Mankind is an indivisible community with a shared future. At present, a variety of complex global challenges are on the rise, which require countries to work together to address them.

Secondly, we share a common future and jointly create a better future for mankind. In recent years, the vision has injected critical positive energy into the international community, shining with the bright light of truth and exhibiting the growing consensus of people all over the world, which guides the direction of the era.

The genuine multilateralism is desperately needed to build a community with a shared future for mankind as well. Multilateralism is the core concept of the current international system, the cornerstone of the existing international order, and an effective way for all countries to maintain peace and promote development.

Since global governance goes hand in hand with global issues, building a community with a shared future for mankind also needs to advance the reform and construction of the global governance system.

Though the road ahead is arduous, we can achieve our goals with constant efforts. To achieve the vision needs to take action and to build a new type of international relations based on the principle of sovereign equality.

World Meteorological Day



March 23 marks the World Meteorological Day. The photo shows graduate students from China Agricultural University check the operation status of a weather station in a fruit garden in Pinggu district, Beijing. (PHOTO: XINHUA)

Editor's Pick

Sci-tech Drives Next Level Transport Sector

By WANG Xiaoxia

China has impressed the world with its rapidly expanding transport sector, known for the super huge networks of highways, railways and ports, and the high interconnectivity has brought considerable economic opportunities.

In recent years, the country has placed greater emphasis on high-quality development instead of merely speed or scale, and transportation is no exception. With advanced technologies, China is improving the quality and efficiency of its transport system and providing safe, convenient, green and economical services.

Smarter construction

Beijing - Zhangjiakou Railway, the first railway designed and built solely by Chinese engineers and workers, opened in 1909, encouraging Chinese people to insist on the self-development of railways.

In December 2019, 110 years after the launch of the old railway, the Beijing-Zhangjiakou high-speed railway began operation. It is China's first intelligent railway, where bullet trains can auto-pilot at a speed of 350 km/h, utilizing China's home-grown satellite navigation system.

The Beijing-Zhangjiakou high-speed railway has realized the integration of intelligent construction, intelligent equipment and intelligent operation, pioneering intelligent railways in the world, said Li Hongxia, a senior engineer from China Railway Group.

During the construction process of Qinghuayuan tunnel along the railway, the shield machine was equipped with sensors, which can update the in-tunnel geological conditions in real time, suggesting tunneling parameters accordingly.

Over the past five years (2018-2022), China's infrastructure construction and equipment manufacturing technologies have improved significantly. The country has built the world's largest high-speed rail network, the world's largest highway network and a world-class port cluster, said Li Xiaopeng, minister of transport.

Low-carbon operation

In the past five years, with the wide application of new technologies, the transport industry has been developing in the direction of green and low carbon.

Beijing Daxing International Airport, which opened on July 1, 2021, has

worked hard to be more efficient and greener in energy use.

In the airport, the ground source heat pump system that uses shallow geothermal energy for heating and cooling buildings, can save 18,100 tons of standard coal per year. Meanwhile the photovoltaic system can provide six million kWh of green electricity to the grid each year, which is equivalent to reducing 966 tons of carbon dioxide. For the first time, a global hub airport achieved 100 percent new energy vehicles.

Green technologies are emerging across China's transport sector. On February 23, a 1,400 - square - meter smart skylight was installed at China's first cross-sea high-speed rail station, Xiamen North Railway Station.

It is the world's largest side - hung modular inductive sliding smart skylight. Covered with sensors, the skylight can automatically open, close and adjust its angle according to the weather.

The smart skylight is expected to decrease the usage of the ventilation system by about 40 days per year, reducing carbon dioxide emissions by 14.13 tons.

See page 2

BDS Epitomizes Reliable Navigation

By Staff Reporters

China's BeiDou Navigation Satellite System (BDS) has been consistently reliable since the introduction of BDS-1.

More than 7.9 million commercial road vehicles, 40,000 vehicles on Express Mail Service lines and 47,000 ships in China have used BDS. Nearly 8,000 BDS terminals of different types have also been promoted and adopted in the railway system.

In addition, there are now in excess of 100,000 farm machines fitted with BDS autonomous driving systems, covering various aspects of agricultural production, including deep ploughing, rice transplanting, sowing, plant protection, harvesting, straw treatment and drying.

Unique to BDS, the short message communication (SMC) service provided by the system can be accessed via smart phones. SMC has also been applied to conduct hydrological monitoring in 2,587 reservoirs.

Cyclists have also benefited from high-precision BDS positioning chips, with over five million shared bikes equipped with the system in more than 450 cities all over the country. Eight cities have successfully conducted pilot projects of high-precision navigation at lane level based on BDS, and the navigation is gradually being rolled out nationwide. BDS has also become the main navigation system on domestic navigation map, and the daily positioning of BDS on the map exceeded 300 billion times.

Since 2020, BDS-3 began offering a service with powerful functions globally. Cooperation with other countries in satellite navigation also flourished.

China has also signed memoranda of understanding on cooperation in satellite navigation with the Arab Civil Aviation Organization and the United Arab Emirates. A statement on cooperation between BDS and Russia's satellite navigation system GLONASS was also issued.

According to the China Satellite Navigation Office, by 2035, China will establish a comprehensive national space-time system with the next generation BDS system as the core, providing unified, seamless coverage, safe, convenient and efficient positioning, navigation and timing services.

WEEKLY REVIEW

MOST Releases Top 10 Scientific Advances

The Ministry of Science and Technology (MOST) released the top 10 domestic scientific advances of 2022 on March 17. At the top of the list is the Martian subsurface structure revealed by Mars rover Zhurong.

New Plant Species Discovered

Chinese researchers have discovered two new plant species, namely an orchid species and a primrose species, in the Wolong National Nature Reserve in southwest China's Sichuan, said the Chinese Academy of Sciences (CAS) on March 17.

A Kind of Eco-friendly Glass Developed

The researchers from the Institute of Process Engineering under the CAS created a family of eco-friendly glasses of biological origin, which can be biodegraded and recycled with a minimal environmental footprint, according to the study published on March 18 in the journal *Science Advances*.

Unmanned Self-driving Service Approved in Special Area

Beijing greenlighted the commercial operation of autonomous driving service without in-car safety supervisors for the first time on March 17, allowing Baidu and Pony.ai to provide fully driverless rides in a 60-square-kilometer area of the Beijing Economic-Technological Development Area.

New Graphic



China-backed Standard Adds New Sub-field to ISO

By Staff Reporters

China National Nuclear Corporation and the International Organization for Standardization (ISO) launched an international standard on March 6 to ensure safer, more stable nuclear fusion reactions. The standard ISO 4233: 2023 is important to research and build nuclear fusion reactors.

The technologies this standard involves arise from International Thermonuclear Experimental Reactor, a fusion research project supported by several countries, including China.

With this standard, more technologies are likely to be developed to detect improper functions of other equipment, including steam generators in nuclear power plants, fuel cladding tubes and

rocket fuel containment, according to the Ministry of Science and Technology.

The launch of ISO 4233: 2023 heralds an important step forward in China's nuclear energy development. According to the country's blueprints, progress in fusion reactors are the most recent step of nuclear energy development, following the previous two steps in thermal reactors and fast reactors.

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