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"Belt and Road" Initiative Builds New Platform for "South-South Cooperation"

August 6, 2015 was a memorable day in the international shipping industry, as the New Suez Canal was officially open to navigation. Egyptian ambassador to China Mr. Magdy Amer said the international shipping route is connected to China's "Belt and Road" initiative and will open up broad prospects for all-round cooperation between China and Egypt. According to Mr. Magdy, since there are many emerging economies along the "Belt and Road", they can tap greater potential for cooperation by integrating each other's development strategies so as to

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build a new platform for mutually beneficial "South-South Cooperation".

The latest statistics show that the trade cooperation between China and "Belt and Road" countries has made progress in the first half of this year, highlighted by the trade and economic cooperation with developing economies. Chinese enterprises made US$7.05 billion direct investments in 48 "Belt and Road" countries in the six-month period, up 22% year on year and accounting for 15.3% for China's non-financial outbound investments. The investments mainly flowed to countries like Indonesia, Laos, Russia, Kazakhstan and Thailand.

The "Belt and Road" initiative will push for construction of six international economic corridors, including the New Eurasian Land Bridge, the China-Mongolia-Russia, the China-Central Asia-West Asia, the China-Indochina Peninsula, the China-Pakistan, and the Mongolia-China-India-Myanmar corridors. The initiative will facilitate international production capacity by means of transport interconnections and industry cooperation. The Asian Infrastructure Investment Bank and the Silk Road Fund will provide funding support for the transport interconnections and industry cooperation between Asian and European economies.

Within the "Belt and Road" framework, China and Russia have initiated a series of cooperation in energy, infrastructure and transport projects. Construction of the Chinese section of China-Russia East Route natural gas pipeline has begun. The two countries have also inked a contract to build the Moscow-Kazan high-speed railway.

(Source: Science and Technology Daily, August 8, 2015)

Sany Heavy Industry Carries out Project Cooperation with Local Government in Russia

A delegation of the Sany Heavy Industry Co., Ltd held talks on August 6 with officials of the Russian state of Kostroma on a couple of projects including road, bridge, public housing and factory. Both sides signed a letter of intent. Sany Heavy Industry said it would like to capitalize on its industrial advantages and experience to advance the development in Kostroma and build Russia into a more prosperous country.

In June 2015, the Mayor of Kostroma, entrusted by the State Governor, led a working group to visit Sany Heavy Industry and discussed the possibility of cooperation in various areas. After nearly two months of research and analysis, both sides reached a consensus to expedite cooperation between Sany and Kostroma.

(Source: Science and Technology Daily, August 8, 2015)

Indonesia Inks Jakarta-Bandung High-speed Rail Deal

On October 16 (local time in Jakarta), a Chinese consortium led by the China Railways Corporation and the Indonesian consortium of state companies led by PT Wijaya Karya inked an agreement to set up a joint venture. The joint venture will build and operate a high-speed rail between the capital Jakarta and the country's fourth largest city, Bandung. The deal marked a historical breakthrough for China's high-speed rail technology to gain a foothold on the international market.

Construction for the 150-kilometer rail is planned to begin in November 2015 and is expected to be completed in three years. With a maximum speed of 300 km/h, the travel time between the two cities will be shortened to less than 40 minutes from the present three hours plus.

According to an executive at the China Railways Corporation, the project, jointly funded, built and managed by Chinese and Indonesian enterprises, was the first comprehensive export of China's high-speed rail

technology, from technical standards, survey & design, engineering & construction, equipment manufacturing, to resource supplies, operation & management and talent training. It was also the first government-led B2B cooperation in the rail industry, a successful practice and a prominent innovation. The project sets an excellent example for China to develop the internal and international markets, refurbish the "China High-speed Rail" brand and push for more exports.

(Source: Science and Technology Daily, October 17, 2015)

Cisco and Inspur Establishes Joint Venture in China

On September 23 (local time in Seattle), Inspur Group and Cisco Systems, Inc. signed a strategic cooperation framework agreement at the 8th China-US Internet Forum on the sidelines of President Xi Jinping's visit to the US. Under the agreement, the two companies will make a US$100 million initial investment to set up a joint venture in China, and the cooperation primarily covers products and technologies including networking, data center, cloud service and the Internet of Things.

Almost all major global network equipment makers and emerging players in the market are related to Cisco in one way or another. In recent years Cisco has encountered challenges in the Chinese market, which now accounts for about 3% of its global revenue. The small proportion indicates the global giant is still a marginal player in the Chinese market, but that also means tremendous growth potential.

Sun Peishu, Chairman of the Inspur Group, received a telephone interview after the signing of the agreement. He said, "from the perspective of industry development, thanks to decades of introduction, digestion and innovation of foreign technologies, China's IT industry has made great breakthroughs though started from zero, become a major global supplier of server, software and communication equipment, and buoyed three decades of rapid economic development. As a late starter, however, China's IT industry continues to lag behind the leading players in the global market of integrated circuit and the Internet. The gap has made it harder for the industry to sustain China's economic and social development at a higher level. Therefore, it's essential for China to rapidly foray into the higher-end market through open cooperation."

Unlike the model of market and capital cooperation in the early stage, in the era of technological integration, Cisco and Inspur presented a new model of strategic cooperation for global technology bellwethers. The new model is characterized by enhancing Chinese IT enterprises' comprehensive strength through cooperation and finally enabling them to develop indigenous innovations.

(Source: Science and Technology Daily, September 25, 2015)

China, UK Launches International Graphene Testing Platform

The China-UK collaborative effort to support the development of an international platform of graphene standards and public service was officially launched on October 24 in Beijing by Zhongguancun Fengtai Science Park, Beijing Fengtai New Materials Inspection Institute and the UK's National Physical Laboratory. The cooperation will fill China's void in graphene standard-setting and testing. As the testing standards continue to improve, building a public service platform will lay the foundation for the development of graphene industry and high-end applications in China.

A high-end China-UK graphene conference was held

on the same day. The Vice Governor of Fengtai District and the Fengtai Park Director, Zhang Jie, said the launch of the platform is a milestone for the China-UK graphene collaboration. International standards and testing are crucial to advance China's graphene industry. The Fengtai Park is now cooperating with the National Physical Laboratory and international research teams to construct the laboratory that can test four international standards in the initial stage. The Chinese Association for Promoting Cooperation between Universities and Industries agreed on a strategic cooperation for the laboratory, which will enable the integration and utilization of the resources of universities and research institutes. Based on professional instructions from the Chinese Association for Promoting Cooperation between Universities and Industries, the China National Institute of Standardization, and the Beijing Institute of Measurement and Testing, the Fengtai Park joined hands with them to build China's graphene testing and measuring platform, a public service platform, and an international graphene innovation center as well.

At the conference, the Fengtai Park was awarded "Chinese Demonstration Base for International Graphene Cooperation". The Chinese Association for Promoting Cooperation between Universities and Industries signed an agreement with the Fengtai Park and Beijing Fengtai New Materials Inspection Institute to deepen cooperation among the government, universities and industries regarding the development and application of graphene and new materials.

(Source: Science and Technology Daily, October 29, 2015)

China Regenerative Medicine International Partners with CCB and Oxford to Commercialise Biomed Research Findings

China Regenerative Medicine International Limited (CRMI) made a joint announcement with the University of Oxford and the CCB International (Holdings) Limited (CCBI, a wholly-owned subsidiary of the China Construction Bank Corporation) on October 21, during the state visit to the United Kingdom by the Chinese President Xi Jinping, that they jointly entered into a memorandum of understanding (MOU) to establish the Strategic Platform for Industrialization of Biomedical Research Results. This is also one of the cooperation achievements for life sciences realized during President Xi's UK visit.

Early in 2014, CRMI and the University of Oxford established the first CRMI regenerative medicine industry R&D Center, focusing on major unmet clinical needs, including but not limited to diabetes, cancer, neural degeneration and organ repair using stem cell therapy. According to the MOU, CCBI will provide £1.5 million of project funding to the Center to accelerate research and its translation into treatments, and improve the operating and training capability of this Center. The three parties, CCBI, CRMI and the University of Oxford, will cooperate to establish a strategic platform for the translation and commercialization of biomedical research particularly in regenerative medicine. For this purpose, CCBI will provide assistance in the capital market of up to RMB 60 billion to support translation and industrialization of cutting edge research outcomes and promising projects. The new tripartite cooperation, with CCBI's participation, will ensure adequate funding and expidite the industrialization of R&D results.

The "CCBI-CRMI Technology Center at the University of Oxford" is part of the Oxford Institute of Biomedical Engineering (IBME), led by Professor Cui Zhanfeng, who is the Donald Pollock Professor of Chemical Engineering at Oxford and a Fellow of the Royal Academy of Engineering. CRMI is the third enterprise to set up such a R&D center that is sponsored by an enterprise and undertakes research at the University of Oxford. IBME is part of the Department of Engineering Science, which hosts all three Technology Centers (Rolls-Royce and Invensys sponsor the other two centers).

The cooperation with the University of Oxford not only builds an international R&D network for CRMI, but also provides training opportunities to scientific researchers in China. Meanwhile, the cooperation is a bridge for scientific exchanges between China and the UK, providing new momentum to the development of human life health.

(Source: Science and Technology Daily, October 29, 2015)

China and UK to Build Floating Nuclear Power Plant

Lloyd's Register announced a framework agreement on October 26 with the Nuclear Power Institute of China (NPIC), a subsidiary of the China National Nuclear Corporation (CNNC). Both sides are to jointly study laws and standards regulating ships carrying floating nuclear power plants. It's noteworthy that the floating plant is built on the basis of a small-scale nuclear reactor.

According to people in the know, small-scale nuclear reactors are mostly built on technologies used in nuclear-powered ships with mature technologies and engineering practices. Thanks to the adoption of advanced technology, high fuel efficiency and cheap costs, floating nuclear power plant is considered the most ideal means of developing coastal energy resources, and has captured growing attention from worldwide nuclear power industry in recent years.

ACP100 was designated a key technology project by the CNNC in June 2010. Based on the scope of application, there are two classifications: inland and offshore floating reactors (ACP100S). NPIC spent about five years in engineering design and key experimental verifications and has met conditions to build an offshore floating nuclear power plant.

Earlier this year, Song Danrong, chief designer of the multi-purpose small modular reactor at NPIC, revealed at the 3rd Nuclear Forum that the preliminary conceptual design for ACP100S is expected to be completed in 2016, and construction will begin simultaneously; the main system to be constructed in 2017 before the ship being taken to the water; main equipment for the nuclear plant to be installed in 2018; equipment debugging to be completed in 2019 after which the plant will be up and running.

The ACP100 was not designated a key technology project until 2010, but technological research had begun more than 20 years ago. As early as in the 1960s, the United States rebuilt a 10MW floating nuclear power facility into a power plant to supply electricity to military bases. A US offshore power system company had designed two floating nuclear power plants installed on a barge and planned to deploy four plants to meet the energy demand for oil explorations. However, it was forced to scrap the plan after energy demand shrank following the oil crisis in the late 1970s. Russia began the construction of its first floating nuclear power plant in 2007 and a ship carrying the plant has already been operating in water. The plant is expected to be operational in 2016.

It's estimated that modular small nuclear reactors with a combined installed capacity of 18.2 GW around the world will be operational by 2030. By 2050, such nuclear reactors would account for 25% of the total installed capacity of nuclear power plants in both OECD and non-OECD countries.

(Source: Science and Technology Daily, October 29, 2015)