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Progress Report on the Implementation of The Strategy for BRICS Economic Partnership

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I. The Strategy for BRICS Economic Partnership and Its Implications for BRICS Cooperation

I.1 Backgrounds

BRICS is composed of Brazil, Russia, India, China and South Africa and accounts for 26.46% of the world territory and 42.58% of the world population. Based upon 10 years' development, BRICS, as an important platform for emerging markets and developing countries, has evolved into an important driving force to global economic growth and trade cooperation, as well as to global economic governance reform.

BRICS countries play a vital role in the world economy in terms of total production, receiving investment capital, and expanding potential consumer markets. Over the past decade, BRICS' contribution to the world economic growth has surpassed 50%, and its economic aggregate soared from 12% of the global total to 23%, its share in international trade increased from 11% to 16%. BRICS countries have been widely regarded as the engines of the global economic recovery.

Within the global multilateral financial and economic institutions, such as G20, IMF, World Bank, and WTO, etc., BRICS has a bigger say than ever. BRICS' share in World Bank developed from 11% to 13.24%, its share in the IMF was upgraded from 8% to 14.91%. At the G20 Summits, BRICS is influential in shaping macroeconomic policies in the aftermath of the recent financial crisis, which underscores the changing role of these economies in the world.

BRICS cooperation is aimed at complementing and strengthening existing bilateral and multilateral relations among member countries. At the Summits in Sanya, Delhi, Durban and Fortaleza, BRICS Leaders agreed to build a partnership, in pursuit of increased stability, growth and development. In view of this, BRICS countries developed pragmatic economic cooperation and forged closer economic partnership in order to contribute to promoting global economic recovery, reduce potential risks in the international financial markets and increase economic growth among its members.

In Ufa Summit, the BRICS Leaders approved The Strategy for BRICS Economic Partnership (referred hereinafter as the BRICS Strategy) which aims to lay down the

blueprint for the long-term economic cooperation among BRICS countries. The BRICS Strategy is expected to contribute to the economic strength and competitiveness of BRICS countries in the global arena.

The BRICS Strategy has been implemented for two years since its adoption in 2015. According to BRICS consensus, the Sherpas will review the BRICS Strategy every 5 years, or earlier if deemed necessary. As the chair of BRICS in 2017, China takes the lead in drafting a report on the progress in the implementation of the BRICS Strategy, which will be submitted to Xiamen Summit to be held in the coming September.

This Progress Report on the Implementation of the BRICS Strategy (referred hereinafter as the Implementation Report) starts with a retrospection on the purposes and basic principles of the BRICS Strategy, focuses upon the implementation of the BRICS Strategy area by area ranging from trade and investment, manufacturing and minerals processing, energy, agricultural cooperation, science, technology and innovation, financial cooperation, connectivity, ICT cooperation, to the interaction with international and regional economic organizations and fora respectively. Based upon overall introduction of the progress in the implementation in the afore-mentioned priority areas, the Implementation Report will conduct a review by means of comparison between the goals and the actual implementation of the Strategy. It concludes itself with a series of policy recommendations and sheds lights on the key priority areas for BRICS economic cooperation.

Since the BRICS cooperation will enter a new decade, the implementation of the BRICS Strategy is essential to pushing forward the economic and comprehensive cooperation of BRICS countries. The BRICS Strategy is also an important collective action of the member countries to accelerate the global development and to promote global economic governance.

I.2 The Strategy and Its Significance

In today's world, emerging markets and developing countries of sound development momentum and prospects are a pivotal force in global development. Meanwhile, they are faced with a myriad of complex challenges, especially the lack of steam in world economic recovery, the interplay of traditional and non-traditional security risks as

well as the anti-globalization and protectionism tendency. Faced with both opportunities and challenges, it is all the more important for BRICS countries, as representatives of emerging markets and developing countries, to strengthen solidarity and cooperation, uphold common interests and shoulder the due share of responsibilities. To this end, BRICS countries should take concrete and practical actions to facilitate the implementation of the BRICS Strategy, in addition to the coordination of their macroeconomic policies and development strategies, which will in turn strengthen the relationship between BRICS countries and the developing countries, and push forward the reforms of the existing global economic governance.

It is necessary and important to reiterate the purposes of the BRICS Strategy, which are:

- to enhance market access opportunities and facilitate market inter-linkages;
- to promote mutual trade and investment and create a business-friendly environment for investors and entrepreneurs in all BRICS countries;
- to enhance and diversify trade and investment cooperation that support value addition among BRICS countries;
- to strengthen macroeconomic policy coordination and build resilience to external economic shocks;
- to strive for inclusive economic growth, in order to eradicate poverty, address unemployment and promote social inclusion;
- to promote information exchange through BRICS Virtual Secretariat and BRICS Economic Exchange Platform, as well as other agreed platforms;
- to consolidate efforts in order to ensure a better quality of growth by fostering innovative economic development based on advanced technologies and skills development with a view to build knowledge economies;
- to seek further interaction and cooperation with non-BRICS countries and international organizations and forums. BRICS countries will engage with the business communities in their respective countries to implement the BRICS Strategy. They will encourage closer collaboration of BRICS business communities.

Furthermore, in line with the BRICS Spirits of Openness, Inclusiveness, Cooperation, and Mutual Benefits, the BRICS Strategy has been implemented based upon the following principles:

- full respect for the sovereignty of the Member States;
- commitment to international law and recognition of the central role of the United Nations on peace, security and development;
- account for national interests, priorities, growth and development strategies of the Member States;
- openness, sharing of information and consensus in decision-making;
- commitment to the rules and principles of the multilateral trading system as embodied in the World Trade Organization (WTO);
- recognition of the multipolar nature of the global economic and financial system;
- support for greater exchanges of best practices in enhancing business environment;
- transparency and predictability in the investment environment in line with national policies and priorities;
- commitment to supporting sustainable development, strong, balanced and inclusive growth, financial stability, and balanced combination of measures ensuring social and economic development and protection of the environment;
- commitment to mutually beneficial cooperation with other countries;
- inadmissibility of unilateral economic sanctions in violation of universally recognized norms of international relations.

II. Progress in the Implementation of the Strategy and a Preliminary Review

The BRICS Strategy specifies 9 priority areas for BRICS countries to push forward economic cooperation and coordination, namely, trade and investment, manufacturing and minerals processing, energy, agricultural cooperation, science, technology and innovation, financial cooperation, connectivity, ICT cooperation, and interaction with the international and regional economic organizations and fora.

This Implementation Report analyzes the progresses in each of these areas, starting with a preliminary review of progress sector by sector and examine the level and depth of cooperation, followed by lists of major policies and actions conducted by BRICS countries in the past years for reference and guidance for future work.

II.1 Trade and Investment

II.1.1 Backgrounds

In accordance with the BRICS Strategy, in order to achieve sustainable, inclusive and dynamic growth, BRICS countries should avail themselves of opportunities provided by international economic cooperation, including deepening of trade and investment ties, both within BRICS and with other members of the international community. More active intra-BRICS trade and investment cooperation will contribute to economic growth, and facilitate the use of existing opportunities of BRICS economic complementarity. It will also strengthen the positions of the Member States in the global economy against the backdrop of weak global recovery, rising protectionism, inward-looking policies in some major economies and other potential risks, and contribute to addressing domestic economic and social challenges, including job creation and promotion of social inclusion.

With joint efforts, the trade and investment cooperation mechanism among BRICS countries has improved and pragmatic cooperation has deepened. Important consensus and documents have been achieved in the previous BRICS Leaders' Summits and Trade Ministers' Meetings, and a series of action plans and cooperation frameworks covering trade and investment issues have been adopted with a view to enhance

economic complementarities and diversification in BRICS countries. In pursuit of the implementation of the BRICS Strategy, BRICS countries mobilized the possible tools with efforts, and much progress has been achieved, which contributed to the institutionalization, systematization, and consolidation of the BRICS economic partnership.

II.1.2 A Preliminary Review of the Implementation

Under India's Chairmanship in 2016, the CGETI (Contact Group on Economic and Trade Issues) convened and prepared for the 6th BRICS Trade Ministers' Meeting in New Delhi; the Trade Ministers' Meeting adopted a series documents, including Framework on Trade in Services Cooperation, Framework on MSMEs Cooperation, Cooperation Framework on Single Window, Framework on Standardization Cooperation; established new cooperation mechanisms on Intellectual Property Rights (IPRs), trade promotion, etc, and approved their mandates.

Under China's Chairmanship in 2017, the CGETI convened respectively in March, May and July in Beijing and Shanghai, with focuses upon trade facilitation, investment facilitation, trade in services, e-commerce, IPRs, economic technological cooperation, supporting the multilateral trading system, etc. The CGETI Meetings discussed new areas of cooperation such as regulatory impact assessment and women economic empowerment, proposed by Russia. The 7th Trade Ministers' Meeting achieved substantial outcomes, and adopted Terms of Reference of BRICS Model E-Port Network, Outlines for BRICS Investment Facilitation, BRICS Trade in Services Cooperation Roadmap, BRICS E-commerce Cooperation Initiative, BRICS IPR Cooperation Guidelines, Framework on Strengthening the Economic and Technical Cooperation for BRICS Countries etc.

Specifically speaking, to achieve the objectives in the BRICS Strategy, BRICS countries has made much progress and gained proportionate achievements. In the following aspects, the BRICS trade and investment cooperation speed up with uttermost incentives:

- Institutionalization of the BRICS trade and investment cooperation has been accelerating, with the annual meetings among ministers, high-level officials and experts, which promoted BRICS cooperation especially in the fields of trade

facilitation, investment facilitation, trade in services, e-commerce, IPRs, economic technological cooperation, etc.

- BRICS trade and investment cooperation emphasized the pragmatic cooperation coordinated collective efforts in arranging dozens of exhibitions, conferences, round tables and business missions on a regular basis with a view to establish partnerships, initiate projects and inform partners on available business opportunities, including exploring possible joint exhibition of BRICS countries in international trade fairs and organizing annual BRICS Trade Fairs, with the latter started under Indian Chairmanship and expanded under Chinese Chairmanship this year. The BRICS business and investment circle are active in participating those bilateral and multilateral programs and BRICS Business Council plays an important role in organizing and coordinating those activities.

- Exchanges on BRICS countries' domestic investment policy and on approaches to investment agreements have been enhanced, thanks to the detailed and comprehensive introduction by the experts' meetings and policy dialogues and exchanges conducted by working groups and contact groups.

- Cooperation on data and information sharing, collection, and analysis among BRICS national statistical authorities have been implemented for years, and cooperation on specific business data and information has been enhanced through BRICS business circles, Business Council, the Information Exchange and Sharing Platform, as well as some commercial platforms such as the EPEC.

- Exchanges on BRICS countries' experience on programmes directed towards the integration of targeted groups (such as youth, women, socially and economically disadvantaged strata and people with disabilities) and rural communities into the mainstream economy have been enhanced with the introduction of BRICS Public-Private Dialogue “Women and Economy” to provide with the opportunity to share experience, good practices and success business stories that can serve as useful examples for motivating BRICS women and increasing their participation in the economy.

Furthermore, with the guiding of the BRICS Strategy, it is inspiring that BRICS countries have embarked on paying more efforts to push forward the following cooperation, especially under China's Chairmanship in 2017. Following fields have witnessed institutionalized cooperation, while more efforts needed in the future.

- With the Terms of Reference of the BRICS Model E-Port Network and the BRICS Model E-Port Network, BRICS countries encourage further information sharing and capacity building on E-Ports construction and operation to improve connectivity through activities such as expert dialogues and workshops.

- With the Outlines for BRICS Investment Facilitation, they identify some of the existing good practices including enhancing transparency, improving efficiency and exploring potential cooperation through information sharing, discussions and exploration on a voluntary basis, including national Investment Promotion Agencies, in line with their domestic legislation and regulations, specific circumstances, priorities and capabilities.

- With the BRICS Trade in Services Cooperation Roadmap, they are committed to strengthening cooperation on information sharing, coordination and promotion, as well as capacity building. The Roadmap will endeavor to enhance cooperation, including exchange of information and promote and facilitate trade in services cooperation among BRICS countries.

- With the BRICS E-commerce Cooperation Initiative, they will jointly enhance cooperation on policy sharing, information exchange including on best practices, and capacity building in order to optimize e-commerce development environment and better leverage the e-commerce opportunities. BRICS countries agree to establish the BRICS E-commerce Working Group and advance the cooperation guided by the adopted Terms of Reference.

- With the BRICS IPR Cooperation Guidelines, they will take concrete actions to promote information exchange, coordination and synergy with cooperation activities among BRICS IP Offices (BRICS HIPO), and capacity building on IP, in particular with a view to improve public IP awareness and promote economic and trade cooperation among BRICS countries.

- With the Framework on Strengthening the Economic and Technical Cooperation, BRICS Countries will conduct economic and technical cooperation and capacity building in areas of trade, investment facilitation, e-commerce, intellectual property rights, trade in services, and other related areas. They are willing to make concerted efforts to mobilize more resources to support capacity building programs and encourage BRICS countries to take individual and collective actions, on a voluntary basis, to provide assistance and contribution.

- With the Strategic Framework of BRICS Customs Cooperation, BRICS

Customs administrations agree to share experience and practices in the implementation of the World Trade Organization (WTO) Trade Facilitation Agreement (TFA), support initiatives by BRICS Customs administrations in other multilateral and regional frameworks, promote mutual recognition of Authorized Economic Operator (AEO) programs, cooperate to ensure expeditious customs clearance for goods, and enhance the use of information technology in customs cooperation.

In some sectors, more efforts are needed to facilitate the implementation of the BRICS Strategy with a view to make trade and investment cooperation more balanced and sustainable.

- MSMEs are playing important roles in the economic development and mutual cooperation for BRICS countries. More efforts are called for BRICS countries to encourage respective Ministries, agencies and organizations responsible for MSMEs to promote their mutual exchanges and cooperation for facilitating innovation, technology transfer, research and development, including organization of joint international seminars, forums, conferences, fairs, etc.

- Exploring opportunities to identify and harness marine and coastal economic resources which are likely to be economically viable, socially acceptable and environmentally sustainable.

- Infrastructure are essential for economic growth and social welfare of BRICS countries, and it is significant for them to explore the possibility of implementing co-financed projects, including regional projects aimed at infrastructure development, which could provide more incentives to solidify the BRICS trade and investment cooperation.

- Talents are indispensable for the long-term BRICS economic cooperation, it is above all necessary to develop programmes for young entrepreneurs and scientists of BRICS countries, particularly in the areas of technology and innovation.

In some other fields, BRICS countries should start their cooperation to catch up with the overall progress of BRICS trade and investment cooperation.

- Promoting cooperation on Special Economic zones, and facilitate attracting and promoting investment into Special Economic Zones within BRICS countries.

- Encouraging trade and investment links between BRICS countries with an

emphasis on promoting market access on goods and services and supporting industrial complementarities, sustainable development and inclusive growth.

- Creating favorable conditions for development of mutual trade and foreign direct investment in BRICS countries.

II.1.3 Progress of Implementation

Concrete and fruitful pragmatic cooperation has been conducted by BRICS countries to meet the goals set up by the BRICS Strategy in past years.

- Russia hosted BRICS Seminar on Single Window for Trade Facilitation in December 2015.

- India hosted the First BRICS Trade Fair in New Delhi in 2016 , and BRICS authorities in charge of trade promotion sent delegations to attend the Fair.

- India hosted a number of joint events at the level of BRICS IP Offices, including BRICS Intellectual Property Examiner Training Seminar (20-24 February 2017, Nagpur), BRICS Intellectual Property Coordination Group Meeting (22-23 February 2017, Nagpur), as well as the Meeting of BRICS Heads of Intellectual Property Offices (6-7 April 2017, New Delhi) focused on further cooperation in the fields of training of IP Offices' staff and examiner exchange, promotion of IP public awareness and patent information exchange, development of IP and patent processes and procedures, IP strategies for SMEs and collaboration in international forums.

- Russia hosted the 6th International Law Forum in St. Petersburg in May 2016, and BRICS countries exchanged ideas on competitiveness cooperation, with focuses upon sectors such as automobile and medicine.

- China hosted Expert Dialogue on BRICS Model E-Port Network in May 2017.

- China hosted Expert Dialogue on BRICS E-Commerce Cooperation in May 2017.

- In May 2017, China hosted the 1st BRICS IPRs Cooperation Mechanism Meeting, and BRICS countries exchanged views on the principles to push forward IPRs cooperation and annual action plan.

- Russia hosted the First International Women's Congress of the Shanghai Cooperation Organization and the BRICS Member States and the First BRICS Public-Private Dialogue "Women and Economy" in July 2017.

- BRICS countries cooperated in the Project Promoting the MSMEs Development and Cooperation between China and other BRICS Countries launched by the UNIDO.

- The BRICS Statistical cooperation mechanism has developed well. In March 2017, Technical Meeting of the National Statistical Offices of BRICS Countries was held in Shanghai; and the Meeting of the Heads of National Statistical Offices of BRICS Countries will be held in Hangzhou in September 2017.

- The BRICS National Statistical Offices release the BRICS Joint Statistical Publications annually, and the 2017 edition will be published in late August 2017. Some indicators on the sustainable development goals (SDGs) will be added into the 2017 edition as an essential component to monitor the implementation of SDGs.

- The Action Plan for the Implementation of the Agreement between the Governments of the BRICS States on Cooperation in the Field of Culture (2017-2021) signed in July 2017 encourages BRICS countries to cooperate across creative and commercial sectors including performing arts, visual arts, music, gastronomy, fashion, literature, yoga, animation and games, new media, cultural and creative merchandise development, design and digital content, to exchange information on cultural industry development and cultural market of BRICS countries, and to build platforms for the networking and cooperation among BRICS creative sectors.

- In July 2017, China organized the Meeting of BRICS Customs Cooperation Committee in Brussels. BRICS countries approved the Strategic Framework, and reached consensus on making contributions, including the Strategic Framework, to the 9th BRICS Summit. They also decided to enhance connectivity in accordance with the principle of “wide consultation, joint contribution and shared benefits” in pursuit of upgraded policy consultation, information communication and procedure connectivity among the BRICS countries and customs-to-customs exchanges, and agreed to accelerate the negotiation on the BRICS Customs Mutual Assistance Agreement.

- In 2017, the BRICS Business Council (BRICS BC) drafted the Joint Declaration of BRICS Business Council on Regulatory Cooperation on Standards.

- The BRICS BC introduced the EPEC developed by Sinopec Group to the BRICS enterprises, and plans to develop the EPEC into an e-commerce platform for BRICS industrial products; by July 31st 2017, the EPEC has 39,000 registered companies, 1.98 million products in the Chinese website, with transaction amount 135.4 billion RMB. The e-commerce platform is now open to the BRICS companies to register. In June 2017, the English website of the EPEC has started operation. The BRICS BC set up a task force to introduce the EPEC to the BRICS companies.

- In 2015, the BRICS BC posted the official investment guides of each BRICS

countries on the BRICS Information Sharing and Exchange Platform. In July 2017, the BRICS BC released a BRICS Investment Guide, which collects the latest and existing investment policies promulgated by the BRICS governments.

- In August 2017, the BRICS BC and NDB agreed on an MOU on the strategic cooperation between BRICS BC and NDB.

- In June 2017, the BRICS BC, Bank of China, and Tianjin Municipality, China hosted the “2017 Tianjin (China) and BRICS High-tech SME Cross-border Investment and Trade Cooperation Conference”. 600 SMEs from BRICS countries and other countries participated in the conference and around 200 cooperation agreements or intention was reached during the conference.

- In July 2017, the BRICS BC hosted the BRICS Digital Economy Symposium in Shenzhen, and experts from BRICS countries exchanged their experience and views in developing digital economy.

- The BRICS BC opened an additional column on digital economy on the BRICS Information Sharing and Exchange Platform.

II.2 Manufacturing and Minerals Processing

III.2.1 Backgrounds

Considering its function in accelerating economic growth, changing structure of the economy, creating new jobs, raising quality of labour and living standards, the manufacturing sector is considered by BRICS countries as one of the most important cooperation area. Growth in production and export of value added goods would provide BRICS countries with an opportunity to gain greater benefits from international cooperation and enhance their roles in global value chains and raise the level of their competitiveness.

Economic growth attributed to the development of industry and mining will also facilitate the strengthening of economic ties among BRICS countries. It will be based on the development of advanced technologies, innovations as well as downstream value addition through the engagement of public and private sectors as appropriate in the implementation of national development programs, as well as international industrial cooperation and partnerships in BRICS countries.

II.2.2 A Preliminary Review of Implementation

BRICS countries accelerated their interaction aimed at technological and industrial development to push forward their manufacturing and mining cooperation, which is fresh but significant for the BRICS Strategy.

- Cooperation has been broadened in the field of technical and vocational education and training (TVET), including educational exchange, on-site training, joint programs in high-tech engineering industries and engineering as well as management to develop a joint expertise on management and technical studies in a multicultural perspective.

- With the development of the BRICS Consolidated Technology Platform introduced by UNIDO/BRICS project, progress has been made in cooperation in developing new hi-tech engineering industries and innovation, cooperation in the development of technologies, capital goods and machinery related to manufacturing and minerals processing, as well as cooperation in creating favorable conditions for BRICS countries to enhance mutual supplies of modern equipment necessary for the development of hi-tech industries.

BRICS countries begin their dialogue in the optimal use of value chains, but more practical cooperation are urgent in the need, including but not limited to following areas:

- Strengthening cooperation in raising the technological level of traditional industries, creating BRICS industrial parks and clusters, etc.
- Attracting and guiding investments of BRICS countries to minerals processing and machinery and equipment manufacturing.
- Joint development and application of clean and environmentally friendly industrial technologies.
- Promotion of beneficiation of minerals and metals at source for use in traditional and new hi-tech industries.

II.2.3 Progress of Implementation

To achieve the goals set by the BRICS Strategy with regards to manufacturing and mining cooperation, BRICS countries conducted a series of activities, signed various cooperation agreements. The major pragmatic progress could be summarized as follows.

- The 1st BRICS Industry Ministers' Meeting was hosted by Russia in October 2015 in Moscow, and the ministers affirmed their support to expand the BRICS industry cooperation and released the Declaration of the BRICS Industry Ministers.
- The 2nd Meeting of BRICS Industry Ministers was hosted by China in July 2017 in Hangzhou, and a series of dialogues, roundtables were organized to push forward the cooperation among the BRICS enterprises; The Action Plan for Deepening Industrial Cooperation among BRICS Countries was adopted and the priority areas for further cooperation were agreed, including strengthening cooperation in industrial capacity and in the development of new industrial infrastructure, expanding cooperation in technological development, innovation, standardization and SMEs, strengthening coordination and match-making in industrial policies and development strategies, and facilitating all-round cooperation with the United Nations Industrial Development Organization (UNIDO).
- BRICS countries signed the Framework Agreement on Manufacturing Cooperation, and conducted connectivity projects and professional education & training.

II.3 Energy

II.3.1 Backgrounds

Promoting sustainable energy production and consumption is crucial for BRICS countries' economic development. Balance of interests, transparency and predictability of supply and demand are the priority, given the unequal distribution of conventional energy sources and their limited reserves, coupled with the substantial increase in energy consumption in the developing countries.

The BRICS produces around 36% of world's energy and consumes almost the same share. The BRICS' energy cooperation would be significant for their and the global energy transformation, in addition to the climate change and sustainable development. Given the growing demand for energy sources, energy-efficient, clean, and environmentally friendly technologies, BRICS countries stress the importance of sharing experience in the areas related to energy planning, production and consumption, and promoting mutual energy cooperation.

II.3.2 A Preliminary Review of Implementation

In order to enhance their energy security, BRICS countries tend to institutionalize their energy cooperation, with focuses upon energy security, energy transformation, and research platform to share information and technologies. They address the following priority areas and gained much progress:

- Establishing regular energy dialogue between BRICS countries in order to discuss long-term and medium-term strategies and energy security issues.
- Enhancing awareness of the needs of the energy-producing and energy-consuming countries, rendering mutual support for diversification of energy supplies, etc. with the initiative to form a BRICS Energy Alliance.
- Introducing environmentally friendly technologies of energy production, storage and consumption; increasing energy efficiency, including joint development and sharing of energy efficient and cleaner energy technologies.
- Conducting research and development (R&D) and studies on advanced energy technologies in sectors of mutual interest which contribute to increase in energy efficiency, furthermore, they broaden their cooperation in the field of educational

programs, exchange of information on national policies and practices, organizing conferences, exhibitions, workshops and seminars, esp. by means of bilateral or multilateral training programs.

- Exploring ways of exchanging statistical data and development of the national energy systems, as well as information on best practices and energy regulatory frameworks. The initiative to establish a BRICS Energy Research Cooperation Platform has been proposed and discussed.

On the other hand, BRICS countries should pay more attention to the following aspects, and stronger financial and policy supports are needed to push forward the BRICS energy cooperation emphasized by the BRICS Strategy:

- Promoting universal access to energy and expand long-term energy supplies for BRICS countries as well as other emerging markets and developing countries, which in turn are essential for the world energy security.

- Promoting the use of renewable sources of energy; promote efficient and environmentally friendly use of fossil fuels in BRICS countries, including through cooperation in exploration and development of technologies aimed at hard-to-recover resources extraction.

- Strengthening cooperation between public and private sector to stimulate investment in energy efficient technologies; accelerating the development as well as transfer of energy efficient and environmentally friendly technologies and equipment.

II.3.3 Progress of Implementation

BRICS countries conducted a series of cooperation activities, established and improved the energy cooperation mechanism, and held policy dialogues to deepen mutual understanding, gather consensus and explore cooperation potentials, etc.

- Establishing and improving the BRICS Energy Cooperation Mechanism. In November 2015, the BRICS Energy Ministers' Meeting was held in Moscow, which laid the framework for energy cooperation among BRICS countries, and the ministers signed the MOU on Energy Conservation and Energy Efficiency among the BRICS Agencies in Charge of Energy Conservation and Energy Efficiency. The meeting proposed to set up the BRICS Energy Efficiency Working Group.

- Promoting the BRICS Energy Efficiency Policy Exchanges. During the 1st Meeting of the BRICS Energy Efficiency Working Group in India in July 2016 and

the 2nd Meeting in Beijing in June 2017, BRICS countries exchanged their experiences in energy efficiency, energy production, storage and consumption.

- Pushing forward the BRICS cooperation on energy conservation. BRICS countries coordinated to establish the BRICS Energy Conservation Technology Database.

- The 2nd BRICS Energy Ministers' Meeting was hosted by China in June 2017 and adopted the Declaration. The Meeting was conducted with concentrations on energy security, renewable and clean energy development, energy transition and BRICS energy research cooperation platform.

II.4 Agricultural Cooperation

II.4.1 Backgrounds

BRICS countries as large agricultural producers play an important role in the global agriculture market and provide a fundamental contribution to food security and nutrition, given that a sizable majority of the 209 million people who have been lifted out of food insecurity in the past two decades reside in BRICS countries.

Agricultural cooperation among BRICS countries will strengthen world food security through sustainably increasing agricultural production and raising the level of productivity in agricultural sector, providing better investment conditions and transparency of the markets, promoting better living standards and access to food for people of all five countries.

II.4.2 A Preliminary Review of Implementation

BRICS cooperation in food security, nutrition and agriculture development has gained much progress in five priority areas: development of a general strategy for ensuring access to food for the most vulnerable population; trade and investment promotion; Basic Agricultural Information Exchange System; agricultural technology cooperation and innovation; reduction of negative impact of climate change on food security and adaptation of agriculture to climate change.

- BRICS agriculture cooperation emphasized the institutionalization with the annual meeting of the Agriculture Ministers, and the Experts' Meeting. They are pushing forward to establish a BRICS Agriculture Research Platform to facilitate their exchanges of experience in public policies and programmes for food security and nutrition and the strengthening of family farming, as well as food safety. Cooperation has been enhanced on information exchange and experiences sharing concerning relevant national policies, programs, plans and climate change adaptation and mitigation strategies. BRICS countries work towards the development of a Basic Agricultural Information Exchange System.

- Cooperation in multilateral organizations has been facilitated, eg., maintaining coordination and dialogue on issues discussed by the FAO governing bodies on information systems such as Agricultural Marketing Information System (AMIS) and

on cooperation in the humanitarian field of food assistance, as well as on issues discussed at the Committee on World Food Security.

- BRICS countries emphasized the agricultural trade and investment promotion and organized a series of agriculture fairs, expos, promotion events in recent years.

- In era of technology, BRICS countries enhance their cooperation in the areas of agricultural science, technology, innovation and capacity building, including technologies for smallholder farming aiming at increasing productivity and sustainability of agricultural production.

II.4.3 Progress of Implementation

BRICS countries pushed forward cooperation in areas of food security, nutrition and agriculture development with abundant policy coordination, concrete programs, guided by the BRICS Agriculture Cooperation Action Plan (2012-2016).

- In order to design the comprehensive food security strategy for the most vulnerable population, Brazil provided a questionnaire on food security and nutrition safety to advance public policy making on supporting family farming. Based upon BRICS countries' feedbacks, Brazil designed the proposal strategy.

- In March 2015, the 4th BRICS Agriculture Ministers' Meeting was held in Brazil with an focus on food security. Brazil organized Public Policy Seminar on Food Security, Nutrition Safety, and Family Farming, to enhance BRICS countries' coordination within FAO and in other multilateral fora and institutions.

- In October 2015, Russia hosted the 17th Golden Autumn Agriculture Trade Expo during the 5th BRICS Agriculture Ministers' Meeting. In the framework of this Exhibition a separate stand of BRICS countries was organized. Moreover, Russia hosted the BRICS Agriculture Trade and Investment Forum, and all BRICS countries participated actively.

- In July 2015, India initiated to establish the BRICS Agriculture Research Center (BARC) during the Ufa Summit and BRICS countries exchanged ideas on the BARC.

- In 2015, BRICS countries agreed on the Proposal to Establish the BRICS Agricultural Information Exchange System, which covers major agriculture products, cash crops, aquatic products, and the quantitative (BRICS countries' basic economic and social information, agriculture products volume, consumption, trade and market prices) and qualitative (agriculture development policies, agriculture products trade policies, agriculture technology) contents.

- In June 2016, India hosted the 6th BRICS Agriculture Ministers' Meeting in New Delhi. The Meeting agreed to establish a BRICS Agriculture Research Platform, and designated India to coordinate its establishment to push forward BRICS countries' agriculture research exchanges and cooperation.

- In June 2017, China hosted the 7th BRICS Agriculture Ministers' Meeting in Nanjing, during which the BRICS Agricultural Development Report 2017 was released. The meeting also reviewed and approved the Action Plan 2017-2020 for Agricultural Cooperation of BRICS Countries which will steer further cooperation among BRICS members with identified priorities and detailed programs. The BRICS Agricultural Cooperation Forum was held together with the ministerial meeting.

II.5 Science, Technology and Innovation

II.5.1 Backgrounds

Science, Technology and Innovation play an important role in simultaneously achieving economic growth, social inclusiveness and environmental protection and preservation. BRICS countries have a solid foundation for the formation of scientific and technological capacity for creating knowledge-based economies, whose drivers are science, technology and innovation, thus expanding cooperation in joint research, design, development, manufacturing and promotion in the field of high-technology products. Based on years of cooperation, BRICS countries began to build consensus that cooperation in this area should be focused on sharing and exchanging information of science, technology and innovation policies and strategies; leveraging contacts and programmes aimed at enhancing collaborative innovation projects; and the formulation of joint long-term cooperation programmes. Cooperation should be based on principles of voluntary participation, mutual benefit, equality and reciprocity.

II.5.2 A Preliminary Review of Implementation

BRICS countries are important players in science and technology competition on the world arena, and they would facilitate their domestic STI development with the multilateral platform. Their STI cooperation has gained much progress, and a series of goals set in the BRICS Strategy have been achieved.

- The BRICS STI cooperation improved its institutionalization, with the function of the STI Ministers' Meeting and a number of working groups. They facilitate information sharing and joint researches in areas of mutual interests.

- The MOU on STI Cooperation adopted in 2015 played an important role in guiding overall cooperation covering sustainable agriculture, food security, natural disasters, water resources and pollution treatment, new and renewable energy, energy efficiency, space research, geospatial technology, medicine and life sciences, new materials and nanomaterials, photonics, information and communication technology, ocean and polar sciences, etc.

- During the last 2 years, BRICS Research and Innovation Initiative is being implemented effectively due to the comprehensive *BRICS STI Work Plan 2016-2018*, which is updated annually.

- The development and implementation of the BRICS STI Framework Programme on multilateral research funding through joint calls allows to meet the challenges which can be best addressed by a multinational approach.

- The BRICS Working Group on Research Infrastructure and Mega-Science contributes to reinforce the BRICS Global Research Advanced Infrastructure Network (BRICS-GRAIN), which is aimed to make infrastructure facilities open for BRICS researchers in order to expand and strengthen STI cooperation.

- The member countries agreed to exchange ideas on the BRICS Technology Transfer Network (TTN), which recognizes the importance and centrality of knowledge and technology transfer as the means of mutually empowering BRICS member countries being an effective mechanism that enhance technology and knowledge transfer amongst the member countries.

- Under China's Chairmanship in 2017, BRICS countries adopted the BRICS Action Plan for Innovation Cooperation. They agree to promote entrepreneurship and build platforms in BRICS countries and mainly collaborate in technology cooperation, technology transfer and translation, science and technology parks, youth innovation and entrepreneurship and in fostering strategic and long-term university-industry partnerships so as to build sound ecosystems for innovation and entrepreneurship.

- They encourage the multilateral cooperation among the BRICS researchers, and sponsored their transnational research cooperation with the BRICS programs sponsored by the relevant ministries, scholarship administrations, and funding institutions, etc.

- BRICS countries gained much progress in aerospace cooperation, with concrete programs such as the BRICS Remote Sensing Satellites Galaxy, with the guidance of the cooperation mechanisms, and working groups; it facilitates the exchange of information on policies and programmes and promotion of innovation and technology transfer.

Compared with the purposes in the BRICS Strategy, BRICS countries should make more efforts in the following fields:

- Science popularization and support for young scientists.
- Developing global research advanced infrastructure network. High tech zones/science parks and incubators.
- Creating BRICS technology transfer network.

II.5.3 Progress of Implementation

- A BRICS + UNIDO + Eurasian Economic Union meeting was convened in October 2015 by the BRICS Industry Ministers, and the Ministers exchanged ideas on technical innovation. The UNIDO introduced the Initiative to Establish a BRICS Shared Technical Platform.

- The BRICS STI Ministers held meetings in February 2014, March 2015, October 2015, October 2016 and July 2017 respectively. During the 2nd Meeting, BRICS countries signed an MOU on the BRICS STI Cooperation, which provided a guiding framework for future STI cooperation.

- In July 2015 Russia hosted the first BRICS STI Funding Parties Meeting aimed at introduction of BRICS Research and Innovation Initiative for multilateral research funding.

- In January 2016, China hosted the BRICS STI Funding Parties' Meeting and Working Group Meeting. Following the outcomes of the Meeting, eight research funding agencies from BRICS countries signed the Arrangements of BRICS STI Framework Programme together with its Implementation Plan, which provided a guiding document for supporting multilateral research programs among BRICS countries.

- In May 2016 first coordinated call for proposals in ten priority thematic areas was launched under the BRICS STI Framework Programme with Russia acting as a Call Secretariat. The call generated great interest among the BRICS research communities with 320 proposals submitted in response to the call.

- South Africa hosted the 3rd BRICS STI Funding Working Group Meeting in May 2017 for discussion and negotiation on the approval of the first set of projects to be funded under the BRICS STI Framework Programme and the second call for proposals. 26 projects with duration for 3 years were selected for support with start of funding in 2017.

- In January 2017 India hosted the 2nd Meeting of BRICS Geospatial Working Group.

- In April 2017 China hosted the 1st Meeting of BRICS Working Group on ICT and High Performance Computing.

- In June 2017 China hosted the 4th Meeting of BRICS Working Group on Solid State Lighting.

- In July 2017, China hosted the 5th BRICS STI Ministerial Meeting. The Ministerial Meeting focused on the innovation platform building, technical cooperation among the enterprise, technology transfer, science park cooperation, youth innovation and entrepreneurship, etc.

- The 2nd BRICS Young Scientist Forum was held from July 11st-15th 2017 in Hangzhou as a side event of the 5th BRICS STI Ministerial Meeting.

- India hosted the 1st meeting of BRICS Science and Technology Driven Entrepreneurship and Innovation Partnership in April, 2017, and endorse the Term of Reference of the BRICS Working Group on Science Technology, Innovation and Entrepreneurship Partnership (STIEP)

- Russia hosted the 1st Meeting of the BRICS Working Group on Research Infrastructure and Mega-Science Projects. The major outcome of the 1st BRICS WG RI meeting is that GRAIN was set up to open the window of opportunities for leading researchers. Now it is necessary to support the development of BRICS GRAIN Road Map of 2017-2020, enhance communication and cooperation with working groups of thematic areas, thus identify potential areas or projects from BRICS GRAIN. The 2nd meeting is to be held in Brazil in 1st quarter of 2018.

- In August 2015, China National Space Administration initiated to co-build the BRICS Remote Sensing Satellite Galaxy and set up the remote sensing satellite data-sharing mechanism, to tackle with the challenges such as the global climate change, natural disasters, and environmental protection.

- In February 2016, the BRICS Aerospace Administration set up the remote sensing satellites galaxy cooperation working group, and the Working Group held its 1st meeting in Vienna and reached consensus on the composition of the BRICS remote sensing satellites. BRICS countries agreed to sign the Cooperation Agreement on the BRICS Remote Sensing Satellites Galaxy; In February 2017, China proposed to contribute one more satellite; In June 2017, Russia proposed to contribute one more land station, with 5 satellites and 5 land stations as the 1st phase of the BRICS Remote Sensing Satellites Galaxy.

- In October 2016, China National Aerospace Administration hosted the 1st meeting of the BRICS Heads of aerospace administration in Zhuhai, and the BRICS heads agreed to establish the BRICS Aerospace Cooperation Mechanism and reached consensus on the remote sensing satellites galaxy; the BRICS aerospace delegations visited the Wenchang Satellite Launch Center in Hainan Province, and it is the first

time for the international guests to visit the Wenchang Center.

- In February 2017, the 2nd meeting of the BRICS Remote Sensing Satellite Galaxy Working Group was held in Vienna, which focused upon the negotiations of the Cooperation Agreement. In May 2017, the BRICS aerospace administration agencies reached consensus on the Cooperation Agreement.

- In February 2017, China National Aerospace Administration proposed the preliminary plan of the future function rules based upon the BRICS Remote Sensing Satellites Galaxy to the aerospace administration agencies of other BRICS countries, and it initiated to construct the remote data exchanging cloud platform for the BRICS Remote Sensing Satellites Galaxy. All of the BRICS counterparts agreed to exchange the data as soon as possible, so as to facilitate the concrete cooperation among the BRICS aerospace administration agencies.

II.6 Financial Cooperation

II.6.1 Backgrounds

Financial cooperation has long been one of the priorities of BRICS cooperation and has made milestone achievements like New Development Bank (NDB) and Contingent Reserve Arrangement (CRA). BRICS countries all emphasized the importance of further strengthening policy coordination and using all policy tools—monetary, fiscal and structural—individually and collectively to achieve the goal of strong, sustainable, balanced and inclusive growth. They also commit to oppose various forms of protectionism, and urged advanced economies to adopt responsible macro-economic policies and minimize possible negative spillovers.

II.6.2 A Preliminary Review of Implementation

Financial cooperation is the starting point for BRICS cooperation, and has always been the focus in the past decade. BRICS financial cooperation strengthened the BRICS cooperation with their outstanding and concrete multi-layered cooperation.

- In face of significant financing constraints to address infrastructure gaps and sustainable development need, BRICS countries established the NDB, with the purpose of mobilizing resources for infrastructure and sustainable development projects in BRICS and other emerging markets and development countries. They have approved the first set of loans by NDB, particularly in the renewable energy projects in BRICS countries. And the bank has also issued the first set of green bond in RMB.

- BRICS countries established the CRA with an initial size of 100 billions USDs, with the aim of helping members forestall short-term liquidity pressures, promoting further BRICS cooperation, strengthening the global financial safety net and complementing existing international arrangements. With joint efforts of five countries, the CRA is now ready for operation.

- They succeeded in reforming the quota-distribution and voting of the IMF and World Bank Groups, and obtained big share for BRICS countries.

- They conduct institutionalized exchanges and cooperation with regards to fiscal, monetary, finance, tax policies with the meetings among finance minister, central banks governors, heads of tax administration, etc.

- With the guiding of the BRICS Strategy, it is inspiring that BRICS countries

have embarked on paying more effort to push forward cooperation in expanded areas, especially under China's chairmanship in 2017. They have started institutionalized cooperation in fields as consultations on the development of Public Private Partnership (PPP), BRICS Local Currency Bond Fund (BBF), the network of financial institutions and the coverage of financial services, development of the NDB. Including the establishment of the Project Preparation Fund (PPF) and the opening of the African Regional Centre (ARC) of the NDB, international convergence on accounting standards and equivalence on auditing oversight, tax cooperation, currency cooperation and cooperation in anti-money laundering and combating the financing of terrorism.

II.6.3 Progress of Implementation

Financial issues are an important area of cooperation between BRICS countries and most of them are considered in the framework of the BRICS Finance Ministers and Central Bank Governors' process. In the past years, BRICS countries pushed forward the financial cooperation with concrete policy coordination, a series of consensus, and pragmatic activities.

- Under the BRICS Finance Ministers and Central Bank Governors Meeting Mechanism, members discussed various issues including macro-economic situation and policy coordination, coordination on G20 financial issues and practical financial cooperation, with the aim to enhance voice and representation of BRICS countries and EMDCs in Global Economic Governance and create a solid foundation for financial cooperation.

- Finance Ministers and Central Bank Governors held two meetings under the India's Chairmanship in 2016. The first BRICS FMCBG meeting was held on April 14 in Washington D.C., U.S. in the margins of the World Bank and IMF Spring Meetings. The second BRICS FMCBG meeting was held on October 14, 2016 in Goa, India in the margins of the Goa Summit.

- Three meetings were held under the China's Chairmanship in 2017. The first BRICS FMCBG Meeting was held on March 17 in Baden-Baden, Germany in the margins of G20 FMCBG Meeting. The BRICS Finance and Central Bank Deputies Meeting was held on April 20 in Washington D.C., U.S. in the margins of the World Bank/IMF Spring Meetings. The second BRICS FMCBG Meeting was held on June 19 in Shanghai China.

- In 2016, the New Development Bank (NDB) approved 7 loaning projects in BRICS countries, and the amount of the total loan commitments reached to 1.55 billion USDs; 6 of the 7 projects supported renewable energy, and one project financed the infrastructure construction.

- The Board of Directors of the NDB approved the Operational Plan in 2017, and the NDB is planning to finance 15 new projects, with the amount of the total commitments at around 2.5 billion USDs.

- The Board of Governors of the NDB approved the first General Strategy of the NDB recently in 2017. The total annual portfolio of NDB in 2021 is estimated to reach 10 billion to 15 billion USDs, and 2/3 of the projects will support sustainable infrastructure.

- The NDB develops cooperation partnership with other multilateral financing institutions since its official operation in 2015. So far, the NDB has signed MOU on cooperation with the major global multilateral development financing institutions, such as the World Bank, Asia Development Bank (ADB), European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), Asia Infrastructure Investment Bank (AIIB), Eurasian Development Bank (EDB), etc., and they will cooperate with each other in joint-financing, information-sharing, personnel-exchanges, etc.

- In August 2017, the African Regional Centre (ARC) of NDB was set up, which means the development of NDB has ushered in a new stage.

- In 2015, the 1st Meeting of the Governing Council of the BRICS CRA approved the BRICS CRA Governing Council Procedural Rules (GCPR) and Standing Committee Procedural Rules (SCPR).

- In February 2016, the CRA Standing Committee approved the Standing Committee Operational Procedures for Instruments (SCOPI) that sets out operational procedures for liquidity and precautionary instruments.

- In March 2016, all CRA member central banks established the relevant swap accounts with each other, which made the CRA ready for operation.

- In 2016, the 2nd Meeting of the Governing Council of the BRICS CRA reviewed the Readiness of the CRA and reiterated the need to establish the macroeconomic exchange system of information.

- In 2017, the 3rd Meeting of the Governing Council of the BRICS CRA agreed that the CRA System of Exchange in Macroeconomic Information (SEMI) template

was a good start to enhance research capacities of the BRICS central banks and should be updated on a regular basis.

- BRICS countries cooperate with each other to reform the IMF. The 2010 Reform Proposal on Quota and Governance has come into force, and the quota of the IMF was doubled, with a total 6% share transferred to the robust emerging and developing countries. The votes of China, Russia, Brazil, and India was increased and reached a total of 14,18%, which together with South Africa votes (14,81%) is moving us near blocking share of votes.

- In November 2015, Russia hosted the 3rd Meeting of BRICS Heads of Revenue in Moscow.

- In May 2016, China hosted a meeting of the BRICS Heads of Tax Authorities during the Plenary of Forum on Tax Administration (FTA).

- In December 2016, India hosted the 4th Meeting of BRICS Heads of Revenue in Mumbai. The Meeting of BRICS Heads of Revenue reached consensus to strengthen the BRICS tax cooperation, and all members agreed to implement the G20's consensus on tax governance and help the developing countries to improve their taxation capacity.

- Since the 1st Meeting of BRICS Experts on Tax Matters held in 2015, BRICS countries established an Annual Meeting Mechanism of BRICS Experts on Tax Matters; and the Meeting of BRICS Heads of Revenue in December 2016 agreed to prolong the period of Experts Meeting from half a day to 2 or 3 days, so as to strengthen the coordination and exchanges at the working level.

- In July 2017, China hosted the 5th Meeting of BRICS Heads of Tax Authorities in Hangzhou together with an Experts Meeting. The Heads Meeting signed the Memorandum of Cooperation between the BRICS tax authorities (MOC); BRICS countries will strengthen their coordination and exchanges in global economic governance, push forward the capacity building cooperation, enhance information and experience sharing, and conduct various kinds of cooperation including the taxation reforms, taxation administration, and capacity building.

- With joint efforts of BRICS countries and other parties, the World Bank Group conducted a periodical shareholding review of the International Bank of Reconstruction and Development (IBRD) and the International Financial Company (IFC) in 2015 and defined a roadmap to implementation of the review, including to develop a Dynamic Formula by the 2016 Annual Meeting, and make decisions on

whether to increase the capital of IBRD and IFC in 2017. So far, the Dynamic Formula was completed, and member countries are negotiating the shareholding distributing rules and capital increase scale.

- BRICS countries' development banks are cooperating under the framework of BRICS Financial Forum and BRICS Interbank Cooperation Mechanism. From June to July 2017, China Development Bank (CDB) hosted the 1st BRICS Financial Innovation and Common Development Training Program, with participants from other members of the BRICS Interbank Cooperation Mechanism, such as the Brazil Development Bank, the VEB of Russia, Export and Import Bank in India, Development Bank of Southern Africa, and other financial institutions of BRICS countries, such as the South Africa Industry Development Corporation (IDC), South Africa Standard Bank, and Barclay Group (South Africa), etc.

- The BRICS Interbank Cooperation Mechanism has set up 5 working groups with regards to innovation, currency guarantee, personnel training and experience exchanges, joint research on the feasibility of a BRICS joint rating institution, and emerging economies research framework, etc.

- In June 2017, the CDB hosted the Skill Group and Working Group meetings of the BRICS Interbank Cooperation Mechanism; the Skill Group Meeting negotiated the Shared Agreement on Rating Conclusion by the BRICS Interbank Cooperation Mechanism, and Agreement on Currency Guaranteeing of the BRICS Interbank Cooperation Mechanism.

- In September 2017, the CDB will host the annual conference of the BRICS Interbank Cooperation Mechanism in Beijing and the BRICS Financial Forum.

- In July 2014, the heads of the BRICS Export & Credits Insurance Institutions signed the MOU on the BRICS Export & Credits Insurance Institutions Cooperation during the 6th BRICS Summit in Fortaleza.

- In June 2017, China hosted the 3rd Head's Meeting of the BRICS Export & Credits Insurance Institutions, and the Meeting focused on the program cooperation, internet and the roles of the export & credits insurance institutions.

- In June 2017, during the 3rd Head's Meeting of the BRICS Export & Credits Insurance Institutions, the heads of the BRICS Export & Credits Insurance Institutions signed the MOU on General Cooperation with the NDB; the relevant parties will cooperate with each other on the sustainable and infrastructure projects in BRICS countries, other emerging countries and developing countries, share their information

and experiences on economy, banks, financing, investment, insurance, capacity building, etc.

II.7 Connectivity

Connectivity is an essential prerequisite for enhancing competitiveness, and should be strengthened in a comprehensive, integrated and systematic way in key areas including policy coordination, infrastructure connection, trade, financial integration and people-to-people contacts. Initiatives launched by BRICS countries are of significant importance for connectivity and have gained momentum.

II.7.1 Institutional Connectivity

II.7.1.1 A Preliminary Review of Implementation

Policy consultation and exchanges are very important, and BRICS countries accelerated the institutionalization of the BRICS cooperation to develop the institutional connectivity, with more regular meetings and institutionalized mechanisms come into being.

- Meetings in fields of trade, finance, monetary, STI, agriculture, tax, agriculture, energy, labor and employment, customs, IPR, competitiveness, etc. have been established or improved.

- Dozens of working groups and expert meetings are established to promote greater regulatory coherence and cooperation through coordination across regulatory standards, regulations, rules, policies and assessment of the impact of such regulations.

II.7.1.2 Progress of Implementation

Institutional connectivity advances regulatory and procedural cooperation and coherence among BRICS countries through addressing trade facilitation issues and improving the coherence and interoperability of institutions, mechanisms, and processes. In order to implement the BRICS Strategy, BRICS countries conducted their cooperation in this area with efforts.

- Institutionalizing the Industry Ministers' Meeting since October 2015, and introduce the UNIDO as an international partner in BRICS industry cooperation.

- The Energy Ministers' Meeting in 2015 proposed to establish the BRICS Energy Efficiency Working Group and institutionalized the Energy Ministers' Meeting since 2016.

- Establishing the BRICS Shipping and Maritime Cooperation Mechanism to promote the BRICS cooperation in fields of shipping security, marine search and escape, greenhouse emission reduction of shipping, marine education and training.
- Institutionalizing the BRICS Competitiveness Cooperation. In May 2016, Russia hosted the BRICS Competitiveness Institutions meeting, and BRICS countries signed the MOU on BRICS Cooperation on Competitiveness Law and Policy.
- Establishing BRICS Competitiveness Regulation Working Group to facilitate the technical coordination and information sharing.
- BRICS countries' development banks cooperate under the framework of BRICS Financial Forum and BRICS Interbank Cooperation Mechanism.
- Establishing the BRICS Interbank Cooperation Mechanism and set up 5 working groups with regards to innovation, currency guarantee, personnel training and experience exchanges, joint research on the feasibility of a BRICS joint rating institution, and emerging economies research framework, etc.
- Establishing the BRICS Export & Credits Insurance Institutions Forum, and this Forum is held annually, composed of the Heads' Meeting and the professional seminar of the BRICS Export & Credits Insurance Institutions.

II.7.2 Physical Connectivity

II.7.2.1 A Preliminary Review of Implementation

BRICS countries are located in four continents, and in both north and south hemispheres, as well as east and west hemispheres, in addition to the geographical obstacles such as the huge mountains and great rivers, which makes it difficult for their physical connectivity by land, sea and air. But BRICS countries strive to overcome those challenges to promote the infrastructure connectivity, and obtained much progress in the following aspects.

- They started to construct infrastructure projects such as bridges, railways, and open new flight routes between the member states, which promote their direct connection and transportation effectively.
- BRICS countries are willing to shares their information and technology on transport and logistics, esp. the railway construction, with the proposal to develop the BRICS railway research platform and network.
- They developed new international transport corridors in BRICS such as the BCIM economic corridor and supported the transport and communication

infrastructure development.

- The ICT cooperation developed fast and is now one of the most important sectors for the BRICS physical connectivity.

- BRICS countries developed many programs to facilitate the cooperation in skills training for design, construction and operation of infrastructure facilities, implementation of joint research programs in the areas of content and application development, establishment of training centers networks in the area of information and communication technologies.

Compared with the BRICS Strategy, following areas have not gained much progress as expected and more efforts are needed in the regard.

- Encouraging BRICS countries enterprises to participate in competitive bidding, including joint bids, for infrastructure development; esp. the engagement of SMEs into construction, logistics, maintenance of transportation and infrastructure facilities to address social and development challenges.

- Cooperation and promotion of technologies of traffic safety control, transportation and infrastructure design, operation and monitoring; what's more, the exchange of experiences and practices with regard to efficient city transport systems, dynamic traffic control systems, efficient freight movement systems, and passenger-friendly services, etc.

- Exchange perspectives on satisfying urban mobility needs.

II.7.2.2 Progress of Implementation

Development of safe, balanced and dynamic transnational transportation and logistics systems is essential for economic growth of BRICS countries. Efficient operation of the transportation system is crucial for international trade and integration in global production chains. Communication infrastructure, information and telecommunication technologies, as a key instrument of logistics system, also make a considerable contribution to accelerating growth and cost reduction.

The BRICS cooperation in these sectors is aimed at developing transportation and communication infrastructure and supporting mechanisms. BRICS countries have developed closer cooperation in this area to implement the BRICS Strategy.

- In May 2015, China and Brazil together with Peru signed the MOU on the Joint

Feasibility Report of the Pacific-Atlantic Railway, and by January 2017, both China and Brazil have confirmed the completion of the final report.

- The Tongjiang Bridge is the first railway bridge across the Heilong River (Amur River), and China has completed its part, in addition to that Russia is constructing its part since 2016, and the project is under construction.

- China and South Africa signed the Action Plan on Strengthening the Blue Economy Cooperation (2016-2020), and both sides emphasized maritime transportation and new projects to renew and enlarge the cargo terminals in Durban.

- Both China and India are cooperating with Bangladesh and Myanmar, to push forward the BCIM Economic Corridor, and the BCIM Working Group has convened for three times with the latest one in April 2017 in Kolkata India. Four countries reached consensus on the priority areas such as infrastructure connectivity, trade in goods and services, investment facilitation, etc. In June 2017, the BCIM expert meeting was convened in Kunming China to improve the joint research report.

- India and China are cooperating on the Delhi-Chennai High-speed Railway. China provided the Research Report on the Delhi-Chennai High-speed Railway Plan in July 2015, and the Research Report on the Delhi-Nagpur High-speed Railway Plan in December 2016.

- China and India are conducting cooperation on the Delhi-Mumbai High-speed Railway. China is proceeding with the feasibility research on the Delhi-Mumbai High-speed Railway, and by December 2016, China completed the preliminary report on the Feasibility, Midterm I Report, and Midterm II Report as well as the Research on the Lining of the Railway, the hubs of the railway, etc.

- China and India are cooperating on the Chennai-Bangalore-Mysore Railway Speed-Accelerating Projects. In September 2014, China and India signed cooperation agreements and confirmed their cooperation on this project. Chinese side has conducted field investigations on Bhubaneshwar Station, and the field investigations about this project. China completed the feasibility research report and provided the Final Report (Revised Version) to India during the 4th China-India Strategic Economic Dialogue in October 2016.

- Enhancing the establishment of BRICS Shipping and Maritime Cooperation Mechanism to promote the BRICS cooperation in fields of maritime safety, search and rescue on the sea, etc.

- In March 2017, China proposed Conceptual Document on BRICS Shipping and

Marine Cooperation, and received positive feedbacks and suggestions from Russia; So far, China is contacting with the Brazilian, Indian and South African Embassies in Beijing for their feedback and opinions.

II.7.3 People-to-people Connectivity

II.7.3.1 A Preliminary Review of Implementation

Culture

People-to-people exchanges have been emphasized by the BRICS leaders since the Goa Summit. In 2017, China made people-to-people exchanges a priority of the whole year's cooperation. With the aim of deepening friendship and mutual understanding, BRICS countries have supported friendly exchanges in various forms by different walks of life. For the first time in BRICS history, they jointly produced a film and held sports games. They also successfully held the BRICS Film Festival, High level Meeting on Traditional Medicines, Youth Forum and other colorful activities, which enhanced friendship among people of five countries and enhanced the visibility of BRICS' charm and vitality. The BRICS Cultural Festival and other activities will also be held.

More efforts should be put to promote cultural cooperation in the following fields.

- Encouraging dialogues between cultural institutes and experts specialized in cultural industry, and offer training opportunities for cultural industry professionals from BRICS countries.
- Promoting greater awareness, understanding and appreciation of each other country's culture; explore areas of practical cooperation including of implementing the Agreement between the Governments of the BRICS States on Cooperation in the Field of Culture.

Education

Being strategic partners in this regard, BRICS countries should forge close mutual links to improve the education from the earliest to the highest levels. In the past years, education cooperation focused upon the higher education, with rapid development of the BRICS University League (association of BRICS universities) and a BRICS Network University. BRICS countries emphasize the necessity to use BRICS Network University as a platform for enhancing academic mobility of the graduate students,

professors and researchers. They also aspire for fuller recognition of degrees and diplomas among BRICS countries. BRICS countries recognize importance of educational research for promoting educational quality and encourage streamlining the cooperation among educational think tanks and education researchers.

The following areas are in need of closer attention of the BRICS countries:

- Developing comparable methodologies in educational statistics.
- Sharing best practices in terms of assessing learning outcomes.
- Exchanging experience and best practices in education.
- Development of the skilled workforce needed by the BRICS industries.
- Enhancing educational cooperation to strengthen regional ties and promoting economic development through knowledge and skills transfer.
- Data sharing for measuring equity, inclusion and quality improvements based primarily on national assessments, administrative data and national household surveys as well as other data.
- Conducting joint scientific research and personnel training.
- Sharing best practices in assessing learning outcomes and report them in order to be useful for policy makers, universities and schools.
- Sharing technical expertise, building linkages and identification and collaboration in addressing gaps in the areas of skill development, curriculum development and reform.
- Sharing benchmark assessment, accreditation standards, and certification and training methods.
- Sharing best practices in areas including policies on skills development, credit framework designs, occupational standards and apprenticeship models.
- Preparing skilled workforce needed by the labour market, including through the TVET.
- Creating a working group to develop a report on the state of vocational and technical education and share concepts, methods and instruments of analysis to match demands and supply of TVET in BRICS countries.
- Carrying out joint activities on teacher training using also ICT, massive open online courses (MOOCs) and other digital initiatives.
- Creating a network of the nodal BRICS institutions for enhancing comprehensive collaboration in using ICT in education, including sharing digital

educational resources.

- BRICS countries recognize importance of using existing platforms such as BRICS Network University and BRICS University League for addressing these and other related issues of BRICS collaboration in education.

Business and Labor Mobility

BRICS countries enhance consular cooperation with each other through dialogue and consultations, so as to facilitate contacts and exchanges between the nationals of BRICS countries. It is important for BRICS countries to facilitate their visa application, and simplify the application procedures, with much progress made by the member states to issue visas with longer validity and simpler procedures. In addition, it is important to initiate the modernization of enterprises and industries including through introducing new technologies aimed at creating favorable employment opportunities. BRICS countries should pay more attention to the following purposes:

- Strengthen occupational safety.
- Ensuring the fulfillment of workers' rights and protection.

Tourism

- Taking into account the importance of the tourism in facilitating the people-to-people exchanges, much has to be facilitated by the BRICS tourism administration in the next steps.

- Engaging in initiatives in the field of human resource development and cooperation to develop, upgrade and expand tourism and travel facilities and services among BRICS countries.

- Cooperating between BRICS tourism administrations in order to ensure tourists safety on the territory of each country.

- Undertaking efforts to create favorable conditions for the public and private sectors to engage more deeply in investments in tourism and travel among BRICS countries.

II.7.3.2 Progress of Implementation

People-to-people exchanges are important basis for further and deeper BRICS cooperation. In comparison with the BRICS Strategy, BRICS countries developed people-to-people connectivity with focuses upon the cultural exchanges, education,

and business & labor mobility.

Cultural Exchanges

There is a huge potential and space for the BRICS cultural exchanges, and BRICS countries has achieved many concrete results.

- In June 2015, the 1st BRICS Culture Ministers' Meeting was held in Moscow, and the Intergovernmental Agreement on BRICS Cultural Cooperation was signed in Ufa in July 2015.

- In July 2017, the 2nd BRICS Culture Ministers' Meeting was held in Tianjin, and BRICS countries signed the Action Plan for the Implementation of the Agreement between the Governments of the BRICS States on Cooperation in the Field of Culture (2017-2021), and BRICS Alliances of Libraries, Museums, Art Museums and National Galleries, Theaters for Children and Young People were established.

Education

BRICS countries commit to attain the goals and targets of 2030 Agenda for Sustainable Development related to education to ensure equitable, inclusive and quality education and lifelong learning. They acknowledge that vocational and technical education addresses the challenge of integrating young people to the labour market and plays a critical role in preparing skilled workforce.

Being strategic partners in this regard, BRICS countries forge close links to improve the education from the earliest to the highest levels.

- In November 2015, the BRICS Ministries of Education signed the MOU on Establishing the BRICS Network University. The BRICS NU is an educational project aimed at developing, preferentially, bilateral/multilateral short-term joint training, master's and PhD programmes along with joint research projects according to common standards and quality criteria.

- The BRICS NU sets 6 cooperation priorities to push forward , namely, computer science and information security, BRICS studies, environment and climate change, economics, water resources and pollution treatment, and energy; the BRICS NU has 56 members universities.

- The overall activity of the BRICS NU is supervised by the International Governing Board (IGB) and performed in 6 International Thematic Groups (ITGs)

under coordination of National Coordinating Committees.

- During the First BRICS NU Annual Conference held at Ural Federal University (Ekaterinburg, Russia) in April 2016, the participant universities signed special Protocols of Joining BRICS NU and the first meetings of the BRICS NU IGB and ITGs were held.

- In July 2017, the BRICS NU held the 2nd annual conference in North China University of Water Resources and Electric Power, and the members signed the Zhengzhou Consensus of the BRICS NU. The BRICS NU International Governing Board adopted the BRICS NU IGB Charter and the BRICS NU International Thematic Group Statute.

- In October 2015, the BRICS Universities League was established in Beijing Normal University, which aims to provide a platform to the BRICS universities for bilateral and multilateral cooperation, in addition to promote the talent-cultivating, academic exchanges and cooperation. The BRICS Universities League focuses on conducting joint research of political and economic cooperation to promote people-to-people exchanges in the long run. So far, the BRICS Universities League has 43 member universities from BRICS countries, and has conducted various educational cooperation, covering the students exchanges, credits sharing, faculty visit and academic cooperation.

- In July 2017, the 5th BRICS Educations Ministers' Meeting was held in Beijing, and the meeting concentrated on the BRICS education cooperation from the perspective of pursuit of excellence and equality.

- China Development Bank establishes scholarship which has sponsored 13 outstanding young students from BRICS countries to come to China for further studies.

Business and labor mobility

BRICS countries cooperate with each other with regards to consular assistance and protection, so as to facilitate the passengers' mobility.

- The Sino-Russian Agreement on Facilitating the Citizens' Mobility has come into force since April 2014. Both China and Russia are proceeding with the issuance of multi-entries business visa with 5 years' validity, and multi-entries tourism visa with half year's validity.

- China and Brazil reached consensus to issue multi-entries visa with 5 years'

validity for tourism and family-visiting; China and India agreed with the MOU on issuing multi-entries visa with 3 years' validity for the resident staffs; China and South Africa has reached an agreement on the mutual exemption of visas for those who holds diplomatic and service passports, and are negotiating to sign the Agreement on Issuing Multi-entries Visa to Ordinary Passports between China and South Africa.

II.8 ICT Cooperation

II.8.1 Backgrounds

ICTs, in particular the Internet and other media, can be powerful tools to provide instruments to foster sustainable economic progress and social inclusion. BRICS countries fully recognize the significance of ICT (Information and Communications Technology) as a necessary tool for promoting the growth and development of developing countries, and further identify the BRICS cooperation framework in the ICT field as the basis for future collaboration.

II.8.2 A Preliminary Review of Implementation

BRICS countries are pushing forward cooperation in fields including B2B Engagement, R&D and Innovation, and Capacity Building, which will improve the cooperative research, trade and engagement among BRICS countries.

- BRICS countries institutionalize their cooperation on ICTs, and co-organized a series of world and bilateral internet conferences and meetings. Cooperation has been carried out or proposed in following areas as promotion of dialogue on internet governance, cooperation within BRICS and in other relevant international fora on countering the use of ICTs for criminal and terrorist purposes, protection of critical ICT infrastructure and personal information, joint research on new technologies and services of information security, communication and cooperation of BRICS on emergency response to information security issues, promotion of a peaceful, secure, open, trusted and cooperative digital and Internet space, cooperation among BRICS countries through joint development of software and equipment in the IT-sphere, and promotion of innovative telecommunication equipment, development and introduction of new standards and technologies of communication to promote information/digital society and to resist cyber threats.

II.8.3 Progress of Implementation

BRICS countries have been strengthening cooperation and promoting joint activities and initiatives to address common concerns in the field of ICTs. The main activities of BRICS ICT cooperation include:

- The 1st BRICS Communications Ministers' Meeting was hosted by Russia in

October 2015 in Moscow and released a Joint Communiqué on Expanding ICT Cooperation. Consensus was reached to promote the cooperation covering software and ICT products, internet and cyber security, global cyber governance, etc. The meeting approved the setup of the BRICS ICT Cooperation Working Group.

- BRICS IT Enterprise Forum was held in Moscow in October 2015, and around 20 delegations from the BRICS ICT corporations attended the forum. Enterprises introduced their technical innovations, and established cooperation partnership with their counterparts.

- The 2nd BRICS Communications Meeting was held in November 2016 in Bangalore India with focus on facilitating the joint research, innovation, capacity building, e-governance, and security & infrastructure of the ICT. The meeting encouraged BRICS countries to expand ICT cooperation, and develop digital economy and submitted an ICT Development Agenda and Action Plan to establish a sustainable digital partnership.

- The 3rd BRICS Communications Meeting was hosted by China in July 2017 in Hangzhou, and emphasized the ITC innovation, infrastructure cooperation, etc. During the meeting, an ICT dialogue among the ICT enterprises from BRICS countries was convened.

II.9 Interaction with International and Regional Economic Organizations and Fora

Development of intra-BRICS cooperation in various international and regional platforms is vital for the promotion of common interests in international trade, investment, industrial, scientific and technological cooperation. BRICS strives to further strengthen its role in the global arena by enhancing communication on global macroeconomic situations and trade policies, through existing mechanisms, coordinating positions within international and regional cooperation frameworks, and developing outreach formats of interaction. BRICS countries are committed to pursuing reform of the global economic governance institutions and safeguard the interests of BRICS countries as well as other emerging and developing economies.

II.9.1 BRICS and WTO

II.9.1.1 A Preliminary Review of Implementation

BRICS countries attach great importance to their participation in global trade. They emphasize the need and reaffirm our commitments to ensure full implementation and enforcement of existing WTO rules and are determined to work together to further strengthen the WTO. They call for the acceleration of the implementation of the Bali and Nairobi MCM outcomes and for the WTO Ministerial Conference to be held this year in Argentina to produce positive outcomes. Representatives and delegations of BRICS countries in WTO conducted regular meetings in Geneva, and cooperated to defend the open world economy and the multilateral trading system.

II.9.1.2 Progress of Implementation

BRICS countries recognize the importance of international trade as a key to new jobs, sustained economic growth and inclusive development. BRICS countries reaffirm the value, centrality and primacy of the multilateral trading system in world trade regulation and their commitments to strengthen the rules-based, transparent, non-discriminatory, open and inclusive multilateral trading system as embodied in the WTO. To that end, BRICS countries solidify their coordination and cooperation in WTO, push forward the multilateral trading negotiations and call to resist all forms of trade protectionism and disguised restrictions on trade while supporting the work of

the WTO and relevant international mechanisms.

- During the informal meeting of the BRICS leaders in Hangzhou in September 2016, BRICS countries expressed their concerns about the rising protectionism, and emphasized the importance of implementing the achievements reached in both Bali and Nairobi Ministerial Conferences.

- During the Goa Summit in October 2016, BRICS leaders reached broad consensus on supporting the multilateral trading system and achieving development-oriented outcomes at the 11th WTO Ministerial Conference.

- During BRICS Leaders' Informal Meeting on the Margins of the G20 Hamburg Summit in July 2017, BRICS countries firmly supported a rules-based, transparent, non-discriminatory, open and inclusive multilateral trading system, implementation and enforcement of existing WTO rules and commitments and oppose protectionism. They committed to striving to improve the current framework and functioning of the multilateral trading system. They called for the acceleration of the implementation of the Bali and Nairobi MCM outcomes and for the WTO Ministerial Conference to be held in Argentina to produce positive outcomes.

- During the Tenth WTO Ministerial Conference in Nairobi in December 2015, BRICS countries made significant contribution to the elimination of the Agricultural Export Subsidies and the new multilateral disciplines with regards to agricultural export financing, export state trading enterprises,, international food assistance, etc.

- Since 2016, BRICS countries strengthened their coordination at various levels on WTO and the multilateral trading system issues with a focus on the successful 11th WTO Ministerial Conference.

II.9.2 BRICS and the G20

II.9.2.1 A Preliminary Review of Implementation

All BRICS countries are G20 members, and playing significant roles in accelerating the world economic growth, safeguarding open world economy and improving global governance. BRICS countries are committed to strengthening the G20 as the premier forum for international economic cooperation. They continue to actively participate in the work of the G20, exchange views with the aim of further strengthening international financial and economic architecture, supporting the multilateral trading system, countering trade protectionism and achieving strong, sustainable, balanced and inclusive growth. BRICS countries concentrate on the following monetary and

financial policy fields under the G20 framework:

- BRICS countries strengthen policy coordination and implement all possible policy solutions including monetary, fiscal and structured reforms to enhance the economic resilience and realize strong, sustainable, balanced, and inclusive growth.
- BRICS countries fight against all forms of protectionism, urge the advanced economies to take responsible macroeconomic policies, and reduce the negative spillover effect to the EMDCs.
- BRICS countries accelerate the infrastructure investment, including encouraging the private enterprises and promoting the roles of the multilateral development banks.
- BRICS countries strengthen taxation cooperation through coordinating positions and policies in the international fora such as the G20, Global Forum on Transparency and Exchange of Information for Tax Purposes, and the Inclusive Framework on BEPS on the emerging international taxation issues such as tax certainty, digital economy, and promise to strengthen the existing cooperation mechanism.

II.9.2.2 Progress of Implementation

BRICS countries coordinate and hold preparatory meetings ahead of main G20 events. In addition, the BRICS Leaders hold informal meetings on the margins of the G20 Summits since 2011, and it is precious opportunity for them to coordinate policies and stances during the G20 summits.

- During the BRICS Leaders' Informal Meeting in Hangzhou in September 2016, BRICS countries reiterated that they would strengthen the strategic partnership, and contribute to the strong, sustainable, balanced, and inclusive growth in accordance with the principles of openness, solidarity, equality, mutual respect, inclusiveness, and win-win cooperation.
- During the BRICS Leaders' Informal Meeting in Hamburg in July 2017, BRICS countries were determined to continue with their support to a strong, sustainable, balanced, and inclusive growth, and they will continue with the implementation of the BRICS Strategy, and strengthen the BRICS Strategic Partnership.
- In 2017, the BRICS Finance Ministers and Governors of Central Banks strengthen their coordination and cooperation within the G20 framework, aiming to implementing the G20 Leaders' Communique of Hangzhou Summit, and leading the G20 to reflect the common interests and concerns of the emerging and developing

countries via G20.

- BRICS countries coordinate to push forward the G20 Energy Efficiency Leading Program, and facilitating the BRICS exchanges of energy efficiency technologies and best practices.

- BRICS countries coordinate and cooperate within the G20 with regards to growth framework, international financial architecture, inclusive finance, green finance, sustainable development, etc.

III. Future Cooperation

Built on progress achieved this year by Ministers' Meetings, working groups and other streams, BRICS countries look forward to further future cooperation along with lines agreed by the Leaders in Xiamen.

As agreed by all BRICS countries and called by the BRICS Strategy itself, BRICS countries will continue to carry out annual review of the implementation of the BRICS Strategy and conduct an overall review after 5 years from its adoption in 2015.