Executive Summary

The year 2017 marks the beginning of the second decade of the cooperation of BRICS countries. The past decade has witnessed closer BRICS partnership in various areas such as economy, finance and trade. Together, BRICS countries also achieved ground-breaking and substantive results such as establishment of the New Development Bank and Contingent Reserve Arrangement. These achievements have extended tangible benefits to and created considerable opportunities for businesses, which brings BRICS Business Council great expectations for BRICS cooperation in the next decade. Our confidence for the future of BRICS nations becomes even stronger with the growing momentum of BRICS economies and broader space for cooperation, as well as the successful experiences of collaboration within BRICS Business Council during the past five years.

While being fully aware of the challenges amid growing uncertainties of global economy, BRICS Business Council believes that all BRICS nations, with the aim of creating favorable environment for their growth, should build and uphold an open global economy, jointly oppose protectionism in any form, and promote the healthy development of economic globalization. We, BRICS Business Council, make our commitment that, we will stand for the principle of inclusiveness, carry out the model of cooperation featuring co-consultation, co-construction, win-win and benefits-sharing.

Since its establishment on the 5th BRICS Heads of State Summit held in March 2013 in Durban, South Africa, BRICS Business Council has walked hand in hand, throughout the first complete round of cooperation by holding five Annual Meetings chronologically in South Africa, Brazil, Russia, India and China.

Over the past year, with both focusing on the implementation of The Strategy for BRICS Economic Partnership and the initiatives of the G20 Summit, BRICS Business Council mainly discussed the following issues of common concern:

- Trade and Investment Cooperation and Facilitation
- Regulatory Cooperation
- Cooperation in Infrastructure Development
- Cooperation in Manufacturing Sector
- Cooperation with the New Development Bank
- Support and development of SMEs
- E-Commerce
- Digital Economy

- Skills Development

Focusing on the above areas, BRICS Business Council has worked together in achieving eight key deliverables in the year 2016-2017, which are:

- Releasing a Joint Declaration on Regulatory Cooperation on Standards
- Signing an MOU on Strategic Cooperation with the NDB
- Building an e-commerce platform oriented to the needs of BRICS countries
- Establishing a BRICS experience sharing mechanism for the digital economy
- Building a financial services platform for BRICS SMEs
- Issuing an Investment Guide of the BRICS Countries
- Establishing the International Alliance of Skills Development for BRICS Countries
- Furthering practical cooperation on specific projects

Being committed to setting up the bridge for practical cooperation among BRICS businesses, BRICS Business Council has also launched a series of activities for business promotion, and contributed to a batch of practical cooperation projects.

In pursuit of greater economic, trade and investment ties among BRICS nations, BRICS Business Council proposes to BRICS governments key recommendations for cooperation in the following areas:

- Closer Partnership between the BBC and NDB
- Global Shipping and Logistics
- Digital Economy
- Energy
- Communications Infrastructure
- Green Finance
- Aviation Infrastructure
- BRICS Rating Agency
- Transport Infrastructure Development Projects

In the Annexes to this report, there are:

- The Joint Declaration on Regulatory Cooperation on Standards
- The Progress Report on BRICS Rating Agency
- Summary reports of the seven working groups on Infrastructure, Energy and Green Economy, Manufacturing, Financial Services, Skills Development, Agribusiness, and Deregulation
- Overview of Practical Cooperation Projects in 2016-2017

It is highly encouraging that some of the key recommendations of BRICS Business Council in the last three annual reports were noted in the BRICS Summit Declarations adopted by the BRICS Leaders.

The Chairpersons of BRICS Business Council are honored to submit the 'Fourth Annual Report of BRICS Business Council' to BRICS Leaders and look forward to discussing recommendations with the Governments.

We continuously seek the guidance of our leaders towards enhancing co-operation between BRICS countries and contributing to achieve the common objectives of driving growth, generating employment and promoting sustainable development of our economies.

____

Capt. XU Lirong (People's Republic of China)

____

Mr. Paulo Cesar de Souza e Silva (Federative Republic of Brazil)

____

Mr. Sergey Katyrin (Russian Federation)

____

Mr. Onkar Kanwar (Republic of India)

____

Dr. Iqbal Survé (Republic of South Africa)

Xiamen, China, 4 September, 2017

Contents

Executive Summary.......1
Contents.......4
Part I Economic Overview.......5
Part II Work Review.......7
I. Major Events.......7
II. Implementation of Recommendations Proposed in Previous Reports.......16
II.1 Social Security Agreements.......16
II.2 BRICS Business Portal.......16
II.3 Trade Facilitation.......17
II.4 Cooperation and Facilitation of Investments.......17
II.5 Cooperation with the NDB.......18
II.6 Cooperation in Agribusiness.......19
II.7 Cooperation in Energy.......19
II.8 High Speed Railway (HSR) section “Moscow - Kazan” in Russia.......20
II.9 Recommendations regarding the BRICS Rating Agency.......20
Part III: Key Deliverables.......21
I. Releasing the *Joint Declaration on Regulatory Cooperation on Standards*.......21
II. Signing an MoU on Strategic Cooperation with the NDB.......21
III. Building an e-commerce platform oriented to the BRICS countries.......22
IV. Establishing a BRICS experience sharing mechanism for the digital economy.......23
V. Building a financial services platform for BRICS SMEs.......23
VI. Issuing an *Investment Guide of the BRICS Countries*.......24
VII. Establishing the International Alliance of Skills Development for BRICS Countries.......24
VIII. Furthering practical cooperation on specific projects.......25
Part IV Recommendations for Deepening Economic and Trade Cooperation.......26
I. Closer Partnership between the BBC and NDB.......26
II. Cooperation on Global Shipping and Logistics.......27
III. Cooperation on Digital Economy.......29
IV. Energy Cooperation.......31
V. Cooperation on Communications Infrastructure.......32
VI. Cooperation on Green Finance.......33
VII. Aviation Infrastructure Cooperation.......34
VIII. BRICS Rating Agency.......35
IX. Joint Implementation of Transport Infrastructure Development Projects.......36
Part V Action Programmes to Closer Partnership amongst BRICS business communities.......39
I. Strengthen Institutional Development.......39
II. Synchronize Development with External Organizations.......40
III. Integrate Strategic Guidance with Practical Cooperation.......40
Part VI Annexes.......42
Annex I: Joint Declaration of BRICS Business Council on Regulatory Cooperation on Standards.......42
Annex II: Summary Report of the Seven Working Groups.......45
Annex III:PROGRESS REPORT of BRICS Business Council on BRICS RATING AGENCY.......102
Annex IV:Overview of Practical Cooperation Projects in 2016-2017.......113

Part I Economic Overview

Global economic activity in 2016-2017 is firming broadly as expected. Growth is projected to gain strength in both advanced economies and emerging markets and developing economies (EMDEs).

According to World Bank's Global Economic Prospects Report (June 2017), global growth is projected to strengthen to 2.7 percent in 2017 and 2.9 percent in 2018-19, in line with January forecasts. In emerging markets and developing economies (EMDEs), growth is predicted to recover to 4.1 percent in 2017 and reach an average of 4.6 percent in 2018-19, as obstacles to growth in commodity exporters diminish, while activity in commodity importers continues to be robust.

Global trade growth has firmed and is expected to outpace GDP growth after two years of marked weakness. The pickup in global trade partly reflects a bottoming out of global investment, which is relatively import-intensive. Global financing conditions remain benign.

However, the recovery is still fragile and risks to the global outlook remain tilted to the downside. These include increased trade protectionism, elevated economic policy uncertainty, the possibility of financial market disruptions, and, over the longer term, weaker potential growth.

Against an improving international backdrop, growth in BRICS has strengthened from a post-crisis low of 4.2 percent in 2016. It is projected to reach 5 percent in 2017 and 5.2 percent in 2018. World Bank Outlook Report 2017 estimates that BRICS real GDP (2010 PPP weights) growth reached 3 percent again after two years and will keep this trend in the next three years.

Brazil's real GDP decline reduces slightly with a positive projection for the future. Russia's recession is less severe in 2016 and it is projected to return to a positive growth from 2017. Growth in India in 2016 was higher than anticipated thanks to strong government spending, and its growth is forecast to pick up further in 2017 and 2018, in line with the April 2017 forecast. China's real GDP expanded 6.7 percent in 2016 as expected and it is projected to remain more than 6 percent from 2017 to 2019. South Africa maintains a modest increase and is projected to slightly increase in the next three years.

The post-crisis deceleration in capital spending observed in BRICS appears to be easing as the earlier terms-of-trade shock for commodity exporters wanes. For example, a recovery in goods trade is supporting an upturn in China's exports, which in turn boosts imports of intermediate products across regional and global value chains. Policy-induced infrastructure spending in China has also supported demand for industrial commodities, benefiting countries exporting raw materials.

WTO data shows that the total merchandise trade volume in BRICS countries was $5.276 trillion in 2016, representing a decrease of 7.5 percent compared with that in 2015. The total trade volume of Russia, Brazil, South Africa, India and China decreased by 11.5%, 11.2%, 10.4%, 6.8% and 5.6% respectively. In terms of exports, the total amount of BRICS amounts to $2.904 trillion with a decrease of 7.9 percent compared to last year, and Russia, South Africa, China, Brazil and India were down by 17.5%, 7.8%, 7.7%, 3.1% and 1.3% respectively. In terms of imports, the total amount is $2.372 trillion with a decrease of 6.9 percent. Brazil, South Africa, India, China and Russia were down by 19.8%, 12.5%, 8.6%, 5.5% and 0.8% respectively.

The fragile recovery of world economy and the decrease of trade among BRICS call for intra-BRICS cooperation. BRICS countries should give full play to the established cooperation mechanisms in areas including trade and investment, energy, agricultural co-operation, science, manufacturing and minerals processing, financial co-operation, technology and innovation and connectivity.

Part II Work Review

I. Major Events

I.1 Chinese Chapter

During China's presidency in 2017, BRICS Business Council successfully carried forward the discussions and activities initiated by Indian Chapter in 2016 and also explored important new avenues of collaboration among BRICS countries.

- **The 5th BBC Annual Meeting**

As the Chinese Chapter assumed the presidency of BRICS Business Council, the 5th BBC Annual Meeting was held on August 31st to September 2nd in Shanghai, China.

On September 1st, the Plenary Session of BRICS Business Council was held in Pudong Shangri-La Hotel in Shanghai. The meeting involved the working groups' reports, remarks by council members, signing of the Annual Report, the adoption of Media Statement, and the introduction of Investment Policies of Shanghai. As the major activity during the presidency of China, the annual meeting fully recognized the efforts and progress made by BRICS Business Council, identified the challenges and opportunities in emerging economies, and also noticed the importance of ensuring greater trade, investment and business co-operation among BRICS countries.

On August 31st, Seven Working Groups of BRICS Business Council organized their working group meetings in Pudong Shangri-La Hotel in Shanghai. The parallel sessions involved the deliberations on the progress achieved by the respective working group during the year, the adoption of the summary reports of working groups, and the exchange of opinions on work priorities for the next step.

On September 1st, the visit to NDB headquarters was organized by the Chinese Chapter in Shanghai, where BRICS Business Council members and working group leaders engaged in a dialogue with NDB management. BRICS Business Council members highly commended the signing of MoU, which identified the fundamental objectives of their strategic partnership, emphasized the importance of NDB in supporting BRICS infrastructure and sustainable development projects, and agreed on enhancing the communication channels between the two sides to jointly target the priority issues facing BRICS countries and emerging markets.

- **The "2017 Tianjin (China) and BRICS High-Tech SME Cross-Border Investment and Trade Cooperation Conference" Held in Tianjin**

On June 5th-6th, 2017, the Municipal Government of Tianjin, Bank of China and BRICS Business Council co-organized the "2017 Tianjin (China) and BRICS High-tech SME Cross-border Investment and Trade Cooperation Conference".

The conference attracted about 570 businesses from 21 countries, including Brazil, Russia, India, China and South Africa. Businesses came from diverse industries such as new energy, new materials, high-end equipment manufacturing, biopharmaceuticals, electronic information technology, petrochemicals as well as traditional industries, namely, fishery, agriculture and light textiles. Business succeeded in finding the partners through one-to-one negotiation and study and audio links with businesses abroad. To better promote the dialogue, financial, legal, accounting, consulting and translating services are provided at the conference.

As one of the 8 core deliverables of BRICS Business Council during China's presidency this year, the conference deepens the cooperation among BRICS SMEs, helps them to be integrated in the global value chain and to benefit from the global resources, and therefore contributes to the promotion of BRICS images in the global arena.

- **BRICS Skills Development & Technology Innovation Competition**

To promote BRICS skills development and technology exchanges, BBC SDWG had passed a resolution to hold BRICS Skills Development & Technology Innovation Competition (hereinafter referred to as "BRICS Competition").

The First BRICS Competition has been held during China's presidency within five individual competition projects put forward by China. The First BRICS Competition included BRICS Youth Maker Competition, Intelligent Manufacturing Challenge (CIMC), 3D Printing and Intelligent Manufacturing Competition, Machinery & Electricity Skills Competition and IIW·CWS·Arc Cup 2017 International Welding Competition.

- IIW·CWS·Arc Cup 2017 International Welding Competition, an opening event with BRICS countries was held successfully from June 24th to June 30th, 2017 in Shanghai. Over 300 professionals in welding technology and skills of 73 teams from four BRICS countries (Russia, India, China and South Africa) and 8 other countries (Kazakhstan, Slovakia, Mongolia, Ukraine, Vietnam, Cameroon, Nigeria and Spain) and people from all walks of life (around 1000 people in total) have attended the Opening and Closing Ceremony of 2017 Arc Cup Competition. For BRICS countries, China selected 253 competitors, Russia sent 50 representatives, India sent 5 representatives and South Africa sent 4 representatives to participate in the International Welding Competition. Finally, China CRRC Group, Russia NAKS delegation, and China Energy Construction Group together won the Team Gold Prize. Besides, Russian delegations have also won four 1st Place, one 2nd Place and one 3rd Place for Individual Awards, and four 3rd Grade Prizes, Indian delegation has won one 2nd Place for Individual Awards, and South African delegation has won one 1st Place for Individual Awards.

- International Youth Maker Competition was held in Kunming, Yunnan province, China, from August 18th to 20th, 2017. Over 400 people from 45 teams participated in the related activities of this competition.

- Machinery & Electricity Skills Competition was conducted in Nanning, Guangxi province, China, from August 20th to 22nd, 2017. This competition was composed of three competition projects: Complex Parts Processing with Multi-axial CNC Machine Tools, Installation and Debugging of Automatic Production Line and Part and Assembly Measuring and CAD Mapping. There were 31 teams for Complex Parts Processing with Multi-axial CNC Machine Tools, 49 teams for Installation and Debugging of Automatic Production Line and 143 teams for Part and Assembly Measuring and CAD Mapping, and about 450 people joined in the activities of this competition.

- 3D Printing and Intelligent Manufacturing Competition was hosted from August 22nd to 26th, 2017 in Hangzhou, Zhejiang province, which consisted of two competition projects, namely, Operation and Maintenance of Intelligent Manufacturing Production Line and 3D Printing. Over 500 people from 51 teams for Operation and Maintenance of Intelligent Manufacturing Production Line and 30 teams for 3D Printing joined in the activities of this competition.

- Intelligent Manufacturing Challenge (CIMC) was the closing event of Competition. And there has been 300 teams participating in the final competition during August 26th-30th. About 1500 people have attended the closing ceremony of the Competition.

This Competition won full support from BRICS countries. Russia, India, China and South Africa selected competitors to participate in the relevant competitions or sent expert teams to attend various activities under this Competition.

I.2 Brazilian Chapter

The Brazilian Chapter organized a meeting between the Vice-President, Economic Research, Strategy, Partnership & Chief Risk Officer of the New Development Bank, with the Brazilian private sector, in May 2017, in order to promote new opportunities to infrastructure and sustainable development.

The Alexandre de Gusmão Foundation (FUNAG) and the Department for Inter-Regional Mechanisms of the Ministry of Foreign Affairs hold, in May 2017, the 4th round-table "Brazil, BRICS and the International

Agenda". The event discussed the BRICS and Brazil's international insertion; the evolution of the BRICS from the partners' perspective, counting with the presence of the ambassadors of the BRICS countries; the investments and financial cooperation in BRICS; and the cooperation on trade policy, in which the National Confederation of Industry represented the Brazil Chapter of the BRICS Business Council.

The President of Brazil held visits to China (2016), India (2016) and Russia (2017). The three visits counted on the participation of members of the Brazil Chapter of the BRICS Business Council and important deliverables to promote trade and investments between the economies were achieved.

During the visit of the Brazilian President to China, in the context of G-20 meeting, the Brazil-China High-Level Business Seminar was realized in Shanghai, in September 2nd, 2016. The Seminar was an initiative of the Trade Promotion and Investment Department of the Ministry of Foreign Affairs and the Brazilian Trade and Investment Promotion Agency, and addressed infrastructure and logistics, industry and agribusiness. Major sectors of the Brazilian economy including agriculture, finance, industry, infrastructure, transportation, energy and services attended the Seminar.

On May 2017, the Minister of External Relations of the Federative Republic of Brazil visit South Africa. The Embassy of Brazil organized a Brazil-South Africa Business Seminar, which was attended by a delegation of Brazilian business people, including members of the BRICS Business Council, government agencies as well as South African entrepreneurs. The Business Seminar focused on opportunities in areas such as energy and food production, as well as ways to enhance business relations between both countries.

During the Second Meeting of BRICS Industry Ministers, on July 29th -30th, 2017, in Hangzhou, China, the Brazilian company EMBRAER, member of the BRICS Business Council, participated in the panel "Industry Development Strategy and Investment Cooperation".

I.3 Russian Chapter

In order to strengthen interregional ties between BRICS countries and to support SMEs' engagement into trade and investment cooperation amongst BRICS countries **the Second Small Business Forum of SCO and BRICS Regions** was held on December 1–2, 2016 in Ufa, Russia.

The Forum was attended by SMEs from 16 countries and 34 Russian regions. 7 agreements on cooperation were signed within the framework of the Forum and more than 300 B2B meetings were conducted.

The following topics were in the focus:

- Financial and infrastructural support as necessary condition for efficient development of SMEs;

- Eurasian economic partnership: prospects for small business;
- Prospects of creation SCO and BRICS single goods and services market;
- Youth entrepreneurship
- SMEs part in innovative and knowledge-intensive industries;
- SMEs part in agriculture and food industry.

Based on the results of the Forum the decision to organize the Forum on a regular basis was announced.

The Third Forum on Small Business of the SCO and BRICS Regions will take place on September 28th-29th, 2017 in Ufa, Russia.

The special session "BRICS: boosting economic cooperation", organized and supported by Russian Chapter of BRICS Business Council was held within St. Petersburg Economic Forum 2017 on June 1st.

Mr. Sergey Katyrin, chairman of the Russian Chapter of BRICS Business Council moderated the discussion, which was focused on possibilities and prospects for initiating a new level of industrial and technological cooperation; implementation of joint projects; New Development Bank support for BRICS projects.

Panelists shared their experience in promoting projects in BRICS countries in the infrastructure, energy, industry, IT, and telecommunications sectors, and identified some of the key challenges faced by business today.

The panelist outlined the following key points with regards to BRICS countries cooperation.

- BRICS countries are known to face challenges, among which the most crucial are:
  - lack of transportation infrastructure and related logistics issues;
  - weakness of currencies;
  - uneven economic development.
- BRICS countries should tighten cooperation at the regional, departmental and sectoral levels.
- BRICS countries are to set up large-scale and joint projects on transport infrastructure development.
- BRICS countries are to further the use of local currencies to finance BRICS investment projects by New Development Bank.
- Cooperation between the BRICS economies is developing very quickly and BRICS countries should do their utmost to strengthen it.

The Participants acknowledged the importance of development of transport infrastructure, including railways, for the purpose of facilitating trade and economic cooperation on the territory of BRICS.

Furthermore, representative of Cooperation Department of China Council for the Promotion of International Trade presented key priorities for China's BRICS presidency in 2017 and the future BRICS summit in Xiamen on coming September this year. Amongst the panelist were the respective representatives of BRICS countries, including President of the New Development Bank, Deputy Minister of Trade and Industry of South Africa, etc.

International IT Forum with the participation of BRICS and the SCO countries was held on June 6th-7th, 2017 in Khanty-Mansiysk, Russia.

Over two days of the Forum, more than 30 events took place, following which 17 agreements were signed. In total representatives of 46 countries and specialists from 44 regions of Russia participated in the Forum.

The participants discussed the following key topics:

- Development of the digital economy
- E-government and digital government development
- Information Security
- Lean Technologies
- Development of telecommunications infrastructure

Russian Chapter takes part in all important BRICS events both bilateral and multilateral put efforts to furthering business ties and partnership intra-BRICS.

I.4 Indian Chapter

- **UNIDO Consultation Meeting on Promoting Cooperation amongst SMEs from BRICS countries through E-commerce:** The Indian chapter of BRICS Business Council collaborated with UNIDO in its project on promoting 'Cooperation amongst SMEs from BRICS countries through e-commerce'. A consultative meeting of stakeholders was held in Federation of Indian Chambers of Commerce and Industry (FICCI), Federation House, on 20th December 2016 in New Delhi, India. The main objective of the meeting was to bring together all the main stakeholders from BRICS countries to exchange information on SMEs e-commerce and technology transfer platforms, as well as interact with industries in India and further promote SMEs e-commerce development. The consultation meeting contributed to the increased awareness of the e-commerce development for the benefit of SMEs of BRICS countries, as well as the importance of having a unified, multi-dimensional platform that would facilitate the SMEs to access relevant information and enable them to exchange experiences on technology with other BRICS countries. The event saw participation of more than 60 representatives from governmental departments, diplomatic corps, research institutions and business institutions from BRICS countries.

- **BRICS Business Council Mid-Term Meeting:** The Mid-term meeting of BRICS Business Council took place on March 31st, 2017 in New Delhi, India. The meeting involved deliberations on the progress made by the seven working groups on the agenda set forth during the Annual Meeting of the Council on October 14th-15th, 2016.

  With this Mid-term meeting, the tenure of Indian Presidency of BRICS Business Council came to an end and Chinese chapter formally took over the Presidency of BRICS Business Council. During the mid-term meeting, the members of BRICS Business Council agreed on the following points:
  BRICS Business Council believes that intra-BRICS co-operation is vital to promote shared economic interests and facilitate sustained development of its economies.

  Members welcomed the conclusion of the negotiations of the bilateral Social Security Agreement between India and Brazil and agreed that there should be more such agreements amongst BRICS countries, as these will have positive implications on business fraternity and further enhance investment flows amongst BRICS countries.

  Members appreciated the progress made with respect to the deliberations amongst members of the Expert Group on the BRICS Rating Agency and agreed to carry forward the discussions to arrive at practical solutions for setting up a BRICS Rating Agency on market oriented principles.

  Members acknowledged the proposal of Skills Development Working Group to set up a BRICS Skill Governance Body to oversee the skill development for labor force in BRICS nations, including coordinating with various skill development bodies and facilitating cross-sharing of learnings and challenges faced in skill development by the BRICS countries.

  Members also acknowledged suggestions of the Agri-Business Working Group to foster agri-food and biofuels trade and investments and enhancing co-operation by sharing best practices related to sustainable agriculture production, productivity, environment protection and food security and contributing towards research activities in these areas.

  It was recommended that the governments in each BRICS country should continue their efforts towards ease of doing business and trade facilitation initiatives to promote private sector trade and investment flows in the BRICS countries.

  Members agreed to carry forward the agenda of the seven working groups of the Council namely

Infrastructure, Financial Services, Skill Development, Manufacturing, Energy, Agri-business and De-regulation and called for new ideas and proposals to further enhance intra-BRICS business co-operation for higher growth and sustained development of our economies.

- **BRICS Business Council and NDB meeting:** Members of BRICS Business Council met President and Vice-Presidents of the New Development Bank at a breakfast meeting on April 1st, 2017 in New Delhi, India. During this working breakfast, discussions were held with respect to cooperation on project identification, pipeline development, co-financing, and knowledge exchange that will form the basis of an agreement on strategic cooperation between NDB and BRICS Business Council proposed to be signed on the sidelines of the BRICS Summit in Xiamen. NDB President, Mr. K V Kamath, mentioned about NDB's plan to enhance its lending to over US dollar 2.5 billion this year, which is expected to be highly beneficial for implementing developmental projects in five BRICS countries.

Members of each national chapter of BRICS Business Council shared their views and suggestions on the potential areas of cooperation. Members also requested NDB to consider private sector participation in NDB's Project Preparation Facility. Council members also committed their support to NDB in identifying and dealing with relevant authorities in respective countries and to co-ordinate with local financial institutions for a potential partnership with NDB, especially with respect to financing of projects in local currency.

- **Workshop on BRICS Skill Governance:** A workshop for discussion on BRICS Skill Governance Body and BRICS Skills Competitions and Trainings was organized by the Indian Chapter of BRICS Business Council on April 1st, 2017 in New Delhi. The workshop focused on formation of BRICS Skill Development Body to oversee the work undertaken by taskforces. It was further decided to set up a taskforce for organizing BRICS Skill Competition from 2018 and a taskforce to map training methodologies and other skill activities with a view to suggest the advanced techniques and methods to the respective skill ministry in each member country.

I.5 South African Chapter

During 2016-2017 members of the SA BBC and Working Groups participated in the following BRICS related events:

- **BRICS Media Forum**

During June 2017, attendance and co-chairing at the BRICS Media Forum, hosted by Xinhua News Agency and Shanghai United Media Group (SUMG) in Beijing and Shanghai respectively. Practical steps were taken to deepen media cooperation between the BRICS countries.

- **SABBC Event in Durban**

In May 2017, the SABBC hosted a dinner on the sidelines of the WEF Africa meeting in Durban, South Africa, attended by SABBC members, Government officials, local and international business people.

- **Russia- South Africa collaboration on Jobs of the future**

This project has happened in a number of phases with Russia conducting a Foresight session on Jobs of the Future with Merseta and its chambers. South Africa participating in a Russian project on Jobs of the future in the Metals industry. A signed agreement that Russia will conduct a train the trainer project on the methodologies to build local capability in this research, which will happen this year. The total project is worth about R100M.

- **BRICS Skills Development Working Group white paper on Industry 4.0**

Under the Indian Presidency of BRICS Business Council, the skills development working group put together research into the impact of the 4th industrial revolution on the manufacturing sector in BRICS economies. A number of South Africans participated in the research, including the CSIR, Department of Science and Technology, Adcorp, Aerosud, Manufacturing Circle, Chieta and Merseta. All BRICS countries' Skills Development Working Groups participated at the FICCI Skills Summit in Delhi in India 2016 and the final report was presented at the Mid Term Summit in March 2017. The final report can be found at: http://indiainbusiness.nic.in/newdesign/upload/whitepaper-summary-skill-development-for-industry-4-0.pdf

- **BRICS Skills Development Working Group -Technical Skills for Jobs of the Future**

Under the Chair of China, the skills development working group is conducting skills competitions for skills of the future, including welding, 3D printing, product life cycle management and intelligent manufacturing. The aim of these competitions is to develop technical future jobs skills and enhance curriculums and knowledge. South Africans participated in the welding competition (and won a gold medal) and will participate as observers in the remaining competitions via Merseta and Adcorp.

- **Atlas of Emerging Jobs**

The world that we live and work in is changing at unprecedented rates. This is predominately due to changes in technology. To keep pace with new trends, one needs to track changes carefully, as they directly affect the employment structures and competitive performance of key players in industry markets. The world economic forum released two key facts in 2016. The first is that 60-70% of jobs will be lost due to changes in technology. This is countered by the second, 65% of kids entering Grade 1 now will do jobs we do not know about yet.

The BRICS Skills Development Working Group uses a foresight methodology to predict the jobs of the future via a product titled, the Atlas of Emerging Jobs. This Atlas provides a vision of changes that may happen in the job market in the coming decades. It also offers an opportunity to prepare our high school and college students for a world they will enter after obtaining their degrees.

The skills development working group aims to produce a BRICS Atlas of Emerging Jobs, with Russia having completed their Atlas. South Africa has begun the research for the South African economy and aims to have the first Atlas available in 2018.

II. Implementation of Recommendations Proposed in Previous Reports

II.1 Social Security Agreements

Taking forward relevant recommendations of the III Annual Report of BRICS Business Council, adopted in Goa, India, Brazil and India initialed the text of the Social Security Agreement in Brasilia on March 16th, 2017. As per the agreed text, detached workers of the two countries are exempted from making social security contributions in both countries so long as they were making such contributions in their respective countries.

The text establishes the rights and obligations of nationals of both countries and provides for equal treatment of the nationals of both countries and unrestricted payment of pensions even in the case of residence in the other contracting state (benefits export principle). The requirements to be entitled to a pension can be met by aggregating the periods of insurance completed in India and Brazil, whereby each country pays only the pension for the insurance periods covered by its laws.

The Social Security Agreement between India and Brazil once brought into force after completion of the ratification process in the respective countries will favorably impact the profitability and competitive position of Indian and Brazilian companies with foreign operations in either country by reducing their cost of doing business abroad. The Agreement will also help promote more investment flows between the two countries.

The Social Security Agreement between India and Brazil once in force will also be the first such agreement between the BRICS countries. The BRICS Business Council keeps its support to the negotiation of Social Security Agreements by the BRICS Governments.

II.2 BRICS Business Portal

In order to implement the recommendation regarding enhancing information exchange in the First and Second Annual Report of the Council, China BRICS Business Council cooperated with Fudan University in building the BRICS Information Sharing and Exchange Platform (BRICS Business Portal). The BRICS Business Council has worked closely together with Fudan University in sharing practical business information and best practices, and been updating information on the Portal throughout the past years. This year, initiated by China Deregulation Working Group, a new section of Digital Economy Experience Sharing Mechanism has been established on the Portal.

II.3 Trade Facilitation

Having in mind the trade facilitation demands of the II and III Annual Report of BRICS Business Council, BRICS Business Council released a Joint Declaration on Regulatory Cooperation on Standards during China's presidency this year, with a view to minimizing obstacles to cross-border trade, strengthening trade and investments ties, and promoting sustainable development within BRICS territory.

This year, the five chapters of the Council worked closely in building EPEC, an e-commerce platform operated by the Chinese company Sinopec, into an industrial product trading e-platform serving the needs of BRICS countries. The EPEC platform, in an innovative way, helps diminish intermediate links of trade, reduce trading costs, and thus facilitating intra-BRICS trade activities.

During the Brazilian President official visit to Russia (June 20th-21st, 2017), bilateral agreements were signed between the two sides aiming to advance a series initiatives of mutual importance in the areas of investment promotion, trade facilitation, customs procedures. With these agreements, Brazil and Russia will strengthen and intensify trade and economic relations. The agreements provide for initiatives on eliminating barriers to trade development, encouraging the growth of trade and investment exchanges, and simplifying customs procedures. A protocol to expedite the customs clearance of Brazilian products using the Russian GSP (General System of Preferences) was signed. Over 2,700 Brazilian products can currently benefit from tariff preferences offered by the Russian GSP, which covers over 50% of Brazilian exports to that market.

II.4 Cooperation and Facilitation of Investments

In the aim of creating a favorable business environment to promote trade, business, investments and manufacturing ties amongst BRICS countries, BRICS Business Council issued the Common Declaration on Investment Principles during the rotating presidency of Brazil in 2014. In order to further build upon this good momentum of facilitating intra-BRICS investments, BRICS Business Council released an Investment Guide of the BRICS Countries, during China's presidency this year. The Guide provides BRICS enterprises with comprehensive, systematic and high-quality policy information services, helping them better understand the investment policies and environment of the country where the project is located and make better use of the existing policies.

India-Brazil Joint Statement during the visit of President of Brazil to India (Goa), on October 17th, 2016, recognized the conclusion of the negotiations of an India-Brazil Investment Cooperation and Facilitation Treaty. India apprised Brazil of the liberalized FDI policies & 'Make in India' initiatives inviting more investments from Brazil. The Brazilian side, on its turn, presented the "Project Grow", proposing new rules, improving the governance and approving some projects as national priority, which brings new opportunities for Indian investments in Brazil. The two leaders appreciated the recommendations presented by the business Leaders, and agreed also to pursue the establishment of business friendly visa procedures based on reciprocity, in order to facilitate bilateral trade and investment.

A binational Brazil-China fund will invest $20 billion in infrastructure projects. The fund was launched on May 30th, 2017, during the Brazil Investment Forum, which brought together CEOs from large international companies. There is a list of 30 projects that will potentially be supported by the fund. One such project is the Ferrogrão, or "Grain railway". The rail will connect the Brazilian grain production region of Sinop, Mato Grosso to the port of Miritituba, Paraná. In addition to infrastructure, the project will invest in agribusiness, technology, and manufacturing. For every Brazilian dollar invested, China will put up three dollars. Operating China's side is Claifund, a fund for investment in Latin America. The fund will not include public resources, and will operate based on market-oriented rules. Brazil will have its financing from the bank Caixa Economica Federal, and the National Economic Development Bank (BNDES). The Banco do Brasil has also expressed interest in participating in the fund. China will bring in money mainly through Claifund, using 85 percent Foreign Exchange reserve funds and 15 percent from the Chinese Development Bank. Three advisors from each side will council the fund to select the participating projects and banks. While China has many international investments, this will be the first one in which joint decisions regarding the funds will be made.

During the visit of the President of Brazil to Russia (Moscow), in June 2017, a Memorandum of Understanding on Economic and Investment Cooperation was signed with the objective of encouraging trade and investment flows, removing barriers to trade and investment, as well as deepening the cooperation on areas of mutual interest. The MoU established a Working Group in the framework of the Brazil-Russia Intergovernmental Commission on Economic, Commercial, Scientific and Technological Cooperation.

II.5 Cooperation with the NDB

BRICS Business Council proposed to forge partnership with the New Development Bank and requested the NDB to provide observer status to the chairpersons of BRICS Business Council in its II and III annual report.

To implement this initiative, the first joint meeting of BRICS Business Council and NDB was held on April 1st, 2017 in New Delhi. This meeting provided an excellent opportunity for the businesses to gauge a better perspective of NDB's operations and discuss key areas of co-operation and priority projects. During this meeting it was proposed that a formal MoU will be signed between BRICS Business Council and New Development Bank in September 2017. Further, NDB President detailed out its lending plans for five member countries and also indicated plans to raise funding in member countries in local currency in the near future.

In 2017, China BRICS Business Council, on behalf of the Council, held several rounds of negotiation with the NDB regarding the MoU, and the two sides reached consensus on August 16, 2017. On September 1, BRICS Business Council delegation paid a visit to the NDB headquarters in Shanghai, and the two sides had further discussion on project financing, NDB cooperation with financial institutions, etc.

Moreover, BRICS Business Council had requested NDB to set up an Infrastructure Project Preparation Facility in its third Annual Report. NDB is working towards setting up of same.

II.6 Cooperation in Agribusiness

India-Brazil Joint Statement during the visit of President of Brazil to India (Goa), on October 17th, 2016, emphasized the importance of formulating a road map for co-operation in agriculture. The two sides also agreed to explore areas where there is immense potential of benefit to both countries, such as production of pulses in Brazil and Brazilian investments in the poultry sector in India. The leaders also welcomed with satisfaction the willingness on both sides to reach an understanding on sanitary and phytosanitary measures, especially in the pork and apples markets. They acknowledged the importance of food processing and agribusiness as key areas for cooperation and agreed to undertake capacity building and joint research programmes and participate in each other's food fairs to facilitate B-2-B interaction, flow of investment and transfer of technology. They agreed that opportunities should be explored for promoting investment cooperation in food processing, including in mega food parks and cold chain infrastructure.

II.7 Cooperation in Energy

India-Brazil Joint Statement during the visit of President of Brazil to India (Goa), in October 17th, 2016, stated the agreement of the two sides to further explore cooperation in the domain of energy. Brazil's expertise in ethanol was acknowledged. They identified potential to cooperate on research and development of renewable energies, as well as in the field of second generation bio-fuels. The two sides also emphasized the importance of cooperation in the oil and gas sector and agreed to pursue further cooperation in these areas. The Indian side expressed interest in further acquisition of oil and gas assets in Brazil.

II.8 High Speed Railway (HSR) section "Moscow - Kazan" in Russia

The Moscow-Kazan HSR in Russia, which will become a part of the Eurasian high-speed transport corridor, has been identified as one of the priority projects on the territory of member-states of the organization in the 3rd annual report of the activities of BRICS Business Council.

A Russian-Chinese consortium of companies is conducting engineering design works of this high-speed railway line.

Taking into account the importance of expanding the participation of the New Development Bank (NDB) in the implementation of large-scale projects on the territory of BRICS, JSC Russian Railways has submitted an official application to the NDB in order for the bank to consider the possibility of co-financing the project HSR "Moscow – Kazan".

As a result of several rounds of negotiations a decision has been reached to conduct a roundtable with participation of partners from China to discuss the issues of joint implementation of the project.

In addition to that, a possibility to sign an agreement for cooperation on the project between JSC Russian Railways and NDB is in the works.

II.9 Recommendations regarding the BRICS Rating Agency

In 2016, BRICS Business Council had proposed further exploring the idea of setting up BRICS Rating Agency. The idea was endorsed in the Goa Declaration during the BRICS Summit in October 2016. At the Government level, the First Meeting of Working Group on Exploring the Feasibility of Establishing alternate Rating Agency for Emerging Markets was held on 7 December 2016 in Mumbai. The discussions were mainly focused on the areas; (i) Need for harmonization of regulation and/or rating scales; (ii) Alternative models for CRA; (iii) Key performance indicators; (iv) Partnership model; and (v) Role of domestic CRAs. BRICS Business Council too has examined the subject through an Expert Group under the Financial Services Working Group. The progress report of the Group has been appended in Annex III with this Annual Report.

Part III: Key Deliverables

I. Releasing the *Joint Declaration on Regulatory Cooperation on Standards*

BRICS Business Council fully supports the World Trade Organization (WTO) Agreement on Technical Barriers to Trade, which aims to ensure that technical regulations, standards, and conformity assessment procedures are non-discriminatory and do not create unnecessary obstacles to trade, while, at the same time, recognizes WTO members' right to implement measures to achieve legitimate policy objectives, such as the protection of human health and safety, or protection of the environment.

BRICS Business Council admits the value of voluntary standards and technical regulations, in such aspects as protecting human, animal and plant health and life, preventing deceptive practices protecting the environment, facilitating production and trade, compliance, and protecting indigenous technologies, production methods and processes.

BRICS Business Council also identifies the role of voluntary standards in creating unintended barriers of cross-border trade, and impeding the free flow of intra-BRICS trade and best practices.

In the spirit of minimizing obstacles to cross-border trade, strengthening trade and investments ties, and promoting sustainable development within BRICS territory, BRICS Business Council makes specific proposals to the governments, as appended in Annex I in this report.

II. Signing an MoU on Strategic Cooperation with the NDB

Since the inception of BRICS Business Council, it has been a top priority of its rotating presidencies to exchange and cooperate with the New Development Bank, which was a tangible and substantive achievement of intra-BRICS cooperation. Since the establishment of the NDB, BRICS Business Council kept track of the bank's progress and stayed ready to provide recommendations for its governance, operation and project selection. In the third annual report, the Council proposed to the BRICS Governments that, "It is suggested that BRICS Business Council be effectively engaged as an advisory council to the New Development Bank. The NDB should consider providing observer status to the chairpersons of BRICS Business Council."

To implement this proposal, BRICS Business Council and the NDB agreed upon signing an MoU on strategic cooperation, which identifies the fundamental objectives of their strategic partnership.

The MoU also designates the major cooperation areas, which includes:

- Economic and Financial Research
- Activities in Local Markets of BRICS Countries
- Knowledge Exchange
- Financial Institutions Cooperation
- Human Resources Development

BRICS Business Council also expressed its full support to the NDB in its efforts to establish an effective presence in all BRICS countries.

As a part of the MoU, BRICS Business Council launched a set of innovative and flexible interactions with the NDB this year, including exchange of visits with NDB's management, the breakfast meetings between BRICS Business Council members and NDB's executives, and visits to NDB's headquarters.

III. Building an e-commerce platform oriented to the BRICS countries

By attracting excellent enterprises from the five countries, BRICS Business Council supports the purpose of the Chinese company Sinopec's EPEC e-commerce platform to build an industrial product trading e-platform oriented to the needs of BRICS countries and to ensure its normal operations in cooperation with analogous platforms operating in BRICS countries where available. By June 5th, 2017, EPEC's Chinese website had reported more than 36,000 registered enterprise suppliers, covering 66 industries out of the 99 industries in China and over 1.8 million kinds of commodities. BRICS enterprises will have access to the platform either as suppliers or buyers and enjoy the most competitive prices, observing the local legal and regulatory environment of each country.

The platform is significant in that it:

- echoes and implements the outcome of the G20 Summit regarding cooperation on e-commerce by taking the lead to build an e-commerce platform oriented to in the BRICS countries;
- promotes BRICS cooperation on production capacity. The platform enables BRICS manufacturers to directly contact with users, thus removing the middle links and lowering the trading costs;
- helps BRICS enterprises establish a global online transaction credit system, therefore substantially reducing risks in international trade;
- helps facilitate trade among BRICS countries

Currently, the international website of EPEC has been put into full operation. Through joint efforts of all the five chapters of the BBC, services and products of Russia, India, China, Brazil and South Africa have been online and sorted in five national pavilions on EPEC platform.

IV. Establishing a BRICS experience sharing mechanism for the digital economy

With the development of next-generation Internet technologies represented by cloud computing, Big Data and Internet of Things (IoT), the digital economy has prompted a new wave of global economic development and brought new opportunities for BRICS economic development. In addition, it serves as a useful means of removing barriers to international trade and driving traditional trade growth. At the G20 Hangzhou Summit, Chinese President Xi Jinping first proposed the *G20 Digital Economy Development and Cooperation Initiative*, which indicates that the digital economy will lead the transformation and upgrading of traditional enterprises and function as a new driver of BRICS economic growth.

Given their diverse political and social environments, the five countries' development in the digital economy differs from one another, which implies that it is imperative to share their experience in developing the digital economy and to explore its future trend. For this reason, the Business Council has established an experience sharing mechanism for the digital economy to facilitate sharing of information and experience amongst BRICS and to promote the development and prosperity of the digital economy in the BRICS nations.

In the past year, BRICS Business Council opened up a section for Experience Sharing of Digital Economy on the BRICS Information Sharing and Exchanging Platform (http://www.brics-info.org, hereinafter referred to as the BRICS Business Portal) to publish articles on the development and experience regarding the digital economy and facilitate communication and experience-sharing amongst the BRICS countries. Moreover, BRICS countries were organized to hold a seminar on the digital economy in an attempt to identify the status of their digital economy and discuss an array of topics, including how to conduct international cooperation in the digital economy and how to promote the development and prosperity of the digital economy, among others. BRICS Business Council will press ahead with the international exchanges on the digital economy and regularly share relevant experience through international conferences, forums and other platforms.

V. Building a financial services platform for BRICS SMEs

Nowadays, small- and medium-sized enterprises (SMEs) play a critical part in the international economic system. According to *The Strategy for BRICS Economic Partnership*, the successful development of SMEs is conducive to the BRICS countries' economic transformation, job creation and cross-border cooperation. In order to spur their development, a financial services platform for BRICS SMEs was built through the "Global SME Cross-Border Matchmaking Service" mechanism of Bank of China, one of the members of the Business Council; and the 2017 Tianjin (China) and BRICS High-tech SME Cross-border Investment and Trade Cooperation Conference was held to help BRICS SMEs remove geographical, language and cultural barriers and achieve the connectivity in terms of market, technology, talent and capital, and accelerate their integration into the global industry chain and value chain.

"Cross-border matchmaking" is aimed at fully leveraging the intermediary role of financial institutions to provide financial support for SMEs in the five countries, while creating more communication and cooperation opportunities to facilitate excellent enterprises to go global. On June 5th, 2017, the 2017 Tianjin (China) and BRICS High-tech SME Cross-border Investment and Trade Cooperation Conference was held in Tianjin. Co-hosted by the People's Government of Tianjin Municipality, Bank of China and BRICS Business Council, this event was intended to support the emerging industries and traditional advantaged industries in the transformation process, and attract quality corporate clients from such sectors as technology, Internet, software information services, financial services, pharmaceuticals, equipment manufacturing, energy and ecological governance, agricultural and sideline food processing, mining and jewelry. During the event, BRICS enterprises showed their intention to seek cooperation on approximately 200 projects. As a major outcome of the practical cooperation developed by BRICS Business Council, this event effectively boosted trade and financial cooperation among BRICS SMEs and advanced their common development.

VI. Issuing an *Investment Guide of the BRICS Countries*

Trade and investment facilitation is a key area of cooperation amongst BRICS countries and facilitating intra-BRICS trade and investment is a core objective set in the regulations of BRICS Business Council. In 2014 when Brazil assumed the rotating presidency, BRICS Business Council issued the *Common Declaration on Investment Principles*, which was submitted to the heads of state at the meeting in Fortaleza, Brazil. Since then, BRICS Business Council has been implementing this Declaration in its daily work. In 2015, BRICS Business Council gathered the official Investment Guides of the BRICS countries and published them on the BRICS Business Portal. To create a better investment climate, BRICS countries have worked out a series of highly attractive investment promotion policies, of which many BRICS enterprises have an inadequate knowledge, though.

In this context, BRICS Business Council released an *Investment Guide of the BRICS Countries*, which collects the current business and investment policies and regulations of BRICS nations. Being an integral part of the BRICS business information and investment promotion system, the Guide was developed to stimulate intra-BRICS investments by providing BRICS enterprises with comprehensive, systematic and high-quality policy information services, so that they can better understand the investment policies and environment of the country where the project is located and make better use of the existing policies.

VII. Establishing the International Alliance of Skills Development for BRICS Countries

In October 2016, BRICS Business Council Working Group on Skills Development signed an MOU on skills development cooperation and issued a white-paper titled *Skill Development for Industry 4.0*. In these documents, the building of high-caliber and highly-skilled workforce and their skills development are goals shared by the five national chapters. In order to contribute to these goals, China proposed to establish a specific working mechanism—the International Alliance of Skills Development for BRICS Countries (hereinafter referred to as “the Alliance” or IASDB). During the Business Council’s annual meeting in September, 2017, members of the Skills Development Working Group from the five countries further discussed the Alliance’s regulations.

For carrying forward the outcomes of BBC SDWG during India’s presidency, BBC SDWG members further discussed the initiative of establishing the International Alliance of Skills Development during the BBC SDWG 4th Conference Call in February, 2017 and BBC Mid-term Meeting. In February, 2017, as a key deliverable of BRICS Business Council, the initiatives of holding BRICS Competition was approved and establishing the Alliance was proposed by the working group. On the BBC SDWG 4th Conference Call in February, India put forward the suggestion of setting up a Skills Development Governance Body and later, the Governance Body was titled as BRICS Skill Steering Committee during BBC SDWG meeting in April 2017. Further, BBC SDWG continued discussions on the Alliance, and the participation of first batch of members in the Alliance marked the formal establishment of the Alliance in June, 2017.

As a cross-industry working group, the Alliance is composed of manufacturers, infrastructure builders, education & training institutions and related organizations involved in the BRICS countries on the principles of voluntariness, equality, open innovation, market operation and mutual benefit. Its purpose is to offer a broader platform for BRICS skills exchange and cooperation and to engage different sectors in the BRICS nations for more extensive exchanges and cooperation. By integrating the resources of BRICS institutions involved in BRICS in areas of education, technology, skills, information and professional standards and fostering high-tech and highly-skilled international talents, the Alliance aims to satisfy the talent requirement for infrastructure development and high-end manufacturing in BRICS countries and to promote their skills development for developing more advanced infrastructure and creating a more enabling international environment.

VIII. Furthering practical cooperation on specific projects

Being committed to setting up the bridge for practical cooperation among BRICS businesses, BRICS Business Council has also launched a series of activities for business promotion, and contributed to a batch of practical cooperation projects in 2016-2017. The information of these projects is appended in Annex IV of this report.

Part IV Recommendations for Deepening Economic and Trade Cooperation

I. Closer Partnership between the BBC and NDB

At its annual meeting in Ufa, Russia in 2015, BRICS Business Council offered to be an advisory council to NDB. Over the past year, BRICS Business Council has continued to enhance the daily communication channels with the NDB. By hosting annual meetings, summits, forums and exhibitions in BRICS countries, the two sides have actively promoted high-level exchanges and visits. As a result, an MoU between two sides will be signed in September 2017 within the framework of the 9th BRICS Summit in Xiamen.

The BRICS Governments are suggested to steer and support BRICS Business Council and the NDB to work closely from all aspects, including:

- BRICS Business Council should be encouraged to promote the consideration of lists of private sector and non-sovereignty projects from the working groups to the NDB to broaden the latter’s project portfolio;
- Financial services working group members of BRICS Business Council should be encouraged to provide financial support to the NDB, to underwrite the latter’s securities and to prepare and organize syndicated loans, with a view to further integrating industry and finance; and
- The two sides should be encouraged to intensify cooperation in specific investment and financing fields.

BRICS countries are highly complementary and they share broad prospects for cooperation in the energy sector. In addition, the NDB was founded to support emerging economies and developing countries in launching infrastructure and sustainable development projects, including the renewable energy projects. Therefore, it is suggested that the NDB set up the Clean Energy Fund to back energy-related projects in BRICS and other emerging economies.

To ensure that the NDB plays a bigger role in developing BRICS manufacturing, BRICS Business Council is supportive of financing for productive investment projects, particularly for manufacturing capacity investment cooperation.

BRICS Business Council congratulates the Bank for the adoption of the NDB’s General Strategy: 2017-2021. The Strategy stated that the main functions of the regional offices will be identification and preparation of bankable projects in BRICS and other member countries. Project preparation encompasses all the activities undertaken to advance a project from conceptualization to implementation, including identification of funding sources, undertaking of assessments and community and stakeholder consultations. Because of the fundamental functions of the regional offices, their effective establishment, as provided in this document, is an urgent measure.

II. Cooperation on Global Shipping and Logistics

Most BRICS countries own a vast territory and a long coastline, which provide the essential conditions to become a maritime power. As far as fleet size is concerned, the aggregate transport capacity of BRICS merchant fleets amounted to 19% of the world's total. Statistics of the United Nations Conference on Trade and Development (UNCTAD) show that, by January 2016, China, India, Russia, and Brazil ranked 3rd, 18th, 20th and 25th, respectively, on the capacity list.

In recent years when traditional economies such as the U.S. and European countries suffered an economic slowdown, major shipping players all over the world have increased their investments in the BRICS countries, and emerging markets including the BRICS nations have enjoyed a higher status in the international shipping landscape. With regard to the total container throughput and the container throughput of key ports, Drewry statistics indicate that the container throughput of Russia, India and China increased to varying degrees in 2016. India, among others, had an increase of 10.9% and its Port of Mundra stood out with a growth rate of 19.7%.

In order to boost the development of their marine economies, BRICS countries are recommended to step up cooperation in global shipping, logistics and related sectors by implementing the following measures:

II.1 Co-building a new ecology for international shipping

The prolonged slump in the international shipping market since 2008 has posed a serious threat to international trade. Thus, it has become a major concern of the shipping industry how to build a healthy and sustainable new ecology for international shipping. For this purpose, the **BRICS Governments** should strengthen policy communication and seek common ground in International Maritime Organization (IMO) and other international organizations so that the BRICS countries can have a stronger voice in the international shipping community. It is suggested that **shipping companies** should:

- resist vicious competition in the forms of either monopoly or dumping to ensure the sound and steady growth of the industry;
- rebuild stable partnerships with **shippers** by signing long-term transportation contracts to hedge against market fluctuations;
- extend cooperation with **ports** from terminals to container yards, warehouses, railways and highways in order to expand value-added services and improve the operating efficiency of the supply chain； and

- cooperate with **BRICS governments** on training and development of seafarers so that practical experience can be gained by trainee seafarers.

II.2 Increasing Port Investment

Considering that inadequate port facilities become a bottleneck to the growth of their shipping industry and foreign trade, the BRICS Governments should encourage investments in those facilities and bring in advanced technologies and equipment to raise their operating efficiency. Moreover, construction of logistics parks and industrial parks adjacent to ports should be stimulated as it helps generate new cargo sources. In most of the BRICS countries, a major portion of the trade passes through the ports and hence the logistics costs as well as 'Ease of doing business' are the critical parameters to be focused on.

II.3 Offering Customers Total Logistics Solutions

Players in the various links of the logistics supply chain, including shipping, ports, logistics, railways, highways, warehousing and container yards in the BRICS countries, should cooperate closely on equity investment, concession and land-sea multimodal transport to achieve complementary advantages. Together, they can offer customers higher-quality integrated supply chain solutions, and in turn benefit from it. Apart from co-operation, it is essential to digitize all transactions at the ports, including interface with users, stakeholders, for optimizing transaction times and thereby minimizing logistics costs. A key focus should be to improve the density and connectivity of trade corridors between the BRICS countries and their immediate regions.

II.4 Cooperating on Shipbuilding and Offshore Engineering Equipment Manufacturing

The BRICS countries should carry out international cooperation on technical innovation in a variety of ways, set up a joint R&D center dedicated to ships and offshore engineering equipment to exchange shipbuilding and ship repair technologies, explore technology transfer opportunities and jointly develop technologies for building new types of vessels such as ice-class vessels and LNG carriers. Moreover, new standards which conform to international practices and the latest development trends should be introduced through consultation.

II.5 Carrying out Technical Exchanges on Ship Energy Efficiency

Responding to global warming, shipping lines in the BRICS countries should shoulder common social responsibilities, strictly implement environmental protection regulations, and carry out exchanges and joint R&D on the application of clean energy technologies to ships. On the other hand, with the melting of Arctic sea ice cover, the BRICS nations may work together to practice Arctic navigation and study new ship types (e.g., LNG carriers and LNG dual-fuel car carriers) and core technologies for deep and polar explorations.

II.6 Co-operation in the Maritime Business for Mutual Gains

The BRICS countries have individually developed areas of excellence in the maritime business. It is proposed that there should be a streamlined process of sharing of information and experience especially best practices so that there is learning within the BRICS community and mutual gains. This should be aimed at reduction in transaction costs for the member countries, to make them more competitive to the world and at the same time putting to use the 'best practices' by a particular country. In addition to knowledge sharing there should also be a mechanism for preferential treatment within the maritime fraternity within the BRICS countries. This would result in gains for the member countries and in the overall context, advantages of scale for services to the world at large.

II.7 Creating a Common Protocol for 'Blue Economy'

Responding to the rapidly deteriorating ocean environment, together with the recognition that the BRICS countries have substantial stakes from the Blue Economy, there is a need for concerted efforts to protect and rejuvenate our oceans. A united and common Protocol should be developed and implemented across the BRICS nations, to lead by example. This should be aimed at conservation of the ocean eco-system and resources towards protecting the continuance of a vibrant 'Blue Economy' amongst the BRICS nations.

III. Cooperation on Digital Economy

As an increasingly important driver of global economic growth, the digital economy is experiencing high growth, rapid innovation, and broad application to other economic sectors. Expanding cooperation on the digital economy amongst the BRICS countries plays a significant role in accelerating economic development, enhancing productivity of existing industries, cultivating new markets and industries, and achieving inclusive, sustainable growth.

The Business Council has made four specific recommendations:

III.1 Promoting network infrastructure development to expand broadband access and improve quality.

For governments, it is suggested that domestic enterprises should be encouraged to take an active part in the BRICS countries' infrastructure development and industrialization and to carry out technical cooperation. Governments are also recommended to enhance the exchange of experience and information in the domain of infrastructure, improve the Internet access mechanism and make Internet access central to economic development and growth initiatives.

For business communities, efforts should be made to speed up infrastructure development in order to:

- promote broadband network coverage and improve service capacity and quality; and
- enhance the ties between IT industries and those based on IT services, advance public-private partnerships, and fully tap the potential of ICTs including the Internet.

III.2 Propelling the integrated development of Internet applications, supporting entrepreneurship and promoting digital transformation.

For governments, efforts should be made to:

- encourage Internet-based research, development and innovation (RDI) and support capacity building in digital technology and Internet-based entrepreneurship through an enabling, transparent legal framework, programs to support RDI and well-functioning capital markets for innovative enterprises;

For business communities, efforts should be made to:

- take advantage of the Internet to promote innovation in products, services, processes, organizations and business models;
- promote the application of digital technology in every field of economic and social life; enhance the integration of digital technology and public services to improve education, health, environmental protection, urban planning, health care, etc.;
- encourage the innovative applications of digital technology in service sectors to promote the continued development of e-commerce, e-government, e-logistics, online tourism, Internet finance and the sharing economy; and
- accelerate the development of cross-border e-commerce amongst the BRICS nations to achieve mutual benefit and connectivity.

III.3 Enhancing digital inclusion, addressing digital divide and adjusting the employment structure.

For governments, relevant policies should be introduced to promote universal access, including open access to the Internet with equal digital opportunities for all.

For business communities, the application of digital technologies should be encouraged in primary and secondary education and in non-formal education (including in libraries, museums, and other community-based organizations), as well as in areas that bring societal benefits such as food distribution, education, health, subsidy distribution and governance.

III.4 Promoting a digital cyberspace featuring peace, security, openness, reliability and cooperation and calling upon the five BRICS countries to strengthen cyber and information security.

For governments, intra-BRICS exchanges and cooperation on information security emergency response should be carried out and joint efforts be made to crack down on ICT-enabled criminal and terrorist activities within intra-BRICS cooperation and other international mechanisms.

For business communities, joint studies should be made on new information security technologies and services. Confidence of users should be built by ensuring the respect for privacy and protection of personal data.

IV. Energy Cooperation

Over the last two years, the global energy market has experienced dramatic changes with sharp fluctuations in energy prices. In addition to posing severe challenges to oil companies and oil producers, the fluctuation in oil prices has also had a bearing on the development of alternative and renewable energy as well. In order to address these challenges, the BRICS Governments are suggested to deepen cooperation in the following fields:

- advancing technical exchanges and cooperation in such fields as energy development & conservation and environmental protection;
- furthering discussions on co-ordination of standards and examining harmonization keeping in mind emerging markets realities and circumstances regarding engineering, construction, equipment supply, etc. in the energy sector, reducing technical barriers to trade and facilitating cooperation on investment, project contracting and technical services in energy infrastructure development among energy companies in the BRICS nations;
- establishing a consultative mechanism on production & consumption, tax subsidy, import & export and investment in the energy sector; and
- exploring the feasibility of using local currency in energy trade and investment cooperation to lower trading costs and exchange risks.
- exchanging statistical data and forecasts of development of the national energy systems, as well as information on best practices and energy regulatory frameworks, national policies and practices conducting conferences, exhibitions, workshops and seminars, through collaborative efforts.
- establishing a Clean Energy Fund with the New Development Bank to support development of Green energy projects in BRICS countries, inclusive of a financing framework covering aspects such as the criteria for funding, the size of Fund required, access to public and private sector projects including risk mitigation frameworks to support the bankability of energy projects as well as support for Credit Enhancement and Hedging Mechanisms.
- creating a BRICS Centre of Excellence on Energy which is proposed to be a network of different Centres of Excellence in BRICS countries. Each BRICS country can identify knowledge centers in terms of technology (coal, nuclear, gas, renewable, etc.), the Green Economy, Governance, Environmental compliance etc. with a view to establish a network of Centers of Excellence for the BRICS countries. the BRICS Centre of Excellence in Energy will aim at:
  - Promoting exchange of scientific and technological knowledge
  - Sharing experience and best practices, and build capacities of various industries and start-up enterprises among BRICS, particularly the energy sector
  - Organizing regular seminars, meetings or forums and other meaningful platforms for parties

involved to learn from each other and jointly make technological progress and, to promote practice and knowledge exchange on energy and energy efficiency.

It will also serve as a mechanism for skill collaboration opportunities in the energy sector amongst BRICS countries, especially for youth to develop their skills through access to the seminars, meetings or forums.

V. Cooperation on Communications Infrastructure

Infrastructure is essential for BRICS economic development and even global economic growth. In particular, digitized, networked and intelligent ICTs enable modern economic activities to be more flexible, agile and smart. In order to bolster intra-BRICS cooperation on communications infrastructure development, the Business Council recommends that the BRICS countries should:

V.1 Establish the concept of shared, safe and open development in the field of ICT infrastructure development amongst the BRICS countries.

The BRICS countries should:

- build a community of communications infrastructure cooperation, and actively engage their companies in infrastructure development in the BRICS countries and Africa;
- promote the coordination and harmonization of technical standards amongst the BRICS nations; and
- increase intra-BRICS exchange of experience and information.

V.2 Encourage cooperation on infrastructure development in other areas and make overall planning to expand the overall infrastructure capacity.

Recognizing that establishing a dedicated backbone infrastructure network amongst the BRICS countries requires substantial financial, material and human resources, especially it will face regulatory and access barriers, the BRICS countries should make overall planning for regional communications infrastructure and engage telecom operators in its construction and operation during the construction of infrastructure projects related to railways, highways, regional aviation, ports, power and water supply.

V.3 Boost cooperation between telecom operators and reinforce the development of international communications infrastructure to achieve a win-win outcome.

According to the general situation of their economies and the global layout of their communications infrastructure, the BRICS countries should build more cross-border information channels and international network facilities to improve the connectivity and global presence of their international ICT infrastructure and expand the infrastructure capacity wherever necessary to serve their national interests.

To implement these recommendations, the Business Council has proposed the following specific

measures:

- Enhancing cooperation between communications companies and transportation & logistics service providers for synchronized planning and development of transportation, logistics and communications infrastructure.
- Pushing forward the development of trunk communications network including cross-border submarine and overland cables to improve international communications connectivity.
- Encouraging companies and financial institutions to expand investment in the development of ICT and other infrastructure projects through diversified forms including public-private partnership (PPP) and "build-operate-transfer" (BOT).
- Encouraging and supporting competitive BRICS ICT companies to engage in the development of optical cable and network infrastructure in the BRICS nations and to work together in construction, operation and service delivery.
- Creating a business dialogue aimed at developing mechanisms of cooperation and exchange of best practices (e.g., exchange of experience in building "smart cities").
- Actively partnering with the International Communication Union (ICU) and other international organizations to bridge the gap between the BRICS economies and developed countries and to advance the building of an information society in the BRICS countries.

VI. Cooperation on Green Finance

Sustainable development has received extensive attention from BRICS countries since the philosophy was put forward at the Ufa Summit, and during Indian presidency the proposal was further discussed. The Chinese FSWG has organized to complete the research report of Green Finance, fully sort through and systematically study how green finance is developing in the five BRICS countries in an innovative manner, demonstrate whether it is feasible to introduce a green finance structure shared by all the five BRICS countries, and come up with more suggestions on the future development. The report offers a fairly comprehensive account of the latest progress the five BRICS countries have achieved in this field so far.

Consensus has been reached amongst the BRICS nations that it is impossible to achieve sustainable development without green finance. In order to bolster intra-BRICS cooperation on Green Finance, the Business Council recommends that the BRICS countries should:

- **Refine the long-term mechanism that governs research on Green Finance.** In the upcoming year, efforts will be made to build on research framework already developed about green finance, work out the overall framework and schedule for the research report as early as possible, fully demonstrate the reliability of research conclusions, present the final research results of the five BRICS countries proportionately, try to offer new policy suggestions to BBC every year, and introduce a reasonable, efficient and long-acting mechanism that governs the research into green finance step by step.

- **Vigorously tap the needs for green finance.** Active contacts should be made on working group levels with NDB in an attempt to provide financial services for its financing drive targeted at green projects. Proceeding from the actual financing needs in the market, it will provide financing to help BRICS participate in green projects together, or financial institutions in BRICS countries will render green projects internally with comprehensive financial services including loans and debt issuing.

- **Carry out in-depth researches on sustainable development and green finance** with systematically studying the development of green finance in the BRICS countries, and analyzing policies and practices in BRICS countries concerning financial tools such as green credit, green bond, green stock index, green development fund, and green insurance, which would offer a fairly comprehensive account of the latest progress the five BRICS countries have achieved and demonstrate whether it is feasible to introduce a green finance structure shared by all the five BRICS countries, and come up with more suggestions on the future development trends and the implementation of more green projects.

- **Develop green finance vigorously and provide comprehensive financial services.** It is able to promote green projects in BRICS countries and further propel their economies toward sustainable development by developing green finance and providing comprehensive financial services for project investment and financing activities, project operation and risk management in key eco-friendly areas such as environmental protection, energy conservation, clean energy, green transportation and green buildings.

VII. Aviation Infrastructure Cooperation

Globally, airline traffic is forecast to grow over 4.5% each year for the next 20 years, which will drive the need for thousands of new aircraft. The current worldwide fleet of 25,000 aircraft will grow to approximately 45,000 between 2016 and 2036 and the passenger numbers will reach 7.2 billion by 2035. The demand for air travel will continue to put pressure on the aviation sector.

Significant investment will be required especially from emerging economies to ensure sufficient capacity which is available to meet this demand. BRICS countries should have a highly efficient and effective aviation industry supported by government policies and regulation particularly on the regional aviation sector. Enhanced BRICS government and private sector cooperation would help fostering new opportunities for investment in the sustainable and intelligent aviation infrastructure of the future.

In the last few years, BRICS countries have been facing similar challenges, in areas such as airport infrastructure management, safety and security, air traffic management, aerospace industry, innovation, human resources qualification and training and environment. The recommended actions below will foster the exchange of experiences among BRICS countries and private sectors, by leveraging connectivity in the regional aviation agenda.

BRICS Business Council recommends that the BRICS countries should foster initiatives aiming at stimulating the connectivity of aviation network and to encourage infrastructure cooperation, promote a safer, more secure and environmentally friendly aviation sector.

In order to address these challenges, BRICS Business Council is aiming at establishing a Working Group on Regional Aviation in BRICS Business Council to set up a Memorandum of Understanding in Regional Aviation Connectivity and establishing a Plan of Action.

VIII. BRICS Rating Agency

At the annual meeting in Goa, India in 2016, one of the key proposals of BRICS Business Council was towards setting up of a BRICS Rating Agency. The idea of exploring the possibility of setting up an independent BRICS Rating Agency based on market-oriented principles was also endorsed by the BRICS leaders in the Goa Declaration. Following this, BRICS Business Council had set up an Expert Group under its Financial Services Working Group to work out the modalities of setting up the BRICS Rating Agency. Considerable work has been done by the Expert Group and it has also come out with a report on BRICS Rating Agency that has been annexed with this Annual Report.

BRICS Business Council recommends continuing the valuable work being carried out by the expert group and to work with the government for taking this initiative to fruition. Some of the key recommendations of the Expert Group on Rating Agency include:

For the business model, issuer-pay model is recommended for the BRICS RA as it is commercially established and globally accepted.

The rating methodology of BRICS RA would give a better assessment of credit risk to the investor on a scale which can ensure the highest quality of credit rating, and where the highest rating would convey the highest confidence of the issuer’s debt repayment. Such better assessment would come inter alia from better understanding of the economic-political environment in emerging countries.

It is recommended that the BRICS RA adopts a fair and transparent methodology to ensure that the ratings assigned by the RA find recognition among all the major investors including insurance companies and commercial banks.

For corporate governance, diversified shareholding is recommended to prevent domination from any single owner. Independence of the BRICS RA should be guaranteed to ensure credibility.

BRICS RA is recommended to be established preferably in one of the BRICS nations. The host country or region should have a conducive yet strong regulatory framework, an experienced regulator, large market size and the presence of a mature credit rating industry.

In general, the BRICS RA should present an independent, unbiased and just view towards emerging economies especially BRICS countries.

IX. Joint Implementation of Transport Infrastructure Development Projects

BRICS Business Council places special emphasis on the importance of building sufficient communication ties between Europe and Asia as the largest economies of the Eurasian continent, generating record volumes of transit freight flows, which demonstrated impressive rates in the last several years.

Even a pessimistic prognosis of dynamics of the world economy implies dramatic increase of cargo traffic between China and the EU in the next years. Taking into account that the portion of the mentioned cargo with high added value grows, such cargo traffic can be transported by overland corridors, passing through Russia.

Given this, an important area of cooperation, aimed at the development of trade interaction, could be construction of efficient transport infrastructure on the Eurasian domain.

One of the practical elements of this work should become implementation of the project of the Eurasian High-Speed Transport Corridor Moscow – Beijing, and HSR Moscow – Kazan, which is considered as its pilot part. The concept of the project implies orientation of the new HSR infrastructure on transportation of passengers and goods.

A key driver of growth of demand for high-speed carriage of goods overland is electronic trade (e-commerce) – the most fast-growing segment of cargo traffic in the world. In 2016, the volume of electronic trade reached the level of 2 trillion dollars.

Growth of electronic trade is accompanied by increase in the volume of outgoing consignments, enhancing railways competitiveness regarding cargo traffic tasks solved currently basically by air transport.

Ultimately the Eurasian High-Speed Transport Corridor will integrate two major high-speed systems – Euro Carex and China High Speed Railway, enabling mass use of HSR for cargo traffic across the Eurasia.

Until the entire corridor is complete for the purpose of transit is used the existing railway infrastructure.

Taking into account the acknowledged role of transport as a principle factor for ensuring economic and trade development, regional and cross-cultural integration, it is important to continue further the activities of BRICS Business Council Infrastructure Working Group aimed at joint promotion of transport and communication networks. Attributing a special significance to the development of joint business with BRICS countries, JSC Russian Railways (leader of Russian Chapter of Infrastructure Working Group) would like to express its willingness and commitment to elaborate joint approaches to the implementation of projects on the territory of BRICS countries as well as in third countries in the fields such as engineering, management of railways, consulting, transport machine-building and staff training. Given the scale of such projects, it is of paramount importance to ensure the support of the NDB in such projects.

The Moscow-Kazan HSR in Russia, which will become a part of the Eurasian high-speed transport corridor, has been identified as one of the priority projects on the territory of member-states of the organization in the third annual report of the activities of BRICS Business Council.

A Russian-Chinese consortium of companies is conducting engineering design works of this high-speed railway line.

Taking into account the importance of expanding the participation of the New Development Bank (NDB) in the implementation of large-scale projects on the territory of BRICS, JSC Russian Railways has submitted an official application to the NDB in order for the bank to consider the possibility of co-financing the project HSR “Moscow -– Kazan”.

As a result of several rounds of negotiations a decision has been reached to conduct a roundtable with participation of partners from China to discuss the issues of joint implementation of the project.

In addition to that, a possibility to sign an agreement for cooperation on the project between JSC Russian Railways and NDB is in the works.

Part V Action Programmes to Closer Partnership amongst BRICS business communities

I. Strengthen Institutional Development

For more than four years since its founding, BRICS Business Council has been developing its communication mechanism from scratch through constant improvements. Based upon its existing mechanism, the Business Council will commit itself to increasing both the breadth and depth of communication in order to form a more effective, deep-going and diversified cooperation system. To that end, the following two major steps will be taken:

- **Improve the regular communication mechanism to ensure the harmony and continuity of cooperation.** To enhance the efficiency and relevancy of communication, BRICS Business Council will enhance its working mechanism, convening annual council meetings and monthly industry working group teleconferences, and will meticulously design the agenda and topics of each meeting. Meanwhile, the communication channels among different working groups will all be opened up (for instance, the one between the closely linked infrastructure working group and financial services working group) with a view to providing new inspirations through information exchange and eventually achieving common development of various working groups. National chapters of BRICS Business Council should also keep close internal communication to ensure the smooth exchange of information between its member enterprises, to identify and solve problems promptly, and to form a common position on multilateral occasions. Many forums, seminars, conferences, trade and exhibitions with regards to promoting BRICS cooperation are held in BRICS countries regularly with support of national Chapters. Secretariats of National Chapter of BRICS Business Council should timely share information about these events to provide for business the opportunity of participation.

- **Optimize the composition of working groups to lay a solid foundation for cooperation.** For now, the members of each working group differ considerably from each other in terms of their industrial background. For instance, in the agribusiness working group, although the member companies are all engaged in agriculture-related business, they are indeed from many different fields, such as chemical fertilizers, forests and woods, food, etc. Considering such disparities, BRICS Business Council will invite some industrial associations to join the working groups, as they represent the comprehensive interests of all companies in the same industry. And it will be easier to seek common interests and carry out practical cooperation through dialogue between industrial associations. In addition, BRICS Business Council will also invite related industry experts and research institutions to join the working groups as a way to provide technical and research support for the working group development.

II. Synchronize Development with External Organizations

Under the guidance and facilitation of the BRICS Governments, the mechanisms for industrial cooperation (BRICS Business Council), academic cooperation (BRICS University League), research cooperation (BRICS Think Tanks Council) and capital cooperation (New Development Bank) have been successfully established. A "five-in-one" cooperation model that integrates the political, industrial, academic, research and capital communities has taken shape among the BRICS nations.

As a representative of the BRICS business community, BRICS Business Council speaks for enterprises from a variety of sectors, and is committed to promoting intra-BRICS economic, trade and investment cooperation. With a view to gaining constant momentum of development, the Council will make efforts to:

- maintain effective communication with government departments and propose policy recommendations;
- enhance interactions with the BRICS Think Tanks Council to obtain up-to-date research information;
- deepen the partnership with the NDB by carrying out industrial and financial cooperation on specific projects; and
- advance cooperation with the BRICS University League to foster more skilled talents for BRICS cooperation.

Within its mandate, BRICS Business Council will expand cooperation with academic, research and financial institutions, and give full play to their synergies so as to better serve the business development as well as economic, trade and investment exchanges among the BRICS countries.

III. Integrate Strategic Guidance with Practical Cooperation

The current working mechanism of BRICS Business Council is largely based on the communication and coordination among high level business, while various working groups being responsible for seeking cooperation in specific projects. However, those who are in charge of high-level communication mostly come from the foreign affairs section of each member company, whereas those who are responsible for working on specific projects are often grassroots business practitioners. Such an arrangement turns out to be inherently problematic in itself: on the one hand, information loss would occur in the communication process between the two groups of people; on the other hand, communication within the foreign affairs teams will focus mainly on macro policy coordination and be less sensitive to direct project cooperation opportunities and business "pain points".

To address these problems, BRICS Business Council will adopt the following measures:

- **Open up the communication channel between the Sherpa channel and grassroots business teams to enable effective transfer of information and needs.** Both teams should be able to work on the macro and micro levels at the same time. To achieve that, Sherpa channel and other relevant streams should be encouraged to strengthen ties with the grassroots business teams, and inform the latter of policies and business opportunities identified during high-level meetings; meanwhile, the business teams should likewise inform the foreign affairs teams of difficulties encountered in doing daily business, and look for a solution to the relevant policy barriers via consultations among high level business executives.

- **Build a cooperation platform directly for the grassroots business teams to exploit cooperation opportunities.** BRICS Business Council will act as a go-between to materialize the partnership between upstream and downstream businesses as well as between companies in the same industry. By hosting business cooperation conferences and project orientations, the Council aims to facilitate substantive project cooperation through direct dialogue between businesses.

Part VI Annexes

Annex I: Joint Declaration of BRICS Business Council on Regulatory Cooperation on Standards

The BRICS Business Council (hereinafter referred to as BBC) fully supports the World Trade Organization (WTO) Agreement on Technical Barriers to Trade, which aims to ensure that technical regulations, standards, and conformity assessment procedures are non-discriminatory and do not create unnecessary obstacles to trade, while, at the same time, recognizes WTO members' right to implement measures to achieve legitimate policy objectives, such as the protection of human health and safety, or protection of the environment.

BBC admits the value of voluntary standards and technical regulations, in such aspects as protecting human, animal and plant health and life, preventing deceptive practices protecting the environment, facilitating production and trade, compliance, and protecting indigenous technologies, production methods and processes.

Meanwhile, BBC identifies the role of voluntary standards in creating unintended barriers of cross-border trade, and impeding the free flow of intra BRICS trade and best practices.

In the spirit of minimizing obstacles to cross-border trade, strengthening trade and investments ties, and promoting sustainable development within BRICS territory, BRICS Business Council (BBC) recommends that the BRICS countries:

1. Base measures on international standards as a means to facilitate trade, and adopt transparency initiatives to create a predictable trading environment.

2. Consider the possibility of creating a Working Group on standardization Cooperation in the Contact Group on Economic and Trade Issues (CGETI) framework, in order to identify areas to advancing a regulatory cooperation agenda in BRICS countries.

3. Consider the convenience of realizing a comparative study of voluntary standards and technical regulations adopted in their respective markets in relation to products with competitive potential in order to promote regulatory cooperation initiatives to facilitate trade and investments between BRICS countries.

4. Strengthen cooperation in the international standards community, including regional and international standards organizations, in developing, revising, promulgating, and issuing voluntary standards.

5. Where there are widely adopted technical regulations and voluntary standards, facilitate interested members within BRICS in becoming acquainted with and understanding these standards in such a manner as they find it appropriate and answer reasonable enquires. For voluntary standards and regulations, developed by national standard setting bodies, the WTO TBT Enquiry Point notified to the WTO, shall act as Enquiry point for each BRICS country.

6. Whenever widely adopted voluntary standards and technical regulations in different BRICS countries have differences, minimize difference through such means as identifying critical requirements that need to be retained in respective standards and identifying requirements that can be coordinated with a goal of enhancing industry-wide exchanges.

7. Wherever widely adopted voluntary standards and technical regulations in different BRICS countries addressing the same policy objective, have differences, explore the feasibility of accepting equivalent standards, the feasibility of referring to existing international standards as a common standard, and the feasibility of accepting certification results of accredited independent certification bodies as an alternative means of conforming to their standards, once approved by national accreditation bodies who are signatories of the International Laboratory Accreditation Cooperation (ILAC) and International Accreditation Forum (IAF) Mutual Agreement Arrangements.

8. In the cases of preparing, adopting and applying new voluntary standards and technical regulations within national border, honor the principle of transparency as provided for in the WTO TBT Agreement Annex 3, *Code of Good Practice for the Preparation, Adoption and Application of Standards*, through such means as publishing pertaining information, strengthening communication with and answering reasonable enquires from interested members.

9. When leading or participating in the process of preparing, adopting and applying new standards within national border, consider using relevant parts of existing international standards as a basis.

10. In conformity assessment, facilitate responsible information sharing, answer reasonable enquires, undertake and complete conformity assessment procedures in accordance with WTO TBT Agreement provision, and enter into substantive communications for the reciprocal recognition of conformity assessment procedures when different members are adopting the same international standards, in compliance with the International Laboratory Accreditation Cooperation (ILAC) and International

Accreditation Forum (IAF) Mutual Arrangements.

11. Taking into account that standardization systems are not always keeping pace with disruptive technological changes boosting tectonic shifts at the existing markets, as well as emergence of new markets, BRICS countries are encouraged to cooperate on new technological standards development, and merge efforts to promote developed technological standards internationally.

12. Whenever a relevant international standard does not exist while BRICS countries have competitive advantages, the BBC is encouraged to work with concerted efforts to identify opportunities in participating in the development of new standards to promote sustainable development within BRICS territory, and represent the coordinated position of BRICS business communities in the international standards setting bodies.

Annex II: Summary Report of the Seven Working Groups

Part I Energy and Green Economy Working Group

Energy is central to social and economic well-being. Under the Chinese Presidency in 2017, the BRICS Business Council Energy and Green Economy Working Group (hereinafter referred to as "the WG") continued to focus on UN's sustainable energy for all (SE4ALL), one of the 17 SDGs, carried forward the discussions and activities initiated by the Russia Chapter in 2015, continued by the India Chapter in 2016, and also discussed important new avenues of collaboration among the BRICS member countries.

I. Review of Key Developments of BRICS Energy Sectors

In the past year, world energy markets continued to evolve with primary energy consumption grew by just 1% and oil remained the world's leading fuel by accounting for a third of consumption. According to the *BP Statistical Review of World Energy 2017*, BRICS combined recorded an increase of 1.6% in primary energy consumption and accounted for 36.7% of the world's total. China and India represented the largest increments in oil consumption while Russia saw the largest drop in natural gas consumption. Global coal consumption fell by 53 million tonnes of oil equivalent (mtoe), and its share of global primary energy consumption dropped to 28.1%, the lowest since 2004. South Africa, the world's seventh largest coal producer, accounted for 95% of Africa's and 3.9% of global coal production. China became the largest single renewable producer and Brazil remained the world's second largest producer of biofuels. World hydroelectric power generation rose by 2.8% in 2016, (27.1 mtoe). China (10.9 mtoe) provided the largest increment and Brazil is the third largest generator of hydro power. India became the 7th largest renewable power generator in the world.

II. Summary of Work

II.1 Working Group Meetings. On 5 January 2017, the Chinese members met to discuss about cases on standards recognition when operating business within BRICS territory. They exchanged insights on promoting the coordination and harmonization of technical standards among BRICS countries. On 25 May, the teleconference covering all the WG members had a further discussion on the proposal of establishing a Clean Energy Fund in the NDB to support the energy projects by the BRICS country members on the territory of BRICS and in other countries. The WG also noted the work on the EPEC, an e-commerce platform under Sinopec flag for industrial products, to service BRICS trade interconnectivity. On 29 June, the second WG teleconference was held across the five chapters and participants further explored the feasibility of setting up a BRICS Clean Energy Fund within the NDB. Inviting more quality resources to register on the EPEC platform, preparing for the Annual Meeting in Shanghai and Xiamen, and structure of the WG annual report were also further discussed.

II.2 Working Group Milestones. During the Goa Summit and New Delhi Mid-term Meeting, the Energy and

Green Economy Working Group voiced their support for more attention on the execution side of consensus under the Chinese presidency. The WG believed it vital to strengthen BRICS partnership through substantial project cooperation and stronger trade interconnectivity. In the spirit of promoting a more productive partnership, the WG was dedicated to the following two initiatives.

- **Setting up a Clean Energy Fund within the NDB**

The New Development Bank was formed to support infrastructure and sustainable development efforts in BRICS and other underserved, emerging economies for faster development through innovation and cutting-edge technology. The WG proposed to establish a BRICS Clean Energy Fund within the NDB to support energy projects by the BRICS on the territory of BRICS countries and in other countries, in the belief that the Fund aligns with the NDB's mission. Through the assistance of the Chinese Chapter of the BRICS Business Council (hereinafter referred to as “the BBC”), the WG had approached the NDB for a preliminary discussion and received positive response and interest from both the NDB and the BBC Financial Services Working Group (hereinafter referred to as “the FSWG”). Proposal was also made to incorporate this initiative into the MoU to be signed between the NDB and the FSWG. Due to time constraint and approval procedure issue, the FSWG recommended not incorporating it in the MoU, but the NDB expressed interest in further the discussions. The WG will continue to engage with NDB for the possibility of establishing the Fund. Options that could be discussed include Blended Finance, exploring the topic of blended finance (and learning from the likes of the IFC, AfDB), this could complement the whole Clean Energy Fund as both are aimed at sourcing affordable project finance funding, and Credit Enhancement to ensure the credit worthiness of entities in BRICS countries.

- **Building EPEC to Service BRICS Trade Interconnectivity**

EPEC is an e-commerce platform under Sinopec that focuses on industrial products trading. By the end of June, accumulated registered suppliers on EPEC had reached over 36,000, covering 66 industries of 96 in China. The total volume of products available online is over 18 million. EPEC will open its registration and user access to BRICS enterprises free of charge. Following the formal proposal and presentation of EPEC by the China Chapter in Mid-term Meeting in New Delhi, EPEC’s international site is on line now and accessible by enterprises from Brazil, Russia, India, and South Africa for registration.

The platform is already open to all quality BRICS enterprises. The initiative will see a much closer trade connection and strike a better balance between supply and demand within BRICS territory. This initiative resonates with G20 summit consensus and marks as a pioneer e-commercial endeavor on a multi-national level. It will not only promote Chinese companies to a global audience but also provide access to the Chinese market for companies across BRICS. The global.epec.com was launched on 18 April 2017 and designated focal points of each country chapter are actively inviting their country enterprises to register on EPEC.

III. Recommendations:

III.1 Coordination and Cooperation of Technical Standards

Project teams have frequently found themselves face inconsistencies between BRICS country standards with global common practice and between adopted standards and their technical capabilities to conform to the standards. Undoubtedly, such inconsistencies would have negative impact on project implementation and thus result in cost increase. In addition, some standards are prepared in a specific mother language other than English, which causes difficulties in accurately and fully understanding the standards for people from a different language background. In the petroleum and petrochemical industry, BRICS adopt different technical standards in their respective countries and this practice very often creates confusion and hurdle to foreign companies. Given that, the WG calls for regulatory cooperation of voluntary standards keeping in mind emerging markets' realities and circumstances regarding engineering, construction, equipment supply, etc. In the spirit of minimizing obstacles to cross-border trade, strengthening trade and investments ties, and promoting sustainable development within BRICS territory, enterprises are encouraged to strengthen cooperation within limits of their resources in information sharing, reasonable inquiring answering and cooperation in developing, revising, promulgating, and issuing voluntary standards. BRICS should cooperate on new technological standards development and promotion of these standards globally. In areas where BRICS countries have competitive advantages, BBC is encouraged to work with concerted efforts to identify opportunities in participating in the development of new standards to promote sustainable development within BRICS territory, and represent the coordinated position of BRICS business community in the international standards setting bodies.

III.2 Collaboration in Addressing Challenges

Depressed oil prices, with Dated Brent oil price hitting lowest annual level since 2004, posed challenges to not only oil companies and producing countries, but also the development of renewable and alternative energy. Against that backdrop, BBC should consider the following areas for collaboration to jointly cope with current challenges. One, promote technical exchanges and cooperation in energy development, energy conservation and environmental protection. Two, explore the feasibility of using local currencies in energy trade and investment cooperation to reduce trade costs and exchange risks.

In the past year, BRICS saw increased share of renewables in their energy mix and decrease of CO2 emission from the use of energy. Despite the achievements, BRICS need to further strengthen their efforts in developing green and low carbon economy. Bilateral or multilateral cooperation among BRICS in technology, capital and policy can significantly help achieve this goal.

III.3 Center of Excellence

Setting up a center of excellence is a proposal the WG would like to carry forward from the Indian presidency. We believe it a tangible mechanism to promote the exchange of scientific and technological knowledge, share experience and best practices, and build capacities of various industries and start-up enterprises among BRICS, particularly the energy sector. Regular seminars, meetings or forums are meaningful platforms for parties involved to learn from each other and jointly make technological progress, to promote practice and knowledge exchange on energy and energy efficiency. It may also function as a venue for young people to develop their skills if they have access to the seminars, meetings or forums. Frequent exchanges and knowledge sharing between young entrepreneurs/early age start-ups and established businesses also bring deeper understanding of each other. The combination among young talents, research and development capabilities and industrial forces will create great synergy.

Part II Financial Services Working Group

While carrying out various work arrangements made by the Indian chapter of BRICS Business Council (BRICS Business Council is referred to as “BBC” for short) for 2016/2017, the Financial Services Working Group of BRICS Business Council (referred to as “FSWG” for short) also set foot in new work fields and organized activities thereof innovatively in 2017 under the leadership of the Chinese FSWG.

To be specific, the Chinese FSWG pushed forward the following five proposals: *Cooperation between BBC & NDB, Financial Services Platform for BRICS SMEs, Green Finance, New International Payment Card System*, and *BRICS Credit Rating Agency*. Besides, it also arrived at a new proposal entitled *BRICS Insurance Support Framework* upon the agreement of all the five member states after full consultation. Additionally, the Chinese FSWG endorses the proposals FSWGs have put forth in previous years, and agrees to continue pushing them forward in the upcoming year.
Below are the details on how each proposal has proceeded.

I. Cooperation between BBC & NDB

I.1 Background

Since the establishment of BRICS Business Council, all its president countries have taken promoting the communication and cooperation with NDB as an important part of their work. The foundation of NDB signals that the collaboration among the BRICS countries is getting substantial. During its establishment and development, BRICS Business Council closely followed up with the progress and gave suggestions on bank governance and operation as well as project selection. Now NDB is dedicated to providing financial services for BRICS countries as well as other emerging markets and developing countries with a view to facilitating their infrastructure and sustainability projects. As supplement to the existing multilateral and regional financial institutions, it is able to advance the ongoing reform on international financial institutions. Considering most of these projects are involved with government credit, NDB is expected to intensify its partnership with the business circles of the BRICS countries, in a joint effort to serve the construction projects owned by them and other developing countries.

In its annual report of previous year, BRICS Business Council offered recommendations to BRICS, saying “*BRICS Business Council be effectively engaged as an advisory council to the New Development Bank. The NDB should consider providing observer status to the chairpersons of the BRICS Business Council.*”

I.2 Work overview during China’s rotating presidency

FSWG took immediate action around the aforesaid proposals. With the concretely coordinated efforts of China FSWG members as well as the cooperation and support from the FSWGs from each national chapter of BRICS Business Council (referred to as "other FSWGs" for short), the pertinent work is now proceeding orderly.

- **Memorandum of Understanding on cooperation**

On BBC New Delhi mid-term meeting at the end of this March, the China FSWG submitted the draft of a Memorandum of Understanding on cooperation to be signed by BBC and NDB, in a bid to seek opinions of other FSWGs. After that, discussions were held among FSWG. Meanwhile, the China FSWG negotiated with NDB on behalf of them for many times before the memorandum was basically finalized by the end of this July. According to the MoU, BBC and NDB make it clear that their primary goal is to establish a strategic partnership, and outline the scope for their areas of cooperation which should include but not limited to the following five aspects: Economic and Financial Research, Activities in Local Markets of BRICS Countries, Knowledge Exchange, Financial Institutions Cooperation, and Human Resources Development. The signing of MoU is supposed to be witnessed by the BRICS Heads of State at the BRICS Xiamen Summit this September.

- **High-level Interactions**

Since the beginning of 2017, FSWG has continued its close contacts with NDB, organizing a variety of communications at the council level, and introducing a mechanism of communication between the two sides. BBC convened its mid-term meeting and NDB held its second annual meeting in India this April. By seizing this great opportunity, the two sides had a breakfast meeting where all council members and bank executives from the five BRICS countries were present together. On the meeting, the two parties briefed each other on their respective short-term work plan, and talked about their visions for areas of cooperation. As the China BBC pointed out, NDB stands as a hard-won result from the cooperation of the BRICS countries and it also exemplifies how emerging economies rally around and get connected closely. BBC and NDB promise enormous space for cooperation. BBC will share resources with NDB and support its growth. BBC and NDB are expected to introduce a mechanism with which the both sides can have strategic talks, and carry out study and practice together. At the same time, they will roll out a personnel training program so that financial and commercial professionals will be trained for the BRICS countries. After the negotiation, both sides have agreed to sign the MoU. According to the memorandum, the study and cooperation about the specific projects in the private sectors will commence as soon as possible; the member units of the financial institutions under BBC are allowed to help NDB create its project reserve fund; and during its annual meeting this year, BBC was invited to visit the headquarters of NDB in Shanghai where they held high-end seminars in a joint effort.

- **Specific business cooperation**

To realize the consensus the two sides have reached, FSWG has solicited from other working groups the list of non-state sovereign and private sector projects that can be recommended to NDB. At the same time, all members of FSWG will provide NDB with financial support by underwriting its bonds, organizing syndicate loans, and taking other measures. Intensified contacts about the details of cooperation have been underway.

The China FSWG has asked NDB about its bond-issuing demand in the future, and put forth the relevant plans in line with the market conditions. NDB is expected to maintain contacts with FSWG and give timely cooperation on the future bond-issuing business. The China FSWG is ready to provide NDB with professional information consultancy and business support.

I.3. Recommendations for the next stage

To further push forward the partnership between two sides, FSWG hereby offer the following recommendations:

- FSWG will work continuously to strengthen the dialogue between BBC and NDB, pursue the advisory role and observer status for BBC in NDB, and exploit the unique resources of BBC in the industrial and commercial circles to offer advisory service for NDB. At the same time, NDB is recommended to designate a dedicated team in charge of connecting with BBC. A regular communication mechanism is to be introduced so that the two sides can have their contacts free from the influence of such factors as personnel replacement and presidency rotation, and continue turning all MoU suggestions into realities.

- FSWG will fully expand the partnership between BBC and NDB in terms of financing, project investment, and information sharing, assist NDB in shifting the focus of its support from government credit to private sectors, and guide commercial banks of its member states to cement their ties with NDB by several ways such as project recommendation, co-financing, and interbank financing. BBC is advised to sum up all industrial working groups' financing demands with NDB, make recommendations to NDB on a regular basis, and request NDB to handle these demands as top priorities and provide it with feedbacks.

- FSWG will discuss with NDB about the possibility for creating a sustainable development-oriented energy fund, with a view to providing the new energy projects carried out by BBC members with a comprehensive financial services package.

II. Financial Services Platform for BRICS SMEs

II.1 Background

Since small and medium-sized enterprises (SMEs) are crucial to today's international economic community, many countries across the world have rolled out an array of policies to develop such enterprises and solve their problems. Closely following and supporting SMEs' development has always been an important content of the *Strategy for BRICS Economic Partnership*. Their success will help BRICS advance economic transformation, increase employment and deepen transnational collaboration. BRICS SMEs promise vast market and complement each other to a certain extent. Therefore, BRICS should make it a top priority to facilitate their SMEs' forming partnership in trade, finance and other fields, and to introduce a communication and cooperation mechanism for their SMEs. The overall mission of BRICS' partnership should be set to create a financial service mechanism targeted at their SMEs, whereby finance can bring its media role into play in support of enterprise cooperation and development.

Therefore, as the China FSWG suggested innovatively, the "BOC global SME cross-border matchmaking service" mechanism should be introduced to help SMEs in the BRICS countries set up financial service platforms; a host of cross-border investment and trade cooperation activities are to be staged among SMEs in the BRICS countries and beyond, with a view to helping them get rid of geographic, language and cultural barriers, bringing their market, technology, personnel and capital together, and getting themselves integrated into the global industry and value chain. At the same time, based on companies' business demands and features demonstrated in different phases of matchmaking process, BOC will also provide them with a full package of customized financial service plans that cover the entire life cycle from customer negotiations to investments and to subsequent operation. In this way, it will not just usher SMEs into the cross-border cooperation but also keep safeguarding them throughout their growth and expansion.

During the activities, FSWGs from each national chapter of BBC will be invited for field observation and are expected to continue holding similar matchmaking activity during their rotating presidency, thus introducing a long-acting mechanism that financially supports the growth of SMEs in the BRICS countries.

II.2 Work overview during China's rotating presidency

- The Tianjin Municipal People's Government, Bank of China and BRICS Business Council co-hosted the 2017 Tianjin (China) and BRICS High-tech SME Cross-border Investment and Trade Cooperation Event on June 5. The event is chiefly aimed to attract high-quality corporate customers from many industries as diverse as science and technology, Internet, software and information service, financial services, pharmaceuticals, equipment manufacturing, energy and ecological improvement, farm and non-staple food processing, mining, and jewelry as well as their upstream and downstream sectors. It makes the emerging industries and traditional advantageous industries that are conducive to BRICS' transformation and development as top priorities.

- This event has been included into the Key Deliverables of Chinese BBC in this year. As the Chairman of the Chinese Chapter of BRICS Business Council, Mr. Xu Lirong sent a handwritten letter to his counterparts of the four other chapters, inviting them to attend the event along with their council members. At the request of the Chinese Chapter, the four national FSWGs made publicity about the event in their own country, and recommended elite companies to participate in it. In the meantime, Bank of China also invited officials of the four countries' embassies in China to take part in the matchmaking activities in Tianjin.

- At the opening ceremony, Dr. Danisa Baloyi, Council Member of the South African Chapter, attended and addressed the event. Besides, South African and Indian Chapters sent delegates to the occasion as well. Charles Manuel, Commercial Counselor of South Africa's Embassy in China, and embassy officials from the four other BRICS countries were present. On behalf of the Chinese Chapter, Mr. Tian Guoli held amicable discussions with other council members and embassy officials in attendance. During the meeting, the China FSWG also exchanged views with its South African equivalent about the specific cooperative projects among their financial institutions.

- Thanks to the vigorous support from the other four chapters of BRICS Business Council, the Chinese Chapter managed to invite 63 companies from Brazil, Russia, India, and South Africa, and nearly 600 SMEs from other 22 countries and regions across the world to the event where a total of 580 B2B talks took place in six rounds and helped companies of BRICS reached some 200 cooperation intentions.

- After the event in Tianjin, upon the request of the delegates from the other four BRICS countries, Bank of China arranged some South African and Russian companies to attend a matchmaking conference in Liaoning, facilitated the visit of some Indian companies to Tianjin Binhai New Area, and helped some Russian companies to look around the Port of Tianjin. In the wake of the event, representatives from Brazil's Embassy in China paid a visit to BOC where the two sides communicated about how to introduce the cross-border matchmaking mode to Brazil and to work together to stage activities in the future.

II.3 Work plan for the next step

With financial services, the China FSWG strives to introduce a long-acting cooperation and communication mechanism for SMEs in BRICS, whereby BBC will translate its theoretical research findings in previous years into practical results, capitalize on FSWG's unique financial perspective and advantages in bank-enterprise and bank-government partnerships to arrange more matchmaking activities for SMEs in the BRICS countries. To this end, the China FSWG puts forth the following suggestions on behalf of the five national FSWGs.

- The matchmaking activities will be held annually for SMEs of BRICS countries. In future, the country in the rotating presidency will host a matchmaking activity for SMEs of BRICS with the national FSWGs as the liaisons of the cross-border matchmaking work, responsible for coordinating and organizing their respective companies to participate in the activity. BOC will provide organizational and technical support.

- Introduce the information release channels for cross-border matchmaking activities. Such information may be released through the BRICS information sharing platform (brics-info.org), FSWG group mailbox and other forms.

- Build the cross-border matchmaking database for SMEs of BRICS. BOC will gather information on SMEs provided by the five national FSWGs into a database. According to the requirements for eligible companies, SMEs may look for their potential partners within BRICS and beyond.

- Banks and governments team up. As advised, embassies in BRICS will be invited to the cross-border matchmaking activities as they were before in an attempt to increase the influence of such activities. At the same time, efforts should be made to communicate with the relevant government departments of BRICS with a view to introducing the fixed cross-border matchmaking channels for bank-government cooperation.

III. BRICS Insurance Support Framework

III.1 Background

As companies in the five BRICS countries carry out economic, trade, and investment activities with each other at an increasing frequency and in annually expanded business revenue and volume, all these countries are showing growing needs for protecting their overseas interests from various risks. To help their respective commercial and trade companies as well as foreign investment companies better manage their overseas risks arising from destination countries due to natural, political, economic, cultural and other factors, insurance entities in the BRICS countries should bring their role into full play so as to provide more first-rate comprehensive risk management services for these firms.

Currently, BRICS countries have varying insurance laws and regulatory provisions, and carry out insurance business contacts at a limited scale. Insurance companies in one member state fails to know well about other four countries' market situation, industry practice or risk profile, which in turn hobbles the business conduction and results in a vicious circle. Take the Chinese market as an example. International cooperation has become a common sight in the reinsurance field. There are 615 reinsurers in the reinsurance business segment of the Chinese market, among which only 13 come from the BRICS countries except China (five from Russia, four from India, three from South Africa, and one from Brazil), accounting for 2% of the total. At the same time, compared with developed countries in Europe and North America, the BRICS countries see their insurance market in its infancy. Insurance arrangements for large local projects are often led by European or American insurance companies, since the domestic insurers fall short of leadership and underwriting capacity.

As an integral part of comprehensive financial services, commercial insurance needs to play a greater role in the foreign investment, business and trade cooperation among the five BRICS countries. Therefore, the Chinese FSWG put forward the proposal of establishing a “BRICS Insurance Support Framework” this year. At the same time, it also advised the recruitment of an expert panel for long-term research.

III.2 Work overview during China’s rotating presidency

- An expert panel was recruited. The panel was composed of eligible primary insurance companies, reinsurance companies as well as pertinent industry experts and professionals that national FSWGs have screened and recommended. As of July 2017, 14 experts recommended by the BRICS countries have constituted the expert panel.

- A signature coordination mechanism and a practical cooperation platform for insurance and reinsurance companies in the five BRICS countries were set up to meet the following research criteria:
  - Clear-cut focus: The focus is set to create an insurance support system which is designed to protect the overseas interests of going-global companies from member states within the BRICS countries.
  - Network of primary insurance companies: Primary insurance companies featuring sound resources, reputation and service capacity in their own country are selected as ceding companies so that going-global companies from member states can have access to convenient policy issuing and consulting services there.
  - Network of reinsurance companies: A policy that is issued abroad by a primary insurer for a going-global company is reinsured by a reinsurer with sound international reputation and strong financial strength which is located in the host country of the company so that the company can have access to the full-flow risk management services provided by the reinsurer of its own country.
  - Significance of the platform: With the platform, the insurance entities of each member state are expected to boost their business exchange and cooperation, generate commercial profits and strengthen information sharing, and enhance their understanding of other countries’ insurance market, thus laying a solid foundation for further improving multilateral collaboration in the future.
  - Memorandum of understanding on cooperation: In accordance with the company qualifications and standards for scope of business designed by the expert panel, the China FSWG invited its four other counterparts to recommend eligible insurance companies to join the cooperation mechanism. The goal of this year has it that one primary insurance company and one reinsurance company from each country will take the lead in forming the policy issuing and reinsurance network. So far, the Chinese representative companies has discussed and worked out with their equivalents from the

four other BRICS countries the scope of cooperation and respective rights and obligations. A memorandum of understanding is expected to be signed upon consensus.

III.3 Work plan for the next step

- Carry out publicity and promotional activities targeted at BBC member units in a bid to promote the projects under the cooperation framework into reality as soon as possible. Take advantage of NDB and other international cooperation platforms to provide commercial insurance services for their large infrastructure projects.

- Strengthen information sharing and exchange. Reply on the practical cooperation platform, share information on specific issues like pertinent laws and regulations, regulatory provisions, industry status, and market practice in each BRICS country, help the BRICS countries to improve their country risk database and insurance product lineup, enhance mutual understanding of insurance entities in member states and encourage insurance entities to make reinsurance and retrocession arrangements with their equivalents from the four other BRICS countries.

- Study to form a reinsurance pool. The five BRICS countries need to bring their respective comparative advantages into full play, form synergy to enhance their insurance supply capacity, provide risk management and reinsurance services for their large projects, and gradually extend their business reach to other emerging economies, and developing countries.

- Develop the mechanism into an important product of the five member states' cooperative efforts as well as a sub-platform under BBC.

IV. Green Finance

IV.1 Background

Sustainable development has received extensive attention from BRICS since the philosophy was put forward at the summit held in Ufa, Russia. The proposal was further discussed during the Indian presidency. Based on the discussion, FSWG was approved to conduct the feasibility study under the philosophy of green finance, with a view to making green projects more attractive to private sectors.

The Chinese FSWG agrees on and holds that it is impossible to achieve sustainable development without green finance. Therefore, through vigorously developing green finance and providing comprehensive financial services for project investment and financing activities, project operation and risk management in such key eco-friendly areas as environmental protection, energy conservation, clean energy, green transportation and green buildings, it is able to promote the development of green projects in BRICS and further propel their economies toward sustainable development.

IV.2 Work overview during China's rotating presidency

This proposal is aimed to carry out an in-depth research into the concepts and proposals on sustainable development, green finance and other topics FSWG has put forth in previous years, fully sort through and systematically study how green finance is developing in the BRICS countries in an innovative manner, and compare and analyze how these countries' policies and practices concerning such financial tools as green credit, green bond, green stock index, green development fund, and green insurance have evolved and progressed over the recent years in the form of case study, demonstrate whether it is feasible to introduce a green finance structure shared by all the BRICS countries, and come up with more suggestions on the future development trends and the implementation of more green projects. Major progresses include:

- The proposal, along with the suggested framework for research and the requirements for project development, was put forward in February, for seeking the opinions of the five national FSWGs.
- The five national FSWGs reached consensus on the project research framework, and the recommended experts formed a panel and started their research on behalf the FSWGs in May.
- The China FSWG completed the draft of research report, revised and improved it through discussion with other four national FSWGs, and formed the final report in July.
- After being adopted by the relevant competent authorities, the final report was deemed as one of major work achievements and included into the annual work report in August.

As the first research result FSWGs have produced concerning green finance, the report offers a fairly comprehensive account of the latest progress the BRICS countries have achieved in this field so far.

- **China**. China has elevated its green finance system to a height of national significance, and formed a fairly complete policy framework for green finance. Relevant government departments work together to issue green finance-related policies and rules, establish an operable green finance system backed up with basic elements, and render the governments at all levels and private capital stakeholders with a variety of green finance-related products and financial tools. Besides, the Chinese government selects regions of different development stages to build the innovative experimental zones to introduce the green finance reform, and explore the replicable experience in developing green finance at different places from the institutional perspective. In the recent two years, China has seen its green bond market developing rapidly and becoming the world's largest one of its kind. Green credit and green insurance policies have developed at a slow pace for many years. However, green funds and ESG information disclosure have drawn increasing attention in recent years. The unification of carbon market across the country will prepare necessary ground for the development of carbon finance in China.

- **South Africa.** As stated in its National Development Plan (a vision for 2030), South Africa will ensure its environmental sustainability and transit to a low-carbon economy. The South African government holds that the sustainable development of economy needs to be realized with the enterprise-government cooperation and the process should be dominated by market and companies. As for some green finance-based products, like green bonds, as long as there are restricted policies and incentive measures, banks are inclined to include environmental and social factors into their decision-making process out of self-discipline. South Africa attaches high importance to responsible investment and development. It has formulated the Code for Responsible Investing in South Africa (CRISA) as a means to encourage more financial products to focus on responsibly investing. For example, ESG factors need to be taken into account while making investments as required by the Code for Pension Funds. Johannesburg Stock Exchange (JSE) has rolled out the socially responsible investing (SRI) index in a bid to promote companies' practice for sustainable development. It is the first stock exchange to do so across emerging markets.

- **Brazil**. The Central Bank of Brazil imposes compulsory environmental and social policies on all banks under its regulation. Three core goals drive the central bank to include social and environmental conditions into financial regulation. They are risk mitigation, high integration of public policies, and efficiency improvement of financial institutions. All these objectives will help divert more capital to green economy. Febraban and the Brazilian Business Council for Sustainable Development (CEBDS) released the Guidelines for Issuing Green Bonds in Brazil in 2016 with a view to propelling the development of domestic green bond market and revealing the government's emphasis for such market. Furthermore, the asset managers and institutional investors vigorously perform the responsibly investing principle. This is especially true for pension funds.

- **India**. India owns progressive renewable energy plans across the world. New fund channels are needed to meet the fund requirements arising from the development of renewal energy industry. The Securities and Exchange Board of India (SEBI) released the requirements for green bond issuing and information disclosure policy in 2017, starting to construct the policy framework for green finance on the national level. At the same time, India also began to develop other green finance-related instruments like green funds and green insurances. The establishment of such stock indices as BSE-GREENEX showcases the Indian private department's engagement in sustainable development and attracts more investors to focus on companies with better carbon performance.

- **Russia**. Even though Russia is a latecomer in building the green finance system, it attaches high importance to investments in renewable energy and few green finance-based products. Most major banks have realized the importance of investing in sustainable development sectors, and proactively prepared ground for the development of green finance-based products. To propel these green finance-related instruments toward rapid growth, more policies are needed and the current policy framework remains slightly weak than expected.

This research has awakened us to the fact that BRICS countries have all made commercial practices and explorations to develop green finance despite their varying policy strength. In the future, we need to strengthen communication, deepen cooperation at both levels of policy and market, explore to introduce the strategic framework for developing green finance, build green bond markets that are interconnected among the five member states, and establish green development funds and energy funds within the five countries. Through this research, FSWGs have sorted through the details on the status of the five BRICS countries in developing green finance for the first time. There are many things to be looked in and summed up in terms of expert recommendation, selection of research direction and material collection. The China FSWG voices its hope that each national FSWG continues the proposal, pushes forward the research work further, and generates a diversity of research results, thus capable of providing efficient policy suggestions and guidelines for the five BRICS countries to develop green finance.

IV.3 Work Plan for the next step

First, refine the long-term mechanism that governs research. In the upcoming year, efforts will be made to build on the research framework already developed about green finance, work out the overall framework and schedule for the research report as early as possible, fully demonstrate the reliability of research conclusions, present the final research results of the five countries proportionately, try to offer new policy suggestions to BBC every year, and introduce a reasonable, efficient and long-acting mechanism that governs the research into green finance step by step.

Second, vigorously tap the needs for green finance. FSWGs will make active contacts with NDB in an attempt to provide financial services for its financing drive targeted at green projects. Proceeding from the actual financing needs in the market, it will provide financing to help BRICS participate in green projects together, or financial institutions in BRICS will render green projects internally with comprehensive financial services including loans and debt issuing.

Third, enhance cooperation under UNFCCC. Another area of cooperation and financing could be climate change mitigation and adaptation where collaborative projects amongst the BRICS countries could be identified. These could be further aligned to the NDC (Nationally Determined Contribution) targets that each of the countries have pledged.

V. New International Payment Card System

V.1 Background

- **Motivation for initiating the proposal**

Facilitating the growth of bank card network infrastructure constitutes a major move for a country to enhance the efficiency of its financial payment system, provide an impetus for its economic development, and guarantee the security of its financial information.

Now most BRICS countries have their separate national payment system while their cross-border bank card transactions mainly rely on such international networks as Visa, MasterCard, and American Express. As a result, they are unable to make fully independent transfer and settlement conforming to their political and economic needs. At the same time, apart from BRICS, member states of many other organizations for international economic cooperation like Shanghai Cooperation Organization (SCO) also seek for external cooperation in terms of their bank card business.

Therefore, FSWG agrees on the suggestion offered by the expert panel under the proposal. It goes as "the existing bank card network of BRICS will be built into a new international payment card system (NIPCS) by integrating and coordinating technical standards and business rules, upgrading out-of-date technologies, and connecting telecommunication lines".

- **Analysis of market opportunities**

As continuously growing members of the tourists in BRICS make outbound trips for business or personal purposes, many industries present broad prospects for cross-border business. This means the market needs an environment where bank cards can be used overseas efficiently and securely. It can be exemplified in the following three aspects:

- **Firstly, the robust economic growth and the increasing needs for external exchanges and cooperation can inject BRICS with vigor in a long run.** By 2020, it is predicted that members of the tourists for cross-border trips in BRICS countries will reach 10 million or above and that number in China is expected to surpass 113 million (see the table below). The tremendously growing members of the tourists for outbound trips will be the most beneficial factor to support the healthy operation of BRICS' payment card system.

	Tourists for inbound trips (1,000 persons)		Tourists for outbound trips (1,000 persons)	
	2017	2020	2017	2020
Brazil	6,700	7,376	8,599	9,109
China	66,550	79,876	84,872	113,000
India	9,287	11,777	20,458	26,864
Russia	32,090	34,412	28,812	31,742
South Africa	9,915	11,855	6,238	7,238

Table I. Tourists flow among BRICS countries

(Source：the travel database of Euromonitor International/statistics from the Tourist Bureaus of BRICS)

- **Secondly, bank card industries in all countries are in a phase of fast growth and electronic payment (e-payment) projects a soaring market with great potential.** All countries now see their e-payment coverage and transaction volume on the rise year on year. All BRICS countries have their e-payment transaction volume growing at a double-digit pace and are expected to increase at a further accelerated rate. The comparatively low e-payment penetration rate means that the payment business promises considerable market potential and space for development.

	E-payment transactions of 2016 (USD1 billion)	Year-on-year growth	E-payment penetration rate
Brazil	864	9.78%	39.1%
China	10,698	17.27%	48.1%
India	512	10.97%	7%
Russia	511	2.64%	26.1%
South Africa	140	10.11%	33.4%

Table II. Digital payment transaction volume and penetration of BRICS countries in 2016

(Source： calculated based on the total commercial transaction volume and digital payment transaction volume presented in the payment database and national digital payment reports provided by Euromonitor International)

- **Thirdly, the huge number of cross-border travel, spending and payment needs provide BRICS with solid market basis.** Besides, the cross-border personnel trips within BRICS exceeds 10 million and the cross-border retail sales of consumer goods among BRICS alone approaches USD20 billion. If the payment transaction service is charged at the average rate of 1-3%, the cross-border travel market of BRICS alone can generate profits in hundreds of millions US dollars.

● **Existing problems and challenges**

- **It is hard to unify the different technical standards and business rules in BRICS.** Currently, all BRICS nations all have their own clearing network, and all of them have different technical standards and business rules. If these transfer networks are finally to be connected together, all the five countries should unify the currently separate standards and rules first. This is a process which takes all stakeholders' cooperation and considerable time to make comparison and coordination. Also it is one of the key steps that are difficult to carry forward at the early stage of project implementation.

- **BRICS have different priorities and demands for project cooperation. To turn commercial cooperation of the project into reality, these countries need to reach a mode of coordinated business cooperation which leads to maximization of the consensus.** During the preliminary surveys and discussions, the India FSWG raised a proposal, hoping that UnionPay takes the lead to have bank cards of BRICS accepted in China. The Russia FSWG holds that creation of a uniform hub means domination of one payment system, and there is no sense in replacing the current dominant international payment system with a new one. In its opinions, the focus should be put on the inter-system connectivity instead. Therefore, as the Russia FSWG suggested, it is necessary to build an equilibrium structure among the NIPCS initiating countries in an effort to prevent the occurrence of excessive point-to-point connections. The latecomers should join in NIPCS through building connections with the initiating countries. Each country should appoint dedicated representatives to join the relevant working group. The China FSWG suggested that the realization of compatible technical standards and rules should go before the discussion about how the business cooperation can be achieved specifically. BRICS countries see their payment markets varying in the development stages and bases. Therefore, their chief problems and urgent needs are different accordingly. To have projects implemented in the form of business cooperation, a mode should be worked out through which all participating parties including NPS and commercial banks can be coordinated to maximize the consensus.

- **Such factors as language, time difference and working mechanism impose more challenges for the work.** Due to limitation in geographic locations, most communication work is now carried out remotely. Working groups merely have face-to-face meetings and the meeting time is not sufficient to fully discuss. As for remote communication, telephone access produces unsatisfying effects due to language barriers and weak signals while emails are poor in time effectiveness. Additionally, most personnel of working groups are assigned or dispatched temporarily, thus falling short of a long-term stable working mechanism and supportive resources.

V.2 Work overview during China's rotating presidency

This proposal was initiated during the Russian presidency. The project ideas were discussed and sorted through further during the Indian presidency. All parties hold that facilitating the growth of bank card network infrastructure constitutes a major move for a country to provide an impetus for its economic development, and guarantee the security of its financial information. Therefore, they propose to establish a new international payment card system (NIPCS) based on BRICS' existing payment card network.

During its presidency that began in March 2017, the Chinese FSWG has further discussed and advanced the project. Below are major progresses it has made.

- Firstly, UnionPay joined in the discussion as an official member of FSWG. As China's largest payment card network, it is very experienced in running international networks. With its joining, the project group has formally created a cooperative organization and platform where national FSWGs as representatives and local transfer networks as industry experts get involved and make discussions together.

- Secondly, the preliminary questionnaire survey was conducted to further collect and collate the experience and problems from BRICS. It identifies prioritization of each party's demands for cooperation, discusses about the approach to and mechanism for working together, drafts the roadmap for the next step, and makes preparations for the work to be done. So far, only the Russia FSWG has sent back the completed questionnaires.

- Thirdly, many rounds of remote-meetings were convened to make communication and discussions. To be specific, the India FSWG took the lead to have a conference call on March 6, 2017 where the work review for 2016 was further talked in details; FSWG attended the BRICS Business Council mid-term meeting that took place in New Delhi, India on March 31, 2017, where the Chinese FSWG took over as the president country of FSWG and held discussions about the NIPCS proposal; and the Chinese FSWG organized the first Group Conference in May 10, 2017 to communicate about the progress of all projects again.

- Fourthly, opportunities and challenges confronting the projects were identified and analyzed and the preliminary ideas and suggested roadmaps were proposed as to the NIPCS project. Based on the results of preliminary discussions, its own experience, and the achievements the Indian FSWG made, the Chinese FSWG has worked out more suggestions on the future work guideline and roadmap. For the next step, it is expected to discuss and improve the project implementation roadmap and working mechanism after more feedbacks are gathered from questionnaires.

V.3 Work plan for the next step

Based on the work performance during the presidencies of India and China, the visions of different parties for NIPCS, and the experience drawn on from our practice, we believe that the subsequent development of the NIPCS project is mainly confronted with the following problems and challenges:

- **Technical standards and business rules are yet to be sorted out to form a coordinated, compatible and consistent framework.**

Uniform, professional business rules and technical specifications are critical for a payment card network to be universal, convenient and secure and possible to realize its core value. At the same time, they also constitute the technical foundations for different countries to conduct international collaboration in terms of payment network. The uniform network resulted from coordinated and universally applicable technical standards and business rules can not only help reduce the occurrence of errors in transaction but also facilitate sharing market opportunities. The new NIPCS project is expected to effectively solve these problems. After coordinating the technical standards and business rules, it should also permit the seamless access of multilateral networks and reserve the capacity and space for external expansion.

On the aforesaid ground, the primary periodic objective of the efforts to build NIPCS is to integrate technical standards and business rules. The uniform rules and standards should be based on the following principles:

- Firstly, a feasible business mode is yet to be created. Based on the current business practice and market scale, all stakeholders should have their demands coordinated so as to have access to an integrated card network members at a lower cost.
- Secondly, the scalability of these rules and standards within and outside the network of BRICS ensures a convenient access for the five member states and their neighboring cooperation organizations in all sorts.
- Thirdly, whether these rules and regulations can be scalable in the innovative payment fields determines their ability to adapt themselves to the new payment environment and needs in a mid-and-long run.

- **A feasible business mode will be reached, where business cooperation stays at the center of the NIPCS implementation roadmap.**

When the coordinated technical standards and business rules come in place, bank card systems of different countries will be able to skip the traditional pair-wise mode of connection and get connected mutually through the access to the central hub. By doing that, they can also ensure the openness of the system and expect the joining of new participants like SCO and Eurasian Economic Union (EAEU) member states, thus constantly expanding BRICS' network of card organizations.

In addition to the uniform, coordinated standards and rules, all parties also need to explore a feasible mode for business cooperation. A duplicable, cost-efficient and low-risk mode enables every participant to get connected into the new network with the greatest efficiency and take on rights and obligations arising from the network.

When the business mode is being designed, the issues to be discussed include demonstration of the feasibility of a business mode through which BRICS collaborate in terms of payment network; devise card products appealing to customers utilizing BRICS platform advantages; ways to deepen cooperation under the framework of mobile payment as a response to the future developments of the industry; measures to deal with the relationship between different card brands and BRICS platforms; specific forms in which the business cooperation can turn into reality (like multilateral agreement and joint venture) and the design of rights and obligations can proceed (source of cost input and distribution of profit), and etc.

- **A specialized taskforce should be established to carry out the work.**

To facilitate the discussion about and the implementation of the project, it is recommended that taskforces are established to carry out the work, provide required and necessary resources, and put in place a sustainable working mechanism.

- When it comes to member composition, all countries are advised to build the corresponding working groups that are based on the existing liaisons, and allocate them with adequate time and resources in their subsequent work.
- With regard to working mechanism, the project group may allow face-to-face meetings and remote meetings, executive meetings and group meetings, and regular meetings and extraordinary meetings to go in parallel as a means to discuss around and advance the project. In the meantime, a reasonable mechanism needs to be designed to share the necessary cost arising from meetings and other work.

VI. BRICS Credit Rating Agency

VI.1 Background

BRICS work together to set up an alternative rating agency in an attempt to pursue a more objective and fair treatment in credit rating. By doing so, these emerging economies contribute greatly to getting their real credit position evaluated objectively and correcting the biased credit rating methods adopted by the existing rating agencies.

However, since the major rating agencies have long occupied a lion’s share in the international rating market and their rating criteria have been extensively accepted all over the international community, there is a long way to go for the emerging economies including BRICS to win over the transparent, equal and fair international rating. Russia put forward the idea to set up a rating agency by BRICS in 2015, to which the member states responded positively. In 2016, India advanced the idea further by sorting through its organizational structure, business mode, rating market and regulatory conditions in BRICS at length. One year later, China made more strides in promoting the proposal during its rotating presidency.

At the same time, considering the new rating agency will serve as an important think tank for the BRICS countries, many elite companies and experts from the five national FSWGs have so far been brought together, thus demonstrating the experience and capability in carrying out the relevant theoretical research. Therefore, as the Chinese FSWG suggests, the research platforms of the five national FSWGs need to be integrated as a means to diversify the composition of experts at the rating agency, a macro-research system that crosses different regions and sectors is to be introduced with a view to carrying out theoretical research into the international situation, macro policies, industry developments, and hot events, guiding the industrial and commercial companies of the five BRICS countries for joint growth, and establishing the long-acting macro-research mechanism for BRICS countries.

VI.2 Work overview during China's rotating presidency

- **Credit Rating Agency**

The BRICS Rating Agency should give a better assessment of credit risk to the investor on a scale which can ensure the highest quality of credit rating, and where the highest rating would convey the highest confidence of the issuer's debt repayment ability. Such better assessment would come inter alia from better understanding of the economic-political environment in emerging countries.

In 2017, FSWG takes "seeking progress step by step and opening wider to the rest of the world" as its overall objective. With regard to the specific execution, it guides the RA Task Force to solve some critical issues left over from the Indian presidency, and continues to push forward the proposal in combination with the opinions of member states. As the China FSWG suggested, FSWG focus on further interpreting the market feasibility, organizational structure and business mode of the rating agency, specifies its equity structure, scope of service and business mode (institution setup, operation and management in particular), and carries out the all-round feasibility and market surveys, in a bid to ensure the agency is capable of making profit. This proposal continues to work in the form of Task Force that has been established during the Indian presidency. The RA Task Force will reach consensus about the foresaid problems on the technical level, put forward the suggestions on the business plan, and then submit it to FSWG for deliberation. After it is adopted, the Task Force will make research and devise the business plan according to the specific division of responsibility.

Additionally, FSWG will also commission the Task Force to conduct a feasibility research into how to establish rating techniques and methods for the new agency. The China FSWG holds that the agency will be positioned as a rating agency with international influence. Its rating philosophy needs to fully expose the inherent elements that lead to credit risk, reveal the professionalism, neutralism and objectiveness of rating, and protect rating from being confined by ideology and politics. When it comes to rating standards and results, the agency should demonstrate the features of globalization, consistency and comparability. To conduct the global rating practice, the five BRICS countries should take into full account their respective macro credit risk arising from political, legal, credit, economic and other factors while formulating rating standards. By summing up the common and particular characteristics of their own credit risk, they are expected to make rating standards and results applicable across the world. The samples gathered from different countries and regions are to be compared and analyzed with the same rating standards so that the rating standards and results can better reveal the rankings of rated targets in the world. As for consistency and comparability, the five BRICS countries should take similar analysis structures and frameworks to analyze and assess the rated targets. The financial indicators used by different rating standards need to undergo financial adjustment, thus unifying the definition of financial standards, fully exposing the credit risk and making the global rating results consistent and comparable.

- **The long-acting Macro-research Mechanism**

As suggested by the RA Taskforce, a feasibility study needs to be carried out this year to analyze how BRICS is doing with trade liberalization, and give suggestions about how they can achieve joint growth despite the recently rising trade protectionism in some advanced countries.

FSWG conducted the relevant research into the field previously. In December 2015, Sergei Katyrin, President of the Chamber of Commerce and Industry of the Russian Federation and Chairman of the Russian Chapter of the BRICS Business Council, noted Russia and China are getting work done under the framework of the BRICS Business Council to analyze the trade barriers among different countries, and that the relevant plan to eliminate such barriers would be proposed in India in 2016. On the Fourth Economic and Financial Forum of BRICS Countries held in January 2016, industrial and commercial representatives from the five countries also held discussions about how to break trade barriers and allocate resources reasonably around the theme of “Exploring New Potential Grounds for Cooperation: Better Project Matching at Lower Cost”. So under the circumstances where the world economy is undergoing fluctuations, breaking trade barriers and increasing import and export among BRICS become the preferred approach to which the five member states may resort while seeking new engines for economic growth.

The formation of trade barriers could be largely attributed to companies’ failure to know well about foreign standards and policies. Most small and medium-sized enterprises fall short of approaches to know about target markets’ technical regulations and policies. Even with such channels, they may be unable to judge whether they are scientifically reasonable. On the contrary, as leading and elite companies in their respective field, FSWG members demonstrate impressive research strength. What’s more amazing, these companies are highly sensitive to various information relating trade barriers abroad, thus capable of timely changing their production plan to steer clear of such barriers. Furthermore, BRICS Business Council, as the most important result under the cooperation mechanism, has always put forth work reports and recommendations that draw the high importance of state leaders and government organs in the five countries. In this sense, the intensified collaboration among research teams of FSWG member units and the time-sensitive and long-term macro research mechanism for BRICS can help their small and medium-sized enterprises with poor research capacity to avoid trade barriers timely, identify the business obstacles and policy bottlenecks existing in the BRICS countries, forward the demands of the industrial and commercial circles to governments in an attempt to assist them in getting rid of policy constraints.

VI.3 Work plan for the next step

FSWG will guide the RA Task Force to continue researching the feasibility of setting up a new rating agency, and focus on assessing the problems to be solved urgently in the commercial operation of the new agency. At the same time, discussions will be made to explore how to play the role of the agency as a think tank, and introduce a long-acting macro-research mechanism fit for the five BRICS countries researches to give recommended solutions to the problems confronting the industrial and commercial companies in BRICS during their international cooperation.

VII. Other Opinions

Apart from the abovementioned six proposals, the China FSWG appreciates the four other national FSWGs for their unremitting endeavors to promote the FSWG work during their presidency. It hereby endorses FSWGs' continual promotion of such proposals as "Infrastructure Project Financing" and "Financial Inclusion" in future.

VII.1 Infrastructure Project Financing

The China FSWG agrees with the demonstration FSWG had made about the proposal previously, and holds that the efforts to strengthen the infrastructure development will help the BRICS countries improve their investment climate, promote cross-border trade, stimulate economic growth, and break trade protection arising from multilateral systems, thus creating a new economic order across the world. According to the measurement of OECD, the world will have its infrastructure demands as high as USD50 trillion by 2030. China would like to share what it has achieved from its economic reform with the other BRICS countries, with a view to intensifying the five countries' joint investments in such infrastructure fields as railway, highway, port and industrial park, and forming complementary advantages in terms of resources, technologies, raw materials, funds and other aspects. By doing so, they could not only directly boost their domestic economy, increase employment, and pull comprehensive development of all trades and professions including manufacturing, logistics processing, resource development, and tourism. As recommended, FSWGs will work hard to create favorable conditions for the five BRICS countries to engage in the abovementioned activities, and provide them with financing facility and comprehensive financial services.

VII.2 Financial Inclusion

The BRICS countries have developed rapidly in recent years, with the potential of emerging markets unfolding before the eyes of the entire world. But the vast number of impoverished population remains a common problem confronting them in future. According to the research findings of the *Annual Report on Poverty Reduction of China (2016)*, an updated international poverty line of USD1.9 purchasing-power parity (PPP) per day released by the World Bank in 2011 shows that the global population below the poverty line reduced by 1.1 billion (or 55.1%) from 1981 to 2012 and that number in China dropped by 790 million, accounting for 71.82% of the abovementioned population over the same period. These anti-poverty efforts have produced impressive results. As the China FSWG believes in, the five BRICS countries may have their governments, markets and societies work together within their cooperation framework. Focusing on improving the ability of poor population, they will come up with innovative poverty relief methods, structures and mechanisms, and take targeted poverty reduction measures in a comprehensive, coordinated, sustainable and green manner. Also in the opinions of China FSWG, the financial industry could make its unique contribution to the poverty reduction drive through vigorously developing the inclusive finance. Inclusive finance is intended to create an all-round, effective financial system that can provide services for all social strata and groups, and render vulnerable groups with opportunities and rights to receive modern financial services equally. As the inclusive finance develops, the market should be allowed to play a decisive role and more emphasis be put on inclusiveness and diversity. Formal finance and informal finance, traditional finance and new finance, and banks and non-banks all can provide products and services relating inclusive finance. Specific strategies to be employed include improving the organizational structure of inclusive finance, introducing the sound market system, providing financial services in innovative ways, and intensifying the education for financial consumers and the protection of their rights and interests.

Part III Deregulation Working Group

Regulatory reforms are an important part of the economic policy framework of countries as it remains one of the most important channels to further industrial growth and development. Easing regulations to stimulate trade and investment has been an important part of the policy formulation and action for the BRICS countries. This has enabled the BRICS nations to enhance their global engagement.

Under India's Presidency in 2016, the Deregulation Working Group (hereinafter referred to as "the WG") has made a lot of valuable discussions. Members of the WG reiterated that there is an imperative need to promote facilitation of business visas and the BRICS nations should consider introduction of a BRICS Business Travel Card. It was further suggested that the steps being taken in the respective countries for enhancing the ease of doing business and for promoting trade facilitation should be widely publicized and shared with members of the business community.

Since China took presidency in 2017, Chinese chapter of the BRICS Business Council (hereinafter referred to as "the BBC") carried forward the discussions initiated last year. Furthermore, Chinese chapter introduced a new topic -Digital Economy- into the agenda of the Deregulation Working Group. The digital economy is now universally recognized as a new mode of economy, a new reality, and a new growth engine. Digital Economy brings transformations to traditional industrial structure, including related to simplifying doing business, which matches the main purpose of the WG.

The following paragraphs provide more details on the work undertaken by Deregulation Working Group in 2017.

I. Trade facilitation / Ease of Doing Business

BRICS countries remain committed to improve the business climate in their respective countries and have seen improvement in terms of ease of doing business.

Continuously improving the business environment remains the top priority for the government in India. The government aims to take India amongst the top 50 in World Bank's Ease of Doing Business (EODB) rankings. To further this ambition, the government has taken several measures over time. While India has seen some improvement in the overall ease of doing business ranking, the country is working towards addressing key challenges to make a significant breakthrough. This entails policy and procedural changes in areas like getting electricity, starting a business, resolving insolvency, enforcing contracts etc. Measures have also been taken to ease procedures and processes for exporters and importers. Further, India remains committed to the Trade Facilitation Agreement. Following the ratification of the TFA, a National

Committee on Trade Facilitation (NCTF) has been set up. The objective of NCTF is to facilitate domestic coordination and implementation of TFA provisions.

Recently, India released its National Trade Facilitation Action Plan (2017-2020). This 76 point National Trade Facilitation Action Plan gives a time bound road-map, not only for implementing TFA, but also for India's initiatives for trade facilitation and ease of doing business which goes beyond TFA. The National Action Plan aims to transform cross border clearance ecosystem through efficient, transparent, risk based, coordinated, digital, seamless and technology driven procedures which are supported by state-of-the-art sea ports, airports and land borders.

The objectives to be achieved by National Action Plan are improvement in ease of doing business by reduction in cargo release time and cost, move towards paperless regulatory environment, transparent and predictable legal regime and improved investment climate through better infrastructure.

The Action Plan lists out specific activities which would be carried out by all regulatory agencies like Customs, FSSAI, Drug Controller, Plant Quarantine, DGFT etc. in time bound manner. The co-ordination among all the stakeholders is the key to achieve the objective of trade facilitation.

Russia continues to demonstrate solid upward dynamics in the EODB ranking. According to EODB ranking for 2017, Russia is currently world's number 40 in terms of ease of doing business. Activities to ensure further upwards dynamics and enter world's top-20 (as ordered by the President of the Russian Federation in 2012) in 2018 are still ongoing. Work on ease of doing business is currently focused on measuring effects from earlier reforms and clarifying those effects to the World Bank, as well as new measures related to obtaining of construction permits, trading across borders and protecting minority shareholders. Besides that, new edition of the National Investment Climate Index was presented on June 2, 2017 at the St. Petersburg International Economic Forum. The Index suggests the business environment is becoming more and more equal and conducive in the majority of the regions of Russia, with general improvement of 27 out of 44 indicators in all regions. Compared to the first edition of the Index in 2015, 43 regions of Russia have achieved positive dynamics.

South Africa has a National Development Plan and one of the key areas in the plan is to improve the ease of doing business in the country. The members were informed that the National Development Plan took another turn in the positive direction with the launching of one stop shops, which enables a quicker registration of businesses and eases the regulation framework. South African government is also very progressive in safeguarding the spirit of entrepreneurship. There are a number of initiatives to ensure that the MSMEs participate in the economy in a big way.

According to the WTO Report on G-20 Trade Measures on the scale of trade liberalization of the G-20 countries, Brazil was appointed as the country that has adopted more effective measures to open trade in the world. In relation to the trade facilitation agenda, Brazilian government has already established a single window for trade and remains committed to obligations of the Trade Facilitation Agreement (TFA). The National Committee on Trade Facilitation (NCTF) has been set up. The objective of NCTF is to facilitate domestic coordination and implementation of TFA provisions, with the effective participation of the private sector. In July 25th, 2017, the Action Plan on Trade Facilitation was approved in the Ministerial Meeting of the Foreign Trade Chamber, and will be presented to the private sector. The National Confederation of Industry, the Secretariat of the Business Council's Brazil Chapter, has been working to monitor the commitments of Brazilian Government with respect to TFA. A facilitation index has been created to track the commitments of the Government in TFA.

On December 2016, the integrated module of the Brazilian Authorized Economic Operator (AEO) Program was initiated. The "Integrated AEO" recognizes foreign trade control procedures from other authorities, such as the Ministry of Agriculture, Livestock and Food Supply (MAPA) and the Health Regulatory Agency (ANVISA). The proposal is to expand the module for other authorities. The government aims for 50% of Brazil's foreign trade to go through AEO certifications by 2019. Brazil signed its first Mutual Recognition Agreement (MRA) of AEO with Uruguay in December 2016, and has signed Joint Work Plans to future MRA on AEO with United States, Argentina, and Mexico.

China has realized nationwide customs clearance integration this year, i.e. an importer/exporter may declare goods at any customs in China, and continued its efforts to extend single window nationwide by the end of the year 2017. The Chinese government has deepened its business registration reform, including integration of multiple licenses/certificates into one and electronization of applications for and process of business registration. As to foreign investment, China has spread the "negative list" management mode from pilot zones to the entire country, replacing approvals with record-filings for establishment and change of foreign invested enterprises except those falling within the scope of the negative list. The Chinese government, by promulgating the 2017 version of foreign investment catalogue, has significantly relaxed market entry restrictions for certain service, manufacturing and mining sectors. China has also established seven more pilot free trade zones to explore more trade and investment facilitation measures.

In 2017, Deregulation Working Group's focused mainly on the analysis, research, and resolution of trade and investment barriers among the BRICS nations. We have kept open lines of communication with the Business Council's six other working groups, and we have listened to companies in each nation, to understand what problems they are facing in international trade and investment. From slow and expensive customs clearance to non tariff barriers, from deficiencies in legal systems to complex working visa processes. We have reflected the needs of companies in every country, and that will set the direction for our future work.

Deregulation Working Group has prepared the *Recommendations on Trade and Investment Facilitatio*n. As to facilitation of trade in goods, it is recommended that BRICS countries take actions to assess the implementation of TFA in the respective country, to simplify import and export procedures, to enhance communication and cooperation among customs authorities, to reduce non-tariff barriers, and to accommodate needs of e-commerce in policy-making. Recommendations for investment facilitation include simplification of investment approval and business registration procedures, establishment of effective dialogue mechanisms between the host state and foreign investors, and upgrade of investment agreements. It is also recommended that the BRICS countries strengthen dialogue and policy exchanges on trade in services and support discussions on a potential agreement on trade facilitation in services. Further, horizontal recommendations were made in respect of availability of information and travel facilitation.

II. Visa Facilitation

Visa facilitation is crucial to promote personnel flow among BRICS countries, and to further improve economic cooperation conditions and drive the rapid economic and investment growth among BRICS countries. Progress has been achieved among BRICS countries: South Africa has already announced a 10 year visa for nationals of the BRICS countries, who apply for visas to visit South Africa for short-term business purposes. This is a very encouraging step and the governments of other countries should also be requested to follow this.

The Indian government has over time taken a series of steps to ease the visa regime in the country. This is in line with objective of enhancing ease of doing business and promoting tourism. At present, the e-visa facility is available to nationals of 161 countries (including Brazil, Russia, China and South Africa) for entry through 24 airports and 3 seaports. Further, the number of e-visa categories has also been streamlined to include tourist, business and medical visas. The stay duration on e-visas has been increased from 30 days to 60 days with double entry on E-Tourist and E-Business visa and triple entry on E-Medical visa.

In 2017, Deregulation Working Group has made a lot of efforts to promote visa facilitation. Introduction of a BRICS Business Travel Card continued to be one of the key issues on the agenda. Such an option should be further discussed at the level of the Contact Group on Economic and Trade Issues. Besides, the feasibility and relevant criteria of white-list mechanism was under discussion by members of the WG.

Brazilian chapter along with the Sao Paulo University has perfected their study to gauge the feasibility and benefits of such a visa facilitation framework.

Chinese chapter has brought together Chinese experts to have discussions on probable methods to promote visa facilitation. Based on the discussion and research, they have completed a report on visa facilitation among BRICS countries, and submitted it to China's relevant government departments to spur implementation of China's visa facilitation plans.

III. Digital Economy

Digital Economy is a newly-introduced subject for Deregulation Working Group elaborations in 2017. Technology is advancing from day to day, and digitization is now a global phenomenon receiving more and more prominence in all BRICS countries.

In Russia, the national program for the development of digital economy was presented by the Government in 2017. The program aims to double the share of digital economy in GDP, and ensure 100% broadband internet penetration and digital literacy. As regards concrete tracks of work, the program prioritizes the technologies of Internet of Things, block chain, big data, artificial intelligence, virtual and augmented reality, neuro-technologies, as well as deployment of nationwide 5G network and other critical digital infrastructure objects. Further consultations are ongoing with the goal to identify the role of the private sector in implementing the program and the sources of finance.

Digitalization is one of the key priority areas for the Indian government. In order to transform India into a digitally empowered and knowledge based economy, the government has taken various initiatives under the Digital India scheme – a flagship programme of the government launched on July 1, 2015. The initiatives under this program centre around three key objectives - provide and strengthen digital infrastructure, deliver governance and services on demand and digitally empower the citizens.

On February 20, 2017, a ministerial working group, secretariated by the Ministry of Science, Technology, Innovation and Communications, was established in Brazil and is tasked with the responsibility of developing the Brazilian Digital Strategy. The group held its first meeting in which decided to work on the guidelines designed to boost the digital economy and define the basis and role of the Digital Economy. The establishment of the strategy provides an opportunity to enhance the country's growth through digital transformation. Brazil is expected to present its plan for its National Internet of Things Plan in the second half of 2017 - the plan aims to address the impact on society, the regulatory environment and instruments of tax reduction, infrastructure and connectivity, innovation and ecosystems - as well as training to train professionals in the areas of investment, financing and internationalization.

IV. Digital Economy Experience Sharing Mechanism

In 2017, Deregulation Working Group has established a mechanism for sharing experience across the nations, to drive knowledge sharing and learning from each other in the digital economy.

Chinese chapter has released a report on BRICS digital economy development, which researches on digital economic development of BRICS countries from perspective of technology, policy-making, social management, industry cooperation and how it impacts the development of society and economy, providing reference for policy decision and industry development.

And the BRICS Information Sharing & Exchanging Platform set up by the BBC and Fudan University was made full use of, and a digital economy section was set on it.

On July 7, BRICS Digital Economy Seminar was held in Shenzhen. The seminar attended by telecoms associations, consultants, telecoms operators, and researchers from Russia, India, China and South Africa was focused on sharing experience of the digital economy among the BRICS countries. The agenda of the seminar included digital infrastructure, multicultural and multinational exchanges, operator growth strategies, Internet finance, and the achievements and challenges of their respective nations' digital growth.

Chinese chapter initiate the *BRICS Digital Economy Development Proposal*. The proposal encourages BRICS companies to seize their opportunities, engage and cooperate with each other, and innovate in the digital economy to raise the competitiveness of the five BRICS nations. The proposal includes building up network infrastructure, closing the digital divide between nations, improving cyber and information security, and developing dialogue mechanisms and dispute resolution mechanisms.

The other four chapters gave positive feedback on the proposal. Indian chapter recommended to involve multiple stakeholders for a faster network infrastructure development across BRICS countries. Russian chapter suggested to strengthen support to Micro, Small and Medium Sized Enterprises (MSMEs) working at the digital economy markets to ensure their innovative potential as drivers of the digital technologies development is fully explored. Brazilian chapter and South African chapter also contributed a lot to the revision of the proposals.

- **Attachments**

I. Recommendations on Trade and Investment Facilitation

Recognizing the important role of trade and investment in economic development and job creation in each BRICS country, Recalling that BRICS countries have adopted BRICS Trade and Investment Cooperation Framework, BRICS Trade and Investment Facilitation Plan and other relevant documents,

Taking notice that Trade Facilitation Agreement has come into effect and international initiatives have been put forward with respect to investment facilitation and trade facilitation in services,

Appreciating the efforts BRICS countries have made to facilitate international trade and cross-border investment,

Aspiring to further trade and investment facilitation among BRICS countries,

Recommends that the BRICS countries:

1. Mandate relevant government agency, business community or professional organization to assess current situation of trade facilitation in goods in the respective country (bringing particular attention to trade with other BRICS countries), taking the rules established in the Trade Facilitation Agreement as a benchmark, with the goals to promote awareness of exporters and importers, and to facilitate best practices sharing.
2. Continue to simplify import/export procedures and documentary requirements, advance the introduction of single window and paperless and electronic customs clearance. Strengthen experience exchange, best practices sharing and capacity building on the customs administration related issues for both public and private sectors participants.
3. Enhance communication and cooperation between their customs authorities, including mutual recognition of Authorized Economic Operators, exchange of information and data on trade and law enforcement, etc. As necessary, renew existing bilateral cooperation and mutual assistance agreements, and explore the potential for a BRICS customs cooperation and mutual assistance agreement.
4. Enhance communication and cooperation in the areas of standardization, certification, inspection and quarantine, encourage developing and introducing domestic standards based on international standards, and simplify certification, inspection and quarantine procedures in order to reduce non-tariff measures' hindrance to trade.
5. Accommodate as much as possible the needs associated with development of cross-border e-commerce when formulating its import and export policies, ensure that small and medium-sized enterprises share the benefits of e-commerce, and enhance exchange of information and cooperation in this area. For this purpose, the Business Council supports the establishment of the BRICS E-Commerce Working Group under the Contact Group on Economic and Trade Issues framework.
6. Within their respective legal frameworks, consider further simplification of procedures of investment approval and business registration, which should include establishing reasonable time limits, strengthening internal coordination between governmental agencies and service providers involved,

and, where practicable, establishing “one-stop service” to process and support investment applications.

7. Set up effective dialogue mechanisms to ensure that the comments of foreign investors and foreign invested enterprises on the policies of market entry, investment facilitation and investment promotion, as well as overall business environment in the host country are clearly articulated, and safeguard that both legitimate rights and interests of investor and public interests of a host country are duly protected and balanced.
8. Negotiate or renew bilateral investment agreements among one another, and explore the potential for a quinquelateral BRICS investment agreement, giving due consideration to investment facilitation, while ensuring that both the interests of foreign investor and public interests of a host country are well protected and balanced; and explore the possibilities of an alternative investment arbitration mechanism under BRICS.
9. Strengthen dialogue and policy exchanges on trade in services, and support discussions on a potential agreement on trade facilitation in services under the WTO framework.
10. Endeavour to make publicly available via internet the information about procedures, documentation, tariff rates, fees and charges, restrictions and prohibitions, tariff quotas, technical regulations etc., relating to import and export of goods, investment-related laws, regulations and policies, and measures affecting cross-border trade in services. Establish or designate an inquiry point(s) to promptly reply to reasonable inquiries from importers and exporters, investors and foreign invested enterprises, and service providers and consumers by email or other means.
11. Bring forward the BRICS travel facilitation agenda to facilitate movement of people among BRICS countries, thereby promoting trade in goods and services and investment.

II. BRICS Digital Economy Development Proposal

Digital economy continues to become an increasingly important driving force for global economic growth. Its role in accelerating economic development, optimizing global economic structure, and achieving inclusive and sustainable growth is getting more and more critical. The digital economy is experiencing high growth, rapid innovation and widespread application in the rest of the economy.

To strengthen efforts aiming to alleviate poverty and unemployment, promote social inclusion and enhance international competitiveness, and ensure high-quality inclusive growth among BRICS, practical cooperation is encouraged to promote the growth of digital economy, enhance the complementarity of industries, and foster innovative economic development based on advanced technology and skills.

With the goal to boost practical cooperation on digital economy among BRICS, the BRICS Business Council proposes that BRICS countries:

1. Seize the opportunity to enhance idea and people exchanges, and jointly promote the innovated development of digital economy.

2. Consider joint projects aimed to enhance private and public investment in network infrastructure and promote digital inter-connectivity. Promote broadband network coverage, improve service capabilities and quality, and jointly explore ways to expand high-speed Internet access and connectivity at affordable prices, and thus provide strong and robust hardware support for digital economic development.
3. Take further steps to promote narrowing of the digital divide, strengthen capacity building and improve people's digital literacy. Encourage both the private and the public sectors to invest into education and skills development systems so that people can adapt to the labor markets requirements changes caused by the digital economy development.
4. Promote the Internet applications integration to support entrepreneurship and digital transformation. Strengthen the cooperation among e-commerce to facilitate the cross-border trading. Strengthen the linkages between information technology and the industry based on information technology among BRICS countries, and stimulating the full potential of ICTs, including the Internet.
5. Take full account of the issue of network and information security, safeguarding healthy and sustainable development of digital economy.
6. Strengthen dialogue and policy exchanges on digital economy with the view to share regulatory experiences.
7. Strengthen support to Micro, Small and Medium Sized Enterprises (MSMEs) working at the digital economy markets to ensure their innovative potential as drivers of the digital technologies development is fully explored.

Part IV Manufacturing Working Group

I. Introduction to Manufacturing Sectors in BRICS Countries

In 2016, the world's total output (GDP) reached 75.6 trillion US dollars, of which China reached 11.2 trillion US dollars, India reached 2.3 trillion US dollars, Brazil reached 1.8 trillion US dollars, Russia reached 1.3 trillion US dollars, and South Africa reached 0.3 trillion US dollars. BRICS countries accounted for 22.3% the proportion of global GDP, which is almost 3 times the proportion of only 8.4% in 2001. And in the past 10 years the proportion doubled to 13.4%. In 2007, China accounted for 14.8% of the global proportion, accounting for 62.6% of the proportion of BRICS GDP. According to purchasing power parity, from 2006 to 2015, the proportion of BRICS GDP rise from 22.9% to 30.9%, contributing 52% to global economic growth. *(Source: The World Bank)*

In 2016, the share of industrial output in GDP of China, Brazil, Russia, India and South Africa accounted for 39.8%, 21.2%, 32.4%, 28.8% and 28.9%, respectively (World Bank). Since 2000, the share of industry in GDP of China, Brazil, Russia and India and South Africa has been higher than the world average.

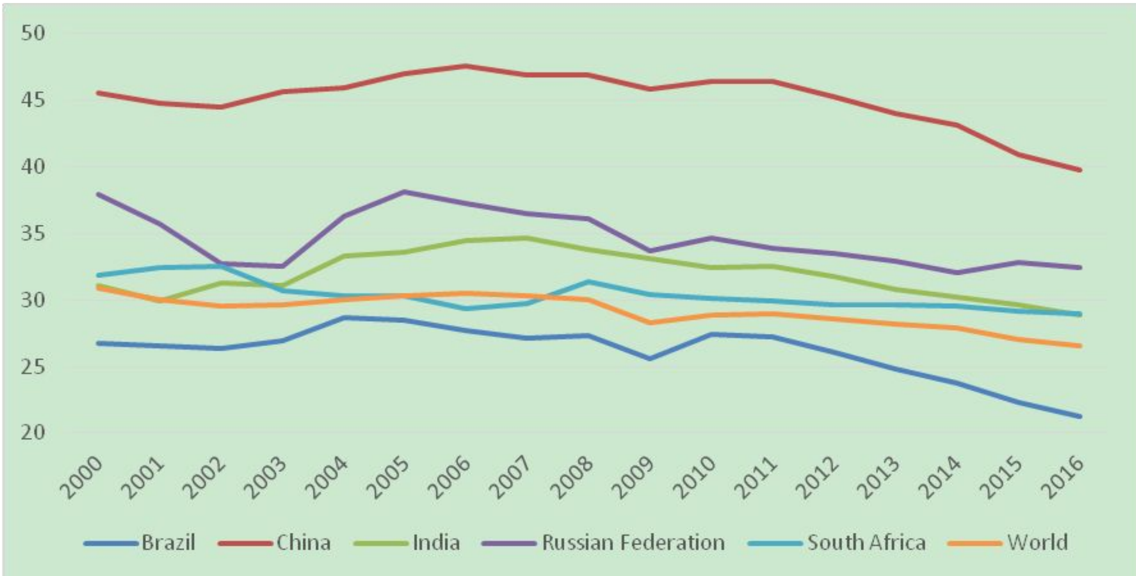

Table I. Proportion of industry in GDP of BRICS countries

(Source: World Bank)

Large-scale and completed industrial system has become an important source of China's trade competitiveness. In the 500 major industrial products, China has more than 220 kinds of products ranking first around the world. In terms of breadth, China has 39 industrial categories, 191 categories and 525 sub-categories. China is the only country which has the complete industrial classification of the United Nations.

Export of China, Russia and Brazil's manufacturing products has been above the world's average level for a long time. And in recent years, export of South Africa's manufacturing products has been increasing rapidly. In 2016, at the national level, export of China, Brazil, Russia and South Africa was higher than the world average, among which, South Africa increased rapidly in manufacturing products, with the South African government supporting the economy and promote planning in recent years.

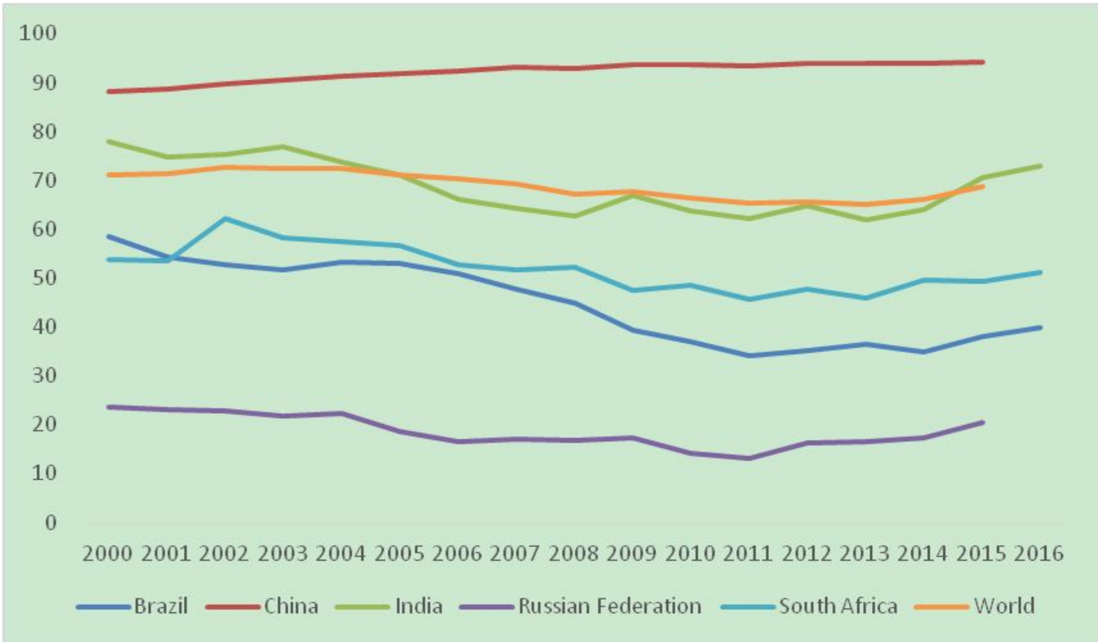

Table II. BRICS countries manufacturing exports proportion

(Source: World Bank)

On the aspect of manufacturing scale, China's manufacturing level ranked on top amongst the BRICS countries, and manufacturing accounted more than 30% of Chinese GDP in 2016. It is much higher than Brazil, Russia, India and South Africa. From the per capita manufacturing value added, the per capita productivity of China's manufacturing industry is much higher than other countries. It grew one-third compared to it in 2005. According to the study of Deloitte, in terms of manufacturing competitiveness, China ranked third in the world, Russia, Brazil and India, respectively, ranked 32, 36 and 39.

The other BRICS countries have dropped significantly over the past few years. As a result of political uncertainty and economic reform postponed, Brazil's global manufacturing competitiveness level from the world's 8th in 2013 all the way down to 29th in 2016; Due to Western sanctions and global commodity prices decline, the manufacturing competitiveness of Russia from the 28th in 2013 down to the 32nd in 2016.

There are some similarities in the distribution of manufacturing industries in all BRICS countries. The main industries of the manufacturing are mainly distributed in the metal, chemical and coal/petroleum products. India has a well diversified manufacturing base producing light and heavy engineering items along with variety of other items like textiles, leather etc. India's Government has launched the “Make in India” campaign in 2014, a major national initiative designed to facilitate investment, foster innovation, enhance skill development, protect intellectual property and build best-in-class manufacturing infrastructure for attracting investments from around the world. India is now seen globally one of the most attractive investment destinations. Also, India is ranked sixth among the world's 10 largest manufacturing countries, as per UNIDO Report 2015. Brazil, Russia and South Africa are competitive in natural and rough industries.

	China	Brazil	Russia	India	South Africa
Manufacturing value added (billion US dollars)	2999.885	226.52	202.188	423.722	51.204
Proportion of GDP in Manufacturing Industry in 2015 (%)	31.95	12.71	12.83	16.83	13.07
Proportion of GDP in Manufacturing Industry in 2016 (%)	32.11	10.11	12.66	17.03	12.28
Main manufacturing industry	Metals, chemicals and food	Food, chemical and coal / petroleum products	Coal / petroleum products, base metals and food	Chemical, metal and coal / petroleum products	Food, coal / oil and furniture manufacturing
Manufacturing Competitiveness Index (CIP, a total of 148 countries ranked)	3	36	32	39	47
2005-2010 Production Output Growth Rate (%)	10.27	4.66	3.69	7.61	3.17
2010-2016 manufacturing industry growth rate (%)	7.55	0.84	0.75	6.76	1.96

2005 Per capita manufacturing output (US $)	1431.80	1414.80	1362.13	228.27	989.11
2016 per capita manufacturing output (US $)	2170.18	1080.89	1409.57	319.36	931.35

Table III. 2016 BRICS countries manufacturing development

(Source: United Nations Industrial Development Organization)

II. Working Group Meetings

Manufacturing Working Group of BRICS Business Council under China's term has come together through teleconference 3 times on the following dates:

- Teleconference on, 11 May 2017;
- Teleconference on, 25 May 2017;
- Teleconference on, 4 August 2017;
- Teleconference on, 24 August 2017.

This report seeks to summarize the work and the proposals developed over the period. This report shares work done so far related to the manufacturing by the BRICS countries based on the recommendations of the industry from BRICS countries. Also, it highlights policy recommendations for the BRICS governments that could deepen economic cooperation.

III. Key issues concerned in BRICS countries

- There is a need for trade facilitation, equity and reduction of restrictive policies for promotion of overall trade. It is also important to focus on reducing trade deficits among BRICS countries.

- Emphasizing mutual benefit and win-win policy, strengthen cooperation with local enterprises in BRICS countries, break the technical barriers to trade and enhance mutual benefit.

Appeal for a reduction of non-tariff barriers in the intra BRICS trade. There is a need for effective market access for intra BRICS trade.

- It is proposed to form a flexible multilateral coordination and communication mechanism. In pertaining areas, BRICS countries are suggested to recognize each other's standards instead of overly stressing on the standards of one country as a benchmark.

- Promote international cooperation on production capacity in BRICS countries.
- In order to further develop the role of the NDB to manufacturing industry, we can actively consider more supporting productive investment projects, especially the cooperation investment projects on manufacturing capacity.

- Strengthen the communication between the BRICS enterprises. Through the organization of CEO roundtable, corporate high-level dialogue and other activities to discuss green manufacturing, smart city and other specific issues. It will provide leading, forward-looking recommendations and global solutions to manufacturing industry.

- Enhance the communication focusing on technical aspects of cooperation. We can discuss the specific mechanisms and activities in the areas of technology transfer and industrial cooperation between BRICS countries.

IV. Current problems in BRICS countries

- In the initial stage of economic development, the gap between the BRICS countries and the developed economies in science and technology is large, and the marginal effect of technology utilization is larger. With the rapid development of the BRICS economy, the effect of the original technology on the economy has been significantly reduced while the developed economies prevent their own new technologies to be learned and the BRICS' own research and development progress is very slow.

- The supply of labor has new changes. This mainly shows the following two aspects: First, the formation of human capital slowed down. With the BRICS national industrial upgrading, economic and social development greatly enhanced new requirements of human capital, technological progress and other intellectual capital. However, for most of the BRICS countries, high-tech talent is still scarce, lack of human capital accumulation. Second, the demographic change. As the labor supply growth rate declines, labor costs increase. The overall economy entered the stage of production factor cyclical rise.

- The adjustment of industrial structure led to the reduction of social labor productivity. In the early stage of industrialization, the labor force from the low productivity of the agricultural sector to the high productivity of the manufacturing sector on a large scale was the important support for rapid economic growth. Now, the size and speed of labor transfer from the agricultural sector to the manufacturing sector is reduced, while a portion of the labor force is transferred from the relatively high manufacturing sector to the service sector in the meantime the increase rate of productivity is slowed down.

V. Suggestion to Manufacturing sector of BRICS countries

- Recognizing the BRICS countries have their own characteristics and strong complementarity, BRICS countries can strengthen cooperation at the industrial level.

- There is a need to set up BRICS Centre for Manufacturing Technology in order to promote cross-border joint venture facilitation. In particular need to work on the architect and the structure for BRICS. A proposal for Centre for Manufacturing Technology to be prepared by members and presented to the concerned authorities within next 6 months. India would be happy to lead this initiative.

- Members to share strategy papers for identified priority sectors for increasing trade and exports in BRICS countries.

- There is a need for reskilling and skill development given the advancements made in technology like industry 4.0. Hence, there is need to align the activities of the members with work done by Skill Working Group of BRICS Business Council.

- Members shall work towards creation of Single Window Platform for exchange of information.

- Trade needs to be broad-based, both within the countries and across manufacturing sectors. Efforts to be continued by members for enhancing exports of value–added products and not just raw materials in order to create more employment and earn more foreign exchange.

- The share of manufacturing in most of the BRICS countries is low. There is a need for collaborative efforts to improve the share of manufacturing in the respective GDP of countries.

- The Council should work with officials of the NDB, so as to ensure that the projects prepared by BRICS businessmen are in line with the prescribed norms of the Bank. Also New Development Bank should finance projects related to manufacturing sector too.

- The NDB should function as an assurance bank of first class for trade among its members. There is a need for a more collaborative approach with the NDB to minimize the currency risk among BRICS thereby facilitating intra-BRICS trade.

Part V Infrastructure Working Group

With China's rotating presidency in 2017, the BRICS Business Council Infrastructure Working Group (referred to as "IWG" for short) successfully carried out the discussions and activities initiated by the Indian chapter in 2016 and also discussed some new avenues to enhance the cooperative framework for promoting infrastructure development and increasing the economic growth and competitiveness of the BRICS economies in the global area.

IWG deliberated key areas of cooperation including sustainable promotion of the "Cooperative Framework", engagement with New Development Bank (NDB) and Export Credit Agencies, promoting and facilitating investments, creating a mechanism for sharing of knowledge/ technology for sustainable infrastructure development, cooperation on maritime matters, etc. Over the past few months, several ideas have been exchanged among the group members and some important recommendations have been made regarding each of these areas of engagement, which are summarized in the subsequent sections.

I. Sustainable promotion of the Cooperative Framework

Connectivity is an essential prerequisite for enhancing competitiveness of BRICS countries. Development of safe, balanced and dynamic transnational transportation and logistics systems is essential for development of the BRICS counties. A well-established cooperative framework among the development of the BRICS countries would contribute to promoting cooperative infrastructure development and increasing the economic growth and competitiveness of the BRICS economies in the global market.

IWG has suggested some of the measures for consideration:

- Strengthening coordination in the multilateral organizations and fora where infrastructure and investment matters arise.
- Conducting regular meetings among BRICS high-level officials in multilateral and international organizations where infrastructure and investment matters arise.
- Identifying areas for possible development and cooperation activities of BRICS countries that could support the development aspirations of developing countries.

II. Alternative sources of funding

BRICS countries face huge annual infrastructure investment requirements and an equally huge gap in available financing. An effort to narrow the gap would require a collaborative effort among all stakeholders, including the private and public sectors (including Multilateral Development Banks like NDB, Financial Institutions, Export Credit Agencies, etc.) both within and across countries. BRICS countries can increase their economic cooperation by greater engagement with NDB. It can make available additional resources by recycling the savings accumulated in emerging countries which are presently being locked up in Treasury bonds having much lower returns. NDB should consider proposals of BRICS Business Council as recommendations for funding the projects being shortlisted by BRICS countries. It is acknowledged that provision of guarantee and creation of hedging mechanism by NDB would be viewed as a valuable support allowing BRICS companies to work in all BRICS and third countries.

The Infrastructure Working Group has designed the basic proposals on development of interaction with NDB:

- A simplified procedure for project selection, including the possibility of providing financial means on the basis of project and/or corporate-wide principles, in order to reduce the timeframe of project finalization and approval process has been proposed as an addition to the NDB investment policy (prior to its ratification).
- Currency hedging and absorbing the risk of currency volatility.
- Financing early stage feasibility and engineering studies for the development of infrastructure projects that will lead to regional development.
- Development of mechanisms to provide equity financing for infrastructure projects.
- Have the role as or include a Guarantee Fund for sovereign risk to allow for greater use of project finance structures and access to wider range sources of funding (i.e. pension funds, commercial banks, etc.) for infrastructure development in the targeted regions of interest to the BRICS.
- Creation of mechanisms to promote integration between the NDB and the BRICS Business Council.
- Provision of comfort to domestic lenders through mechanisms to reduce their costs of borrowings.
- Provision of direct financing in the domestic currency.
- Allowing domestic companies to use their credit enhancements to borrow money internationally.
- Provision of interest subsidy to developers, as all the BRICS countries are facing issues of high interest rates.
- Financing infrastructure projects with a time horizon of 25 to 30 years.
- Supporting cross border infrastructure investments by providing standard set of bankable documents.

III. Promoting and Facilitating Investment

Promoting and facilitating investment was deliberated as one of the focused areas among the BRICS countries. Under the Chinese presidency, the Infrastructure Working Group carried out the discussions and highlighted various suggestions to pursue the cause further:

- Sharing and exchanging information and experiences in infrastructure and construction.
- Enhancing information exchange on infrastructure/investment policies and business opportunities through mechanisms including websites for trade/investment information sharing.

- Encouraging trade/investment promotion agencies to establish stronger relationships, and providing policy support for infrastructure investment missions among the BRICS countries.
- Expanding cooperation on infrastructure for BRICS enterprises to meet, communicate and cooperate with each other.
- Improving the transparency of the infrastructure investment environment in line with their respective laws and regulations.
- Enhancing communication and cooperation in the areas of standardization, certification, inspection and quarantine.
- Enhancing communication and cooperation between agencies responsible for trade remedies.
- Considering the effect that a positive outcome of the work by Ministries of Finance and Central Banks on settlement in local currencies may have as a support to enhanced intra-BRICS trade.
- Encouraging relevant enterprises to participate in infrastructure development and construction in the BRICS countries, and having mutually beneficial cooperation with each other.
- Analyzing the prospects for joint bids by BRICS enterprises in international infrastructure and construction projects.

IV. Creating a mechanism for sharing of knowledge/ technology for sustainable infrastructure development

Cross-border cooperation and the flow of knowledge is an essential condition for supporting large-scale innovation and research projects in the BRICS countries. As the infrastructure projects require advanced technologies and skill-sets, cooperation in skill development for design, construction and operation of infrastructure facilities; establishment of training centers; exchange of experiences and practices with regard to efficient city transport systems/ freight movement systems, etc. would contribute to building sustainable infrastructure. IWG deliberated on the ways by which the BRICS economies can work together to undertake innovation cooperation:

- Broaden cooperation in the field of educational programs, conducting joint training programs to support human capital development, including short-term exchanges between technical experts, project managers etc.
- Jointly conducting Research and Development studies on advanced technologies in infrastructure sectors of mutual interest which contribute to development of sustainable infrastructure facilities.
- Establishing project platforms to promote communication and cooperation in high technology areas.
- Encouraging the expansion of trade and investment in high value-added products related to infrastructure.
- Advancing dialogue and communications in emerging industries, and promoting trade and investment in industries that are technology- intensive, knowledge- intensive, or capital- intensive.

Small Contractors Cooperation (SCC)

Part VI Skills Development Working Group

Under the Presidency of China in 2017-2018, the BRICS Business Council Skill Development Working Group (BBC SDWG) successfully carried forward the outcomes and activities initiated by the India chapter in 2016, and also put forward some new projects that can be jointly taken up among BRICS countries.

In order to put the MoU (*MEMORANDUM OF UNDERDSTANDING on cooperation between the Chapters of the BRICS Business Council Skills Development Working Group in the spheres of human capital and professional skills development in the BRICS countries*) raised by Russia and Signed during the Presidency of India, and also the suggestions for Industry 4.0 put forward by India into practice, China SDWG expounded the projects of carrying out BRICS Skills Development & Technology Innovation Competition, and establishing International Alliance of Skills Development. The two projects were proposed during the Mid Term Meeting in India to other SDWG members, and received support of BRICS countries from the BBC SDWG level, subject to authorization from relevant Government departments as per country specific requirements.

As one of the most important deliverables of BRICS Business Council during China's presidency, BBC SDWG proposed and initiated a Charter of the International Alliance of Skills Development from the BBC SDWG level.

Against the context of intelligent manufacturing and industry 4.0 and for the sake of providing the matched technologies and skills for the development of intelligent manufacturing, BBC SDWG put forward the initiatives of carrying out BRICS Skills Development & Technology Innovation Competitions (Hereinafter refers to as BRICS Competition) to develop new skills and establishing an International Alliance for Skills Development to broaden and deepen skills cooperation amongst BRICS countries.

Over the past few months, the BRICS Competition has been successfully held, and achieved good reputation over the world. BRICS countries responded positively and actively participated in the series of activities of BRICS Competition. BBC SDWG also initiated a Charter of International Alliance of Skills Development from the BBC SDWG level.

I. BRICS Skills Development & Technology Innovation Competition

To promote BRICS skills development and technology exchanges, implement the spirit of proposed MoU about the cooperation of professionals development, build the professionals international cooperation platform of vocational skills development, engineering capacity cultivation, and intelligent technology innovation, as well as achieve the target to provide high-level learning and exchange opportunities for

BRICS high-quality skills and technology professionals, BBC SDWG passed a resolution to hold BRICS Competition.

BRICS Competition was held during China's presidency with five individual competition projects put forward by China. The Competition included International Youth Maker Competition, Intelligent Manufacturing Challenge (CIMC), 3D Printing and Intelligent Manufacturing Competition, Machinery & Electricity Skills Competition and IIW·CWS·Arc Cup 2017 International Welding Competition.

IIW·CWS·Arc Cup 2017 International Welding Competition, an opening event of BRICS Competition was closed successfully from June 24 to June 30, 2017 in Shanghai. Over 300 professionals in welding technology and skills of 73 Participating teams from 4 BRICS Countries (Russia, India, China and South Africa) and 8 other Countries (Kazakhstan, Slovakia, Mongolia, Ukraine, Vietnam, Cameroon, Nigeria and Spain) and people from all walks of life (around 1000 people in total) attended the Opening and Closing Ceremony of 2017 Arc Cup Competition. For BRICS countries, China selected 253 competitors, Russia sent 50 representatives, India sent 5 representatives and South Africa sent 4 representatives to participate in the International Welding Competition. And China CRRC Group, Russia NAKS delegation, and China Energy Construction Group together won the Team Gold Prize. Besides, Russian delegations also won four 1st Place, one 2nd Place and one 3rd Place for Individual Awards, and four 3rd Grade Prizes, Indian delegation won one 2nd Place for Individual Awards, and South African delegation won one 1st Place for Individual Awards. Moreover, the remaining awards have been achieved by the representative teams from China and other countries.

The other four competition projects have been held from August 18th to 30th in succession. International Youth Maker Competition has been held in Kunming, Yunnan province from August 18th to 20th, 2017. And over 400 people from 45 teams participating have participated in the related activities of this competition. Machinery & Electricity Skills Competition has been conducted in Nanning, Guangxi province from August 20th to 22nd, 2017. This competition was composed of three competition projects: Complex Parts Processing with Multi-axial CNC Machine Tools, Installation and Debugging of Automatic Production Line and Part and Assembly Measuring and CAD Mapping. And, there have been 31 teams for Complex Parts Processing with Multi-axial CNC Machine Tools, 49 teams for Installation and Debugging of Automatic Production Line and 143 teams for Part and Assembly Measuring and CAD Mapping, and about 450 people have joined in the activities of this competition. 3D Printing and Intelligent Manufacturing Competition has been hosted from August 22nd to 26th, 2017 in Hangzhou, Zhejiang province, which consisted of two competition projects, namely, Operation and Maintenance of Intelligent Manufacturing Production Line and 3D Printing. Over 500 people from 51 teams for Operation and Maintenance of Intelligent Manufacturing Production Line and 30 teams for 3D Printing have joined in the activities of this competition. Intelligent Manufacturing Challenge (CIMC) was the closing event of BRICS Competition. And there has been 300 teams participating in the final competition during August 26th-30th. About 1500 people have attended the closing ceremony of this BRICS Competition.

The BRICS Competition has won a big support from BBC SDWG Members. Representative teams from India, Russia, and South Africa recommended competitors to participate in the relevant competitions or send expert teams to attend the activities of the BRICS Competition.

BRICS Competitions should have its own characteristics. BRICS Competition is open and flexible. And BRICS Competition should attach importance both to skills development and technology innovation. For the future BRICS Competition, the first step is to form BRICS Competition projects that each BRICS country proposes five competition projects so as to form the fixed BRICS Competition projects. And currently China is planning to cooperate with China Unicom Group to co-build a large data network platform so that BRICS countries can join in the competition remotely through the network, which will greatly reduce the cost of competition, and attract more countries to participate in the BRICS Competition. In the future, BRICS Competition will become a long-term mechanism for BRICS skills exchange and cooperation.

II. International Alliance of Skills Development

II.1 Background and Development Process for the Establishment of International Alliance of Skills Development

Based on the previous work undertaken by BBC SDWG, and the White Paper on Skill Development for Industry 4.0 conducted by India, the professional skills education of BRICS countries is generally weak, and the techniques and skills of the professionals cannot match well with or fully satisfy the requirements of economy and society. Therefore, BRICS countries have a strong demand for higher quality vocational skills education and training. In order to break through the bottleneck for BRICS skills exchange, China advocated the establishment of the International Alliance of Skills Development.

For the sake of carrying forward the outcomes of BBC SDWG during India’s presidency, BBC SDWG members developed the initiative of establishing the International Alliance of Skills Development over various meetings. Significantly, in February, 2017, as the key deliverables of BRICS Business Council, the initiative of holding BRICS Competition and establishing International Alliance of Skills Development (including Industry Management Body IMB, Authorized Training Body ATB, Authorized Certification Body ACB, Standard Harmonization Body SHB, Skill Competition Body SCB, Exchange and Mobility Body EMB, and Skill Fund Body SFB) are approved by the Chinese government and Chinese Chapter of the BRICS Business Council. On the BBC SDWG 4th ConCall in February, India put forward the suggestion of setting up Governance Body, and later, the Governance Body was titled as BRICS Skills Steering Committee. And then, BBC SDWG continued to perfect the suggestions of the International Alliance. On June 24th, 2017, the first Alliance members signed on the application forms of the International Alliance.

II.2 Formation of Parts of the Bodies of International Alliance of Skills Development

The Permanent Secretariat of the International Alliance will be discussed later to determine whether it can be located at Beijing ARC Xinxing Science & Technology Co., Ltd. And the Formation of Parts of the Bodies of International Alliance of Skills Development is as below:

And upon approval, BRICS Skills Steering Committee, Skills Competition Body, and Division of Responsibilities upon Industry Task Force are initially formed.

BRICS Skill Steering Committee Composition 2017-2018		
Country	**Name and designation**	**Name and designation**
Russia	Ekaterina Loshkareva (Advisor to General Director)	Alina Doskanova (Deputy Director, Worldskills)
India	MS Unnikrishnan (MD & CEO, Thermax Ltd)	Shobha Mishra Ghosh (Assnt. Secretary General, FICCI)
China	Dr Liu Zhenying- Chair (President, Beijing ARC Xinxing Science and Technology Co. Ltd)	Lisa (China BC SDWG Executive Director)
South Africa	Bhabhalazi Bulunga (Director, Adcorp)	Sherrie Donaldson (Analyst, Adcorp
Skills Competition Body Composition 2017-2019		
Country	**Name and designation**	**Name and designation**
Russia	Alexey Tymchikov, WorldSkills Russia Technical Director	Sergei Shabelnikov, WorldSkills Russia Technical Director Deputy
India	Shobha Mishra Ghosh (FICCI)	Mr Harish Nachnani (FESTO)
China	Dr Liu Zhenying- Chair (President, Beijing ARC Xinxing Science and Technology Co. Ltd)	Lisa (China BC SDWG Executive Director)
South Africa	Bhabhalazi Bulunga (Director, Adcorp)	Sherrie Donaldson (Analyst, Adcorp

Division of Rresponsibilities upon Industry Task Forces	
Country	**Task Forces of Responsibilities**
Russia	Task Force of Intelligent Manufacturing Industry; Task Force of New Generation Information Technology Industry Task Force of New Material Industry Task Force of Digital Creative Industry Task Force of Metallurgy Industry Task Force of Aerospace Industry
India	Task Force of Intelligent Manufacturing and Industry 4.0 (specific to Training, Certification and Standardization)
China	Task Force of High-end Equipment Manufacturing Industry Task Force of Bio-tech Industry Task Force of New Energy Industry Task Force of Energy-saving and Environmental Protection Industry Task Force of Power Industry Task Force of Building Materials Industry Task Force of Rail Transit Industry Task Force of Petroleum and Petrochemical Industry Task Force of Machinery Manufacturing Industry Task Force of Engineering Construction Industry Task Force of Automobile Manufacturing Industry Task Force of Mine Industry Task Force of Welding Industry
South Africa	Subject to relevant Government approval, 4th industrial revolution with focus on Agriculture, Maritime economies and jointly with India Manufacturing

*Brazil Chapter understands that the legal nature, rights and obligations of the institutionalization of the Alliance need clarification and further analysis. Brazil Chapter will follow its developments and will support specific activities.

II.3 Main Content of International Alliance of Skills Development

Subject to approval from relevant Government Departments per country, abiding by the principles of voluntariness, equality and mutual respect, openness and innovation, as well as mutual benefit and win-win, the International Alliance of Skills Development in an international exchange platform is serving for BRICS countries to carry out technical exchanges, talent flow, standards coordination, skills training and certification. The International Alliance aims to promote the development of education, skills, training, certification, and occupational skills standards in BRICS countries, to integrate skills development resources such as education, capital, project, manpower, information, services in different countries, to cultivate international highly technical and skilled professionals, and to promote infrastructure construction and global industrialization development process amongst BRICS countries.

Based on the international platform, BBC SDWG will focus on the following aspects:

- Establishing an international communication platform for human resources optimization in order to achieve talents exchange, talents flow and supply & demand docking, and to share human resources, employment opportunities, and project information; Formulating standards for occupational skill standard to achieve the standards coordination; Promoting teacher training to lay the foundation for skills training;
- Cooperating with local training institutions to train skilled professionals for BRICS construction; meeting the needs for local vocational education and skills training and to cultivate workers for local industry; this could include setting up vocational education institutions, and establishment of skills training and certification centers in BRICS, in conjunction with relevant Government departments, in order to cultivate qualified & skilled workers, to open flow channel for international talents, and to realize the industrialization and large-scale development of the skilled professionals.
- Realizing remote online technical skills training by a platform in BRICS countries; Setting up International Skill Development Forum for BBC SDWG cooperation and developing BRICS Skills Development and Technology Innovation Competition.
- Establishing industry working committees taking charge of skill development for different industries; in conjunction with relevant Government Departments, carrying out training, certification, vocational skills standards coordination. Facilitating competitions and human resources exchanging in different industries, such as Intelligent manufacturing, New Generation of Information Technology (NGIT), High-end Equipment Manufacturing, New Materials, Biology, New Energy, Energy Saving & Environmental Protection, AD&C Design INC, Welding, Power, Building Materials, Rail Transportation, Petroleum & Petrochemical, Machinery Manufacturing, Shipping, Engineering Construction, Automobile Manufacturing, Metallurgy, Mining, Aerospace, etc.;
- Promoting experience, exchanges through international seminars, skills competitions, network teaching, field visits, etc.; Carrying out skills exchange, training and practice to expand international horizons; Communicating with famous research institutions and leading enterprises around the world, and participating in well-known exhibitions and forum activities in order to build a platform for global economy and trade cooperation.

II.4 Current Progress and Near-term Work Plan of the International Alliance of Skills Development

- **Updated Activities about the International Alliance**

On June 24th, some representatives signed on the application forms of the International Alliance during the opening ceremony of BRICS Skills Development & Technology Innovation Competition. Secretary General of China Section of BRICS Business Council presided over the signing ceremony. 23 organizations and enterprises became the first members of the International Alliance:

Russia NAKS	Fushun Petroleum Machine Co., Ltd.
Southern African Institute of Welding	HUNAN FORHOME COMPOSITE MATERIALS CO.,LTD
CRRC QINGDAO SIFANG CO., LTD.	Guangzhou Zhongwang Dragon Software Co., Ltd.
Aviation Industry Corporation of China	Beijing Taier Times Technology Co., Ltd.
CNPC International Welding Training Center	Beijing three - dimensional World Technology Co., Ltd.
Welding Industry Employees Association (Hongkong)	Wuhan Huazhong Numerical Control Co., Ltd.
Beijing Institute of Educational Research and Technology Research Institute	Shanghai Jiaotong University
Chengdu Holy Industry & Commerce Corp. Ltd. (Group)	Guangxi Technological College of Machinery Electricity
Beijing ARC Xinxing Science & Technology Co., Ltd.	Xi'an Aeronautical Polytechnic Institute
Shanghai Tayor Heavy Industry (Group) Co., Ltd.	Hangzhou Vocational and Technical College
Fundamental Industrial Training Center of Tsinghua University	Changchun Automobile Industry Institute
Xiamen Jimei Vocational and Technical Schools	

*Brazil Chapter understands that the legal nature, rights and obligations of the institutionalization of the Alliance need clarification and further analysis. Brazil Chapter will follow its developments and will support specific activities.

- **On-going Activities about the International Alliance, subject to approval from relevant Government Departments per country**

- Establishing or co-establishing skills training centers under the guidance of BBC SDWG to cultivate internationalized and skilled professionals within high comprehensive quality;
- Co-formulating vocational skills standards that BRICS countries can mutually accept;

- Establishing the international platform of human resources optimization to achieve talents exchange and talents flow amongst BRICS countries;
- Setting up large data platform to achieve remote online technique and skills training;
- Developing international seminars, skills competition, network teaching, visiting, on-the-spot investigation, etc. to realize best practice exchange.
- Building the official website of the International Alliance to guarantee the smoothness of information.

Part VII Agribusiness Working Group

Agriculture, as one of the most important pillars in economy in both developed and developing countries, gains more and more recognition among the governments and people, not only for its role of providing basic needs for ever growing population, but also for its growing role of becoming one of the key areas where sustainable development of the world economy relies on.

BRICS countries are featured with high growth rate of population, rising living standard, lack of high technologies and mechanization in agriculture sector, with only few exceptional, and decreasing of farming people along with the rapid urbanization. With all these factors, plus climate change, water shortage, low education of rural workers (including lack of technological knowledge), logistics, etc. challenges facing the development of agriculture in BRICS countries are severe.

On one hand, demand for agricultural based products in both quantity and quality is increasing in the BRICS countries, on the other hand, the awareness of environmental protection enforces more and stricter rules to effectively use land and natural resources such as water as well as to preserve soil. Therefore increasing productivity by adopting sustainable technologies and attracting investment is crucial. Furthermore, to diversify the land output and to expand the product chain can also be worthy considering in the hope to widen the means of livelihood of farmers. Finally BRICS countries shall increase their agribusiness globally, showing capability to improve techniques and performances.

During the Indian presidency in 2016, the BRICS Business Council Agribusiness Working Group has addressed several important issues, they are:

- Skill Development in agriculture, livestock, fisheries and allied activities;
- Sharing best agriculture practices;
- Development of a strategy for ensuring food security;
- Innovation and technology frontiers;
- Climate change and sustainable development in agriculture and
- Ease of doing business within the BRICS Countries.

Obviously those issues are among the key elements for which the BRICS nations need to implement with the support of governments and the collaboration of members so as to fulfill the targets set out individually.

In 2017, during China’s rotating presidency, the BRICS Business Council Agribusiness Working Group has organized discussions and information exchanges to assess mutually to what extent the above mentioned key issues are currently under implementation, and what further actions, including governmental support and cooperation between the member nations are required. Furthermore, the country members understand that the modern agriculture shall not be limited to producing agricultural products only, we can look to the wider economic picture and longer product chain, also considering the provided environmental services, such as carbon stocks, and aiming to achieve the transition to the green economy. New suggestions have been made and discussed amongst the BRICS countries with a summary in the subsequent parts.

I. Mutual Recognition of Forest Certification

As one of the most original resources in the Earth, forests are not only the provider of raw materials for many industries as well as several ecosystem services, but also the preserver of natural ecosystem.

Forests have many functions in human activities. They provide humans with rich edible goods to survive and evolve, they balance air and water to combat climate change, they help maintain biodiversity, landscape management, water flow regulation, soil protection, carbon stocks etc. to sustain the environment. Forests play a very important role in economic and social life and ecological system.

Forest products trade is intensified by globalization. The demand for timber products is expected to reach 10 billion m^3 by 2050, when the world's population shall reach up to 9 billion. Hence the world will have to produce more with less resources, maintenance of a sustainable forest business becomes one of the top prioritized issues.

Forest certification system is a market mechanism which assures consumers that forest based products are being produced in a socially fair, environmentally friendly and economically competitive manner. It is a tool that assures products come from responsibly managed forests to realize sustainable forest management.

At present, two schemes of the forest certification systems prevail in the world, i.e. Forest Stewardship Council - FSC and the Programme for the Endorsement for Forest Certification Systems - PEFC, which have different policies and principles that are audited by a third party verification system . Some of the BRICS countries have established their own forest certification systems. China has CFCS system which is recognizable mutually with PEFC. Russia has its own system called Russia's National Forest Certification System.

In the forest products trade between the BRICS countries, exporters may need to obtain the recognition of each forest certification system of the destination country due to the fact that none of any understanding of mutual recognition amongst the BRICS countries is in place so far. This will result in hindering of the timber trade or increases of the trade cost.

Meanwhile forest products trade is very active among the BRICS countries. One example is China who needs to import a huge amount of timber every year from other BRICS countries. Therefore we suggest that it is time to study the feasibility of mutual recognition of forest certification systems between the BRICS countries to facilitate the forest products trade, in the aim of reaching consensus and signing a memorandum of mutual recognition between the BRICS nations as early as possible.

II. Agricultural Productivity Enhancement

Industrialization might be the word when we think about how to increase agricultural productivity. However in BRICS countries where many farmers are self employed and farming belongs to household business, we need to change our mindset.

South Africa, for instance, is producing 50% less food than it did in 1980. There are only 200 certified farmers. The 2011 report compiled by DR Jane Batterby indicated that an average of 80% of households surveyed in selected townships areas lack access to sufficient provisions and communities often go hungry.

Therefore, the South Africa agribusiness working group believes that organic and near organic agriculture methods and technology, no external inputs needed, use locally and naturally available materials to produce high quality products, are ideal suited for many poor, marginalized smaller farmers in Africa, given its aim to strive for inclusion of producers who grow organically without organic certification, so that the collective productivity is enhanced.

In summary, the benefit of organic and near organic agriculture is that organic farming increases access to food at several levels:

- Increased quantity of food produced per farm
- Household food security which result in all members of the household having access to enough food
- Production and selling of food surplus at local markets, farmers benefit from higher incomes
- Fresh organic produce becomes available to more people in the wider community
- Organic farming enables new and different groups in a community to get involved in agricultural production and trade where previously were excluded for financial or cultural reasons
- Benefits to soil fertility, water supply flood control, biodiversity ,increased water retention in soils, improvements in the water table ,reduce soil erosion and improved organic matter in soils

- Increase soil agro biodiversity, soil have high nutrient content
- Soil enables farmers to grow crops for longer periods, with higher yields in marginal conditions

Russia actively promotes organic agriculture and biological farming. Russia believes high technology introduction in agriculture will not only increase the quality of agricultural products and reduce environmental load but also rise agricultural productivity and simplify products' certification procedure. Russia encourages that BRICS countries should more actively share their results in technological sphere, taking the opportunity of annual exhibition Agroprodmash – international exhibition "Equipment, machines and ingredients for food and manufacturing industries".

Brazilian Agricultural Research Corporation (Embrapa) is constantly helping to improve the productivity of the Brazilian agribusiness sector as debated at New Delhi Summit in 2016. Joint efforts of Embrapa and the agribusiness sector have changed Brazil. Nowadays, Researches are made in all products and crops, from coffee to meat, from sugar cane to yucca, vegetables, fruits and forests, making Brazilian agriculture one of the most efficient and sustainable ones in the planet. Brazil have quadrupled the beef and pork supply and increased the chicken supply 22-fold.

III. Food Security by Innovation and Technologies

Food security has been a threat to under developed and developing countries where there is the most rapid population Increase in the world. Growing population, shrinking natural resources and climate change is adding new challenges for the food security. As developing countries and emerging economies, BRICS countries have duty and consensus to address this issue constantly.

Food security has been a main topic in the BRICS Business Council Agribusiness Working Group from the beginning, it remains an important subject in 2017.

China has successfully improved the food security situation since its reform and opening up to the world in the 1980s, thanks to central government's rural policy and technologies.

Hybrid rice is one of the technology breakthroughs which drive productivity improvement dramatically.

China believes that many other innovations and technologies in the areas of farming, talent training and policy making, though not as well-known as the hybrid rice, have proved their effectiveness regionally, it is our duty to make them spread and shared. China suggests that the working group shall encourage and organize those who have achieved to list and publish their stories and results in the existing columns at the BRICS Information Sharing & Exchange Platform, in the form of "case study" or "on-line workshop", to let them known.

In Brazil, coffee harvest has been increasing due to the implementation of technologies in order to following population and consumption increase. Brazil also successfully implements public policies in order to fight hunger and poverty.

India believes that ensuring food security is a key public policy objective in all member countries. Countries can exchange experience in public policies and programmes for food and nutritional security.

The success stories from across the sectors should be shared on common platform as it was proposed in BRICS Agriculture ministers meeting.

IV. Strategy of Poverty Relief

In most of the BRICS countries, the majority of the population lives in rural areas where traditional way of farming and doing business does not offer relatively acceptable economic returns, which explains why big portion of the population living in some of the BRICS countries are below the poverty line.

No doubt that enabling smooth business channels for product sales, technology and investment access with the support of government would be the most effective way to tackle the poverty relief issue, however it is also feasible to have brainstorm to initiate ideas of widening economic picture and extending the product chain.

In Southern China, farmers plant fast-growing trees in the pastureland of non-natural forest area to provide raw materials to timber-relied industries. In some sugarcane rich region, bagasse is used to make tissue and paper, which definitely produces supplementary income for the sugarcane farmers.

Rice and wheat straw are also used in the rice and wheat rich areas in China to make pulp. Recent development is that certain technology breakthrough in reducing water pollution and converting the effluent into fertilizer has commercialized.

Agricultural residue is also a good biomass resource for clean energy. We expect that all level of governments in the BRICS countries will matchmake between farmers and clean energy technology providers.

V. Ease of Multilateral Trade

Russia suggests creating a base of approved suppliers of BRICS agricultural products by creation of own website by each country following special standards and including cross-references.

This can be our mutual goal, for which we initiated the discussion this year and expect to continue in the years to come until a proper platform is established.

Details of the suggestion are as below:

- These standards might relate to both the website design (for example, a common emblem, home page, references' location) and the structure and content (common functional).
- Furthermore, Russia suggests a standards' harmonization which will allow reduce costs and time required on the product certification, due to the fact that restrictive standards of agricultural products are the main non-tariff barrier.
- Besides, well- recognized international standards can be used as a reference. On the first step, BRICS members should inspect which categories of agricultural products can satisfy standards by all BRICS countries. On the second step, to analyze why some requirements cannot be kept and work out certain measures for softening these requirements or correction the quality of BRICS agricultural products.

Annex III: PROGRESS REPORT of BRICS Business Council on BRICS RATING AGENCY

I. Introduction

The concept of an alternative credit rating agency to be formed by the BRICS countries was first mooted during the BRICS Summit 2015 held in Ufa in Bashkortostan, Russia. Following the summit, the concept was deliberated upon by the BRICS Business Council. In 2016, under India's Chairmanship, the EXIM Bank of India appointed CRISIL Ltd – India's leading credit rating agency, to develop a research paper studying the modalities of such an alternative rating agency. The key findings of the research paper have been deliberated upon by BRICS leaders, development banks, financial market participants and regulators at various forums including the BRICS Summit held in Goa, India in October 2016, wherein a need to take this concept forward was established.

The Goa Declaration which was endorsed by the leaders of the five BRICS nations proposed the formation of an Expert Group to examine the feasibility of setting up the BRICS Rating Agency based on market principles. Accordingly, an Expert Group has been formed under the aegis of the BRICS Business Council Financial Services Working Group (BBC FSWG), comprising 23 members with rich experience in this area, representing the five BRICS countries - Brazil, Russia, India, China and South Africa. Representatives from the New Development Bank have also participated in the discussions of this Expert Group and have shared their views.

Subsequently, the Terms of Reference, detailing the key aspects for deliberation for the purpose of this study, have been adopted by the Expert Group. The Group has conducted extensive discussions during January to March 2017 on these aspects, highlighted below:

I.1 The viability of the BRICS Rating Agency on market based principles

- Need assessment
- Assessment of likely perception of financial markets and industry
- Scope of activities and type of issuances to be rated by this agency
- Business opportunity and financial viability assessment
- Regulatory, financial or technical support required in its formative years

I.2 An appropriate regulatory framework for the proposed BRICS RA

I.3 An optimum ownership, governance and management structure for the proposed BRICS RA keeping in view the objective of credibility, integrity and avoidance of conflict of interest

I.4 A broad implementation plan and timelines for setting up the BRICS RA that may include hiring plan for infusing right expertise

The key interim findings and recommendations of the Expert Group on each of the above are summarized below.

II. The viability of the BRICS Rating Agency on market based principles

Summary:

- *An emerging market focused Rating Agency with capabilities to benchmark risks on emerging-economy will help channel much needed funds to core sectors in these economies.*
- *Large investors are enthusiastic regarding BRICS RA. However, its credibility will depend on independence, strong governance, ability to provide differentiation of risk across emerging market borrowers and regulatory accreditation.*
- *Issuer-pay model recommended for the BRICS RA as it is commercially established and globally accepted. However, support will be needed from BRICS nations in the initial period to encourage investors in their country to seek ratings from the BRICS RA.*

II.1 Detailed Findings

- ***Need Assessment:*** The Expert Group is of the opinion that there is a distinct need for a rating

agency for emerging countries including BRICS nations. The group has observed that as compared to the developed world, the need for capital far exceeds the availability in emerging economies, especially in the area of infrastructure, in which most countries face large funding gaps. Hence, these countries have to depend on large investors including multilateral agencies for their funding needs beyond the institutions and investors present in their own markets. These investors most often seek assessment of credit prior to investing in projects of different emerging countries and rating forms an important part of this credit assessment process. Rating should be able to provide consistent and comparable rating information in this process. Cross-border capital flows call for the unblocked circulation of credit rating information, while information consistency and comparability remains a necessary condition for such kind of circulation.

However, the credit assessment based on national scales only evaluates the credit risk within the particular country where the project is based and is therefore not comparable with credit assessment made in a different country. Hence, ratings based on national scales find limited usage among the investors who are looking to invest across various emerging markets and need a comparative assessment across projects from different countries.

There is no political or economic system in the world that is more to the benefit of a country's credit status than others. Credit ratings must present an unbiased value judgement according to the particular contexts of emerging market economies. Hence, there is a need for establishing a rating agency, which would evaluate the credit quality of emerging markets in an unbiased perspective and take into account the nuances of these markets. Moreover, for multilateral organizations like AIIB and NDB, which have a mandate to invest in developing economies, the proposed rating agency can prove to be an important partner and a critical part of market infrastructure which will facilitate the flow of investments to viable projects.

- ***Large investors' perceptions:*** The Expert Group also felt that it is important that the proposed rating agency be supported by investors who would utilize its ratings and assessments. To understand the perspectives of investors, the group undertook an "investors' outreach programme" whereby the members of the group reached out to some of the large investors present in their respective countries and held discussions with the help of a structured questionnaire to gauge their opinion on the need for such an agency and their willingness to use the ratings provided by the entity if it is established in future.

While this exercise is on-going, initial feedback received revealed that investors too are of the opinion that formation of such an entity would be useful for the BRICS and other emerging countries. The following perspectives have been highlighted by investors:

- BRICS RA can bring an independent, unbiased, EM-focused view of the highest standard
- Acceptability of ratings issued by the BRICS RA on a stand-alone basis is seen as challenge until track record of operations is established
- Key Aspects highlighted by investors for the success of the BRICS RA –
- Experienced management and strong corporate governance:
    - Extent of coverage provided by the rating agency both in terms of the number of borrowers covered and types of financial instruments rated.
    - Ability to provide differentiation of risk across borrowers in emerging markets
    - Accreditation by regulators and independence from political influence are crucial for success of the BRICS RA
    - Capability to present unbiased rating viewpoints to emerging markets (EM)

- ***Scope of activities and type of issuances to be rated by this agency:*** The Group recommends that it would be important for the BRICS RA to obtain the support from the Central Banks and relevant credit rating regulators of five BRICS countries as its scope of activities would include loans and fixed income market. Initially, the services of the Rating Agency could be provided in the BRICS countries, which can be further extended to other emerging markets in future. However, before extending the scope of work to other developing countries, the Expert Group feels that it would be important to identify the final users (specially the investors) of the ratings issued by the new rating agency in each of the country and understand their respective needs. To obtain investor perspective and ensure that the concept is acceptable from a broader market perspective, views from NDB have also been solicited.

- ***Rating Methodology:*** It is suggested that the rating methodology should be fair and transparent to ensure that all major investors including insurance companies and commercial banks recognize the ratings and assessment given by the rating agency.

- ***Business Model:*** Discussions among the Expert Group members have revealed that worldwide, 'Issuer Pays' business model is the most preferred one, is more suited and benefits markets having strong regulatory framework. Majority of the rating agencies across the world operate on an 'Issuer Pays' business model. Hence, it is commercially established and successful as opposed to the 'Investor Pays' model. 'Issuer Pays' model offers several advantages. Firstly, under this model, all ratings assigned are available publically, to the entire market, free of cost. Investors can use these ratings to evaluate their investment decisions across wide range of issuers and instruments. Secondly, it allows the rating agency to access relevant and high-quality information from the company or the issuer on a regular basis.

Rating agencies need information and cooperation of the issuer, not only to arrive at the decision at the time of assigning a rating but also at the time of monitoring the rating .The rating agency needs information about the developments taking place in the company whose instrument is rated and therefore there is need for continuous flow of information from the company to the rating agency during the monitoring phase. This helps in enhancing the quality of analysis by the rating agency, and keeping the cost to the system low which may not be possible under the 'Investor Pays' model. Global experiences further indicate that under the 'Investor Pays' model, the rating agencies work for investors and often assign ratings unilaterally, which run into disputes. The ratings assigned through this model are often conservative due to lack of information about the companies whose assets are rated and prompt these companies to reach out to rating agencies to correct these ratings. As a result, effectively an investor pay model is often converted into an 'Issuer pays' model. Therefore, the Expert Group has concluded that the 'Issuer pays' model is the optimal option for the proposed rating agency.

However, the Group suggests that in the initial years of establishment, support will be needed from the BRICS nations in encouraging large investors in their country to seek ratings from the new RA.

III. An appropriate regulatory framework for the proposed BRICS RA

Summary:

- *Sub-group formed to discuss and identify an optimal regulatory framework for the BRICS RA*
- *BRICS RA to be established preferably in one of the BRICS nations. The host country should have a conducive yet strong regulatory framework, an experienced regulator, large market size and the presence of a mature credit rating industry*
- *BRICS RA to be governed by a 'Governing Charter' document, which will be signed by all member countries (similar to New Development Bank)*
- *Member countries will be signatories to the charter and would provide exemptions and regulatory approvals*
- *Will conform to highest standards of quality*

III.1 Detailed Findings

To deliberate and identify an optimal 'Regulatory Framework' for the BRICS RA, the Expert Group has carved out a dedicated regulatory sub-group. The sub-group discussed some of the factors which need consideration while arriving at a decision regarding the *'country of establishment'* and an appropriate *'regulatory framework'* for the entity.

III.2 Key Recommendations

- ***Country of Establishment:*** The BRICS RA should be established in a country which has strong yet conducive regulatory framework as it would be easier to set up a Rating Agency in such a country. The RA regulator of the host country should have a strong track record in regulating rating agencies. The host country should also have deep financial markets and a history of credit ratings issuances. The Sub-Group is presently reviewing the regulatory framework of all the five BRICS countries and would continue its discussions in the coming days.
- ***Regulatory Framework***: The BRICS RA should preferably be established in one of the BRICS countries and it could be governed by a 'Governing Charter' which should be formulated and signed by all the founding member countries.

- This Charter shall govern all matters relating to capital, governance and credit rating operations of the RA.
- It shall also put forth the rights, exemptions, immunities and privileges that the BRICS RA shall be subject to, similar to the case of other multilateral agencies' establishment documents.
- As a result, BRICS RA will have only one, defined governing document to refer to, will facilitate easier day-to-day operations and faster conflict resolution
- Support from BRICS governments will be needed to establish 'Governing Charter' – in line with multilateral agencies.

Through this charter, each of the signing member countries will agree to provide privileges and immunities specified in this charter to the BRICS RA, including approvals. Approvals will be provided by the regulators after ensuring that the BRICS RA conforms to the highest standards of quality. The BRICS RA would need to get its rating criteria and policy approved by all the key regulators. Additionally, BRICS RA should register itself as an ECAI with all the five central banks and relevant regulators. Even if the RA is exempt from regulatory requirements, an empanelment with the central banks and relevant regulators will serve to improve acceptability of its ratings among banks and financial institutions lending in foreign currencies. This will enable banks to use these ratings to complement their internal risk assessment as well as for the purpose of capital computation.

IV. An optimum ownership, governance and management structure for the proposed BRICS RA

Summary:
The following aspects were considered critical in determining the optimum ownership structure of the BRICS RA:

1. *Diversified shareholding – to prevent domination from any single owner*
2. *Independence of the BRICS RA from any political influence – to ensure credibility*
3. *Presence of member development banks and private financial institutions – to ensure investor acceptance and regulatory support*
4. *Shareholding and support of single or multiple established rating agencies that have significant experience and are of strong repute in emerging markets – to ensure technical capabilities, investor acceptability and to expand market reach.*
5. *Essential that the partnering rating agencies are given a significant stake to ensure their continued interest in the success of the BRICS RA*

IV.1 Detailed Findings

- ***Ownership:*** The Expert Group suggests that following aspects need to be considered while arriving at the ownership structure for the Rating Agency:

- Diversified Shareholding: It is recommended that the BRICS RA have a diversified shareholding structure which would ensure that no single entity (country/institution) influences the operations of the BRICS Rating Agency.
- Independence of the BRICS RA: The ownership structure of the BRICS RA should ensure that it is not viewed as a politically influenced entity. This can be achieved through the presence of New Development Bank (NDB) and other EM multilateral agencies as minority shareholders. This is important from the perspective of maintaining analytical independence of the BRICS RA and to emerge as an apolitical EM credible RA in the long run.
- Presence of member development banks (MDB) and private financial institutions: Presence of MDBs and financial institutions is essential to garner credibility and accreditations or exemptions in the various regulatory jurisdictions.
- Support of multiple rating agencies: The Rating Agency could consider receiving support from established credit rating agencies or an executive body comprising members from rating agencies present in each of the BRICS countries, which have strong presence in the emerging markets. These credit rating agencies should have an established repute in emerging markets. This would enable the BRICS RA to gain faster acceptance among issuers of the BRICS countries, investors, global regulators as well as central banks across the world given the strong reputation of the established RAs.

In light of the above, the following option is proposed for the shareholding of the BRICS RA:

The group proposes that the RA should have diversified shareholding with:

- Support from established rating agencies as shareholder will ensure faster acceptance in local markets.
- Member development banks
- Financial institutions
- An established RA or a consortium of five RAs (one each from each of the BRICS countries)
- or an executive body comprising members from the five Rating Agencies from five BRICS countries

There could be 10-12 shareholders, with no shareholder (apart from the partnering rating agencies) having more than 10% stake. The partnering rating agencies should be given significant stake to ensure their continued interest in the success of the BRICS RA.

- Merits of the Option:
- Support from established rating agencies as shareholder will ensure faster acceptance in local markets.
- Independence in management and governance principles along with ownership options.
- Presence of member development banks or financial institutions will prevent any conflict of interests that may arise for the partner RAs. In this regard, member development banks and financial institutions will also play a supervisory role over the activities of the RA partners.
- Shareholding distributed between 10-12 shareholders consisting of public, private and multilateral agencies will prevent domination of any single member country/institution, thereby reducing the scope for political influence or conflict of interests on the BRICS RA.

It was also discussed that the BRICS RA could explore a technical, management contract with established BRICS RAs in addition to a share in ownership. Under this option, the BRICS RA can derive technical and managerial expertise from established RAs by way of its technical tie-up, with limited influence on ownership.

IV.2 Way Ahead

ToR items I.2 Examining the appropriate regulatory framework for the proposed BRICS RA and I.3 Examining optimum ownership, governance and management structure for the proposed BRICS RA keeping in view the objective of credibility, integrity and avoidance of conflict of interest have been substantially addressed by the Expert Group.

Post the mid-term meeting, balance of item I.1 Examining the viability of the BRICS Rating Agency on market based principles and all of item I.4 shall be taken up by the Expert Group.

V. A broad implementation plan and timelines for setting up the BRICS RA

Sr. No	Activity	Progress	Timelines														
			Jul-2017			Aug-2017				Sep-2017				Oct-2017			
			13-Jul	20-Jul	27-Jul	6-Aug	13-Aug	20-Aug	27-Aug	3-Sep	10-Sep	17-Sep	24-Sep	1-Oct	8-Oct	15-Oct	22-Oct
1.	Need Assessment and Investor Outreach	Discussions Commenced															
2.	Regulatory Framework	Discussions Commenced															
3.	Business Model	Recommendation Finalized															
4.	Ownership and Shareholding	Recommendation Finalized															
5.	Government Support Required	Discussions Commenced															
6.	Presentation of Interim Key Findings to BRICS Business Council FSWG and																
7.	Business Plan Framework: 1. Financial Viability Assessment 2. Corporate Governance 3.Generic Commercial Analysis	To be Discussed															
8.	Rating Philosophy and Techniques	To be Discussed															
9.	Presentation of Key Findings to BRICS Business Council FSWG and main Council																

Expert Group Report: The Expert Group will develop the draft report detailing out all the recommendations and findings regarding the proposed BRICS RA, and the final report will be presented ahead of the 9th BRICS Summit to be held in Xiamen, China in September 2017.

Composition of Experts Group on BRICS Rating Agency

I. Indian BRICS Business Council FSWG

- Ms. Ashu Suyash, MD & CEO, CRISIL
- Mr. Sameer Bhatia, President, CRISIL Infrastructure Advisory
- Mr. Pradip Shah, Chairman, IndAsia Fund Advisors Private Limited
- Mr. Sunil Sanghai, Vice Chairman, Investment Banking, HSBC - India
- Mr. Goutam Sanyal, General Manager – Risk Div., ICICI Bank
- Mr. Samuel Joseph, Chief General Manager, EXIM Bank of India

II. Russian BRICS Business Council FSWG

- Mr. Nikolay Vukolov, Deputy Director, Russian Direct Investment Fund
- Dr. Seniuk Ninel, National Consultant, UNIDO
- Mr. Aleksei Kechko, MD, Sberbank, India
- Mr. Vladimir Markelov, Advisor to the First Deputy Governor, Bank of Russia
- Mr. Pavel Ovsienko, Deputy Head, International Development Institutions Division, Bank for Development and Foreign Economic Affairs (Vnesheconombank)
- Mr. Oleg M Preksin, Vice President of the Association of Russian Banks, Russian Financial & Banking Union Deputy Chairman
- Mrs. Julia Trofimova, Managing Director, Head of Rating Advisory, Gazprombank

III. Chinese BRICS Business Council FSWG

- Ms. Wang Shuo, Senior Manager, Risk Management Department, Bank of China
- Mr. Zhang Ruohan, Assistant to Chairman, Dagong Global Credit Rating Group
- Mr. Guo Rui, International Business Development Manager, Dagong Global Credit Rating Co. Ltd.

- Ms. Olga Skvortsova, International Business Development Manager, Dagong Global Credit Rating Co. Ltd.

IV. **South African BRICS Business Council FSWG**

- Mr. Cas Coovadia, Managing Director, The Banking Association South Africa
- Mr. Sello Mashao Rasethaba, Chairman, Black Business Council
- Mr. George Sebulela, President and Chief Executive, Sebvest Group
- Mr Jurgen Boyd, Financial Services Board
- Mr. Jerry Mashamba, Chief Executive Officer, Mashamba Asset Managers
- Mr. Phakamile, Mainganya, Chief Risk Officer, Industrial Development Corporation of South Africa

V. Brazilian BRICS Business Council FSWG

- Mr Marco Tulio, Banco do Brasil S.A., Director of Credit
- Mr Ricardo Goya, Banco doBrasil S.A.
- Mr. Leonardo Cappa, Brazilian Financial Executives Association
- Mr. Luiz Calado, Brazilian Financial Executives Association
- Mr Luiz Antonio Martins, Banco do Brasil, Shanghai Branch
- Mr Marcelo Assi, Banco do Brasil, Asia Regional General Manager

Annex IV: Overview of Practical Cooperation Projects in 2016-2017

I. Chinese Chapter

I.1 Projects with Brazil

1. BOC Supported China Molybdenum's acquisition of Anglo American's Niobium and Phosphates businesses in Brazil for $1.5 billion

On September 30, 2016, China Molybdenum Co., Ltd. (CMOC) reached an agreement with Anglo American plc (Anglo American), an international mining giant, on a cross-border M&A project. According to the agreement, CMOC bought a 100% stake in Anglo American's Niobium and Phosphates businesses in Brazil for a total cash consideration of $1.5 billion, out of which $900 million was a loan provided by a cross-border M&A consortium of four banks led by the Bank of China (BOC). Relying on its global integrated settlement network and aided by its branches in New York, Luxembourg and subsidiary in Brazil, the BOC assisted CMOC in completing the consideration payment to Anglo American.

2. Brazil-Peru "Transcontinental Railway" Feasibility Study Project

The project was first written into a joint declaration of China, Brazil and Peru during the state visit to Brazil by Chinese President Xi Jinping in 2014. In May 2015, when Chinese Premier Li Keqiang visited Brazil and Peru, the MOU on the Joint Feasibility Study on the Transcontinental Railway was signed between the National Development and Reform Commission (NDRC) of China, the Ministry of Transport and Communications of Peru, and the Ministry of Transport of Brazil. As the major part of the Chinese technical expert group, China Railway Eryuan Engineering Group Co., Ltd. (CREEGC), a subsidiary of China Railway Engineering Corporation (CREC), was responsible for carrying out the feasibility study. A final report of the feasibility study was completed and delivered to the Brazilian and Peruvian governments for review in late October 2016.

3. COSCO SHIPPING concluded a 27-year COA with Vale

On March 18, 2016, COSCO SHIPPING concluded a 27-year contract of affreightment (COA) with Vale S.A. in Brazil. Every year during the term of the contract, COSCO SHIPPING will carry approximately 16 million tons of iron ore for Vale. In order to execute the COA, China Ore

Shipping Pte. Ltd. signed a contract with Shanghai Waigaoqiao Shipbuilding Co., Ltd. on the building of ten 400,000-ton ore carriers on March 31, 2016, which marked the beginning of a new era of cooperation between COSCO SHIPPING and Vale.

4. COSCO SHIPPING signed cooperation contracts with ECOVIX

In 2011, COSCO (Shanghai) Shipyard Co., Ltd., a subsidiary of COSCO SHIPPING, and ECOVIX, a Brazilian shipyard, signed a consulting contract on the design and construction of eight FPSO units for Petroleo Brasileiro S.A. It means that COSCO SHIPPING became China's first company in the industry that successfully exported offshore engineering equipment technology overseas. Since then, COSCO SHIPPING has offered comprehensive technical support to ECOVIX and helped the latter win multiple bids. In 2013, COSCO SHIPPING advanced its technology-based cooperation with ECOVIX by entering into a series of contracts for a win-win outcome.

I.2 Projects with Russia

1. China and Russia jointly developed next-generation long-range wide-body aircrafts

On May 22, 2017, China-Russia Commercial Aircraft International Co., Ltd. (CRAIC), a joint venture of Commercial Aircraft Corporation of China, Ltd. (COMAC) and United Aircraft Corporation (UAC), was founded in Shanghai. The joint venture is mainly responsible for operating the joint development project of next-generation long-range wide-body aircrafts. It is a strategic project based on the practical cooperation in the high-tech field between both Chinese and Russian companies against the background of a closer comprehensive strategic partnership between the two countries. The project is about to enter the preliminary design phase when system and equipment suppliers will be inquired. The assembly will be done in Shanghai.

2. The Moscow-Kazan HSR Project in Russia

A joint venture has been established by CREEGC, National Transportation Engineering Design Institute of Moscow and Nizhny Novgorod Metro Design to execute the survey and design contract for the Moscow-Kazan high speed railway (HSR) project. With a total length of 770 km, this double-track broad-gauge railway can accommodate a maximum operating speed of 400 km/hour. In June 2015, the joint venture won the bid for the survey and design of the HSR project.

On June 30, 2016, it delivered on schedule the design drawings and related documents for the first project phase to the project owners. CREEGC is now preparing various technical documents which are to be submitted to relevant Russian regulators for approval, and will then make revisions based on their opinions. Meanwhile, the Russian project owners are now working on the construction model of the HSR project.

3. Yamal Project

Located on the Yamal Peninsula in northern Russia, the YAMAL project is the world's largest LNG field project jointly developed by Russia's NOVATEK, France's Total and China National Petroleum Corporation and Silk Road Fund. The main development goals are to build an LNG plant and its ancillary port and campground facilities. Thanks to its initial efforts, COSCO SHIPPING Specialized Carriers Co., Ltd., a subsidiary of COSCO SHIPPING, successfully won the bid for the annual contract of building two 50,000-ton semi-submersible carriers for the YAMAL project in 2014. A specific plan was worked out based on the contract, opening up a new model of project-oriented shipbuilding. To date, the project has been running smoothly with 15 voyages completed.

I.3 Projects with India

1. Indian Metro Project Series

Currently, China Railway Engineering Corporation (CREC) is implementing seven metro projects in India, including:

- **Delhi Metro CC24 Section.** A joint venture established by China Railway No.3 Engineering Group and a local Indian company won the bid. The project covers four stations and three blocks, with a duration of 42 months.
- **Delhi Metro CC20 Section.** A joint venture established by China Railway No.3 Engineering Group and a local Indian company won the bid. The project covers one station and two blocks, with a duration of 36 months.
- **Bombay Metro Line 1 TALOJA Rail Yard.** A joint venture established by China Railway No.3 Engineering Group and a local Indian company won the bid. The project was started in 2013, and is scheduled to be completed in late September 2017.
- **Bombay Metro Line 2 Phase 2 AC-01 Section.** A joint venture established by China Railway

No.3 Engineering Group and a local Indian company won the bid. The project covers some viaducts with a total length of 8km and nine elevated stations. The bid was won in June 2016.

- **Bombay Metro Line 2 Phase 2 AC-02 Section.** A joint venture established by China Railway No.3 Engineering Group and a local Indian company won the bid. The project covers some viaducts with a total length of 10km and eight elevated stations. The bid was won in June 2016.
- **Bombay Metro Line 3 Phase 1 UGC-05 Section.** A joint venture established by China Railway No.3 Engineering Group and a local Indian company won the bid. The project covers four stations and four blocks, with a total length of 3,620m. The bid was won in July 2016.
- **Bombay Metro Line 3 Phase 1 UGC-06 Section.** A joint venture established by China Railway No.3 Engineering Group and a local Indian company won the bid. The project covers three stations and three blocks, with a total length of 3,500m. The bid was won in July 2016.

2. BRICS Business Council Promotes Intra-BRICS Trade via EPEC

Prism Cement Limited, among the leading construction material companies in India, sent an enquiry about petroleum coke to Sinopec International (Shanghai) Co., Ltd. via the global website of Epec.com in May 2017. Sinopec followed the enquiry and extended reach to potential clients for petroleum coke in the Indian market. Drawing on its network strength, Sinopec promptly set up a professional petroleum coke team to analyze the quality and cost of petroleum coke for the cement industry, and provided bountiful selections of overseas resources for Indian cement companies. Eventually, a first order of 50,000 tonnes of petroleum coke was obtained from India Cements Ltd., one of the leading cement manufacturing companies in India, and products were delivered successfully later.

Even though its international site was just inaugurated, Epec.com has proven very effective and valuable in product promotion and trade services, assisting open and resources-sharing in trade practices among BRICS. BRICS Business Council and Epec will tap unlimited potential for increased business and trade ties.

3. Project of Indian Quarried Stone Import to Quanzhou's Shihu Port

Every year, China imports more than 4 million tons of quarried stone from India, the world's largest stone material producer. Reputed for its high strength and top quality, Indian stone materials meet the world's highest standard and are therefore widely used in a number of renowned buildings around the globe. Situated in Quanzhou, China, Shuitou Town is world-famous for its stone material industry and has become the largest stone processing base in the world. Therefore, the rich variety of Indian stone materials have naturally become the most important raw materials in the town, which also allows the port of Shihu in Quanzhou to flourish in the import of Indian quarried stones over the past 13 years. Notably in the last three years, a great leap forward has been made with an accumulated import volume of up to 7.2 million tons. Every month, more than 12 vessels carrying Indian quarried stones are unloaded at the port. Responding to the growing import of quarried stones, the port has continuously optimized its handling technology and efficiency to satisfy customers' requirements, winning wide acclaim from shipowners and quarried stone importers.

I.4 Projects with South Africa

1. South Africath South Africaimporters.Notably in the la

In 2016, Bank of China Johannesburg Branch signed a 15-year bilateral loan agreement worth 3 billion rand with Transnet, a state-owned freight transport and logistics company in South Africa, and became the only Chinese bank providing financing in rand in TRANSNET's locomotive procurement project. Such a loan will be used to pay for CRRC's 591 locomotives, thereby helping CRRC export its locomotives to Africa and supporting Chinese technologies and equipment in going global. This project also won Trade Finance Deal of the Year 2015 in the Middle East and Africa.

2. BOC Supported China-Africa Production Capacity Cooperation Project

In 2012, First Automobile Works (FAW) set up a vehicle assembly plant in Coega, South Africa. By providing timely loan support, the Bank of China helped ensure FAW's smooth local operation, finished the assembly of its first commercial vehicle manufactured in South Africa, and boosted China-Africa production capacity cooperation.

II. Brazilian Chapter

According to FDiMarkets, between January 2016 and April 2017, Russian, Indian and Chinese Direct Investments projects were recorded in Brazil, as follows:

II.1 Russian investments in Brazil

- Russia-based Morton (Moscow), which constructs and sells real estate properties, plans to build a joint venture composite materials manufacturing plant in Brazil. The facility will be built with a local partner and manufacture materials using basalt fibre reinforced polymers.
- It is important also to highlight that in the press statements following Russian-Brazilian talks, in June 21, 2017, it was stated that Russian business is quite actively investing in Brazil. Regarding the energy sector, there are projects successfully underway in Brazil. The energy companies - Rosneft and Gazprom - are working in Brazil. The company Siloviye Mashiny has built five new hydropower stations in Brazil and will localize production of hydroturbine equipment in Brazil. It was stated that Russian transport companies are ready to take part in carrying out Brazil's new programme for modernizing the national infrastructure. There are also promising projects in nuclear energy. The Russian company Rosatom won a tender to supply uranium to Brazilian nuclear power plants. In peaceful space exploration sector, a Russian electro-optic facility to detect space junk has opened in Brazil. Four ground stations that are part of the Russian GLONASS global satellite navigation system are operating on Brazilian soil.

II.2 Chinese investments in Brazil

- China-based JA Solar (Shanghai), a manufacturer of solar power products, is to establish a subsidiary office in Brazil. Known as JA Solar Brazil, the new entity will focus on consolidating partnerships with local and international energy companies. It is scheduled to commence operations in July 2017.
- China-based Huawei Technologies (Shenzhen), a telecommunications provider, has opened a new customer solution innovation and integration experience centre (CSIC) and headquarters in Sao Paulo, Brazil. The company's CSICs are used for clients to run proofs-of-concept and test the implementation of new applications for their business lines

before launching new services commercially.

- China-based Wecash (Beijing), an online financial credit assessment platform provider, is investing in the city of Sao Paulo, Brazil in the Software & IT services sector in a Sales, Marketing & Support project.
- China-based BYD Electronics (Shenzhen), a rechargeable batteries and automobiles manufacturer, has launched a solar panel factory in Campinas, Brazil.
- Cofco Agri, a company which engages in agricultural trading and processing businesses and is a subsidiary of China-based COFCO (China National Oils, Foodstuffs and Cereals Corporation), is to increase capacity of its plants in Brazil. In the long term, the company aims to double in size. The growth horizon of the company for sugar production in Brazil is in line with its global strategy. Cofco Agri owns four sugar and ethanol plants in Sao Paulo. It also does not rule out the acquisition of mills.
- Bluestar Silicones, a subsidiary of China-based China National Chemical (ChemChina), has invested to relocate its industrial headquarters from Santo Andre to Joinville, Brazil. The facility, located at the Perini Business Park, serves customers in Brazil, Mexico and Latin America. The site will house a logistics platform. The company offers an extensive line of products for use in various markets, such as to the self-adhesive, cosmetics, construction, automotive, healthcare, and textile product industries, among others.
- Yasuna Motors, a manufacturer of motorbikes and subsidiary of China-based Yasuna Group, is to build a new facility in Una, south of Bahia, Brazil. Scheduled to commence operations in February 2018, it will have the capacity to produce 3500 motorbikes per month and also feature a research, design and development unit. Yasuna Motors also plans to open 10 new stores in the country, with five to open in Bahia by 2022.
- Key Safety Systems, a developer of automotive safety-critical components and a subsidiary of China-based Joyson (Ningbo), has expanded its operations in Jundiai, Brazil. The company has relocated to larger office in preparation for a ramp-up in production. The expansion will enhance customer coordination, strengthen the firm's local identity and build upon centralised team work to manage the momentum and growth.
- Mesnac Americas, a supplier of rubber and tyre machinery and a subsidiary of China-based Mesnac (Qingdao), has established a sales and service operation in Campinas, Brazil.

- China-based Zotye Holding (Hengyang), an automobile manufacturer, is to open a new plant in Goianesia, Brazil by late 2018 or early 2019. The facility will produce SUV and mini electric models. The plant will export to countries which the company already operates in such as Uruguay, Paraguay, Bolivia, Costa Rica and Chile.

II.3 Indian investments in Brazil

- Varroc Lighting Systems, a subsidiary of India-based automotive component manufacturer Varroc Group (Aurangabad), is to open a new location in Sorocaba, Brazil. The company has entered into a partnership with Mekra Lang to share the existing facility in the city. Mekra Lang will supply injection moulding and administrative support for Varroc Lighting Systems in Brazil. The project forms part of Varroc's worldwide growth plans.
- Motorcycles and bikes manufacturer Royal Enfield, a subsidiary of India-based Eicher Motors (Gurgaon), has established a Latin America subsidiary in Sao Paulo, Brazil. The distribution subsidiary, Royal Enfield Brazil, will sell to dealers, as well as conduct all front-end activities such as marketing and after-sales in Brazil.
- J.K. Organization (New Delhi) is investing in the city of Sao Paulo, Brazil in the Paper, Printing & Packaging sector in a Sales, Marketing & Support project. The new office of J.K. Organisation is scheduled to assess potential for participation or acquisition in the pulp industry in Brazil.
- India-based UPL (United Phosphorus) (Mumbai) is investing in Brazil in the Chemicals sector in a Manufacturing project. UPL, a supplier of crop protection products, is to open an agrochemical plant in Brazil. The facility will produce chemical products that provide protection for crops such as soybeans, corn, cotton, coffee, sugarcane and rice. The company already has a Brazilian unit in Ituverava, Sao Paulo.
- Roha Dyechem, a manufacturer of natural and synthetic colours and a subsidiary of India-based JJT Group (Mumbai), has opened a new plant in Brazil. It will allow the company to meet the emerging requirements of the food and beverage industries in Brazil and accelerate its growth in South America. The investment is part of the company's global expansion plans during 2016.
- India-based Indus B2C Global (New Delhi), which offers hair extension products, plans to

increase the headcount at its hub in Brazil.

III. Russian Chapter

III.1 One of the examples of practical interaction for promoting connectivity amongst countries is the establishment of the Eurasian high-speed transport corridor on the destination Moscow – Kazan – Yekaterinburg – Astana – Urumqi – Beijing. Construction of new sections of high-speed railway lines is stipulated in the strategic documents of development of railway transport of Russia, Kazakhstan and China. Construction of the HSR section “Moscow-Kazan” (770 km) is suggested as the initial stage of establishment of this corridor on the territory of the Russian Federation. Currently a Russian-Chinese consortium is conducting engineering design works for this High-speed railway line. An official application has been submitted to the NDB in order for the bank to consider the possibility of co-financing the implementation of the project.

In development of the articles of the Protocol between JSC Russian Railways and Ministry of Railways of the Republic of India on the programme “Semi-High-Speed Railways” in June 2017 the parties signed an Agreement for elaboration of a Feasibility study and tender documentation for the Project of modernization of the railway section “Nagpur – Secunderabad” (575 km).

The implementation of the Project will allow for increasing the speed of passenger trains on the section up to 200 km/h. In addition to that, the Russian Railways Holding Company is evaluating the possibility of participation in other projects on the Indian market. In order to facilitate and promote this area of cooperation RZD International LLC opened a representative office in India. Furthermore, together with the partners from Republic of South Africa JSC Russian Railways is discussing the opportunities to develop business initiatives in the railway field. The opportunities to participate in the programme of development of railways in Brazil are of significant interest to JSC Russian Railways.

III.2 Russian Direct Investment Fund (RDIF), Russian Railways, and Indian state engineering and construction company Ircon International signed an agreement on joint searches and investments in railroad infrastructure projects in Russia and India during the St. Petersburg International Economic Forum on June 1, 2017.

Russian Direct Investment Fund (RDIF) and China Development Bank (CDB) have envisaged the constitution of the China-Russia RMB Investment Cooperation Fund. The Memorandum of Understanding was signed on July 4, 2017 in Moscow in the presence of Mr. Vladimir Putin, the leader of the Russian Federation, and Mr. Xi Jinping, the leader of the People's Republic of China, as part of Mr. Xi Jinping's state visit to Russia.

China-Russia RMB Investment Cooperation Fund is expected to facilitate the establishment of a simplified framework for direct investments with settlements in national currencies. The investments will be total RMB 68bn ($10bn equivalent). The investment activities will focus on Russian and Chinese projects. RDIF will implement the project via the Russia-China Investment Fund (RCIF) created jointly by RDIF and China Investment Corporation, while CDB will implement the project via its wholly owned subsidiary China Development Bank Capital (CDBC).

On June 4, 2017 in Moscow Russian Direct Investment Fund (RDIF) and China Investment Corporation (CIC) agreement on a capital increase of the Russia-China Investment Fund (RCIF) was signed. In accordance with the agreement, capital under the RCIF's management is to be increased by $1bn through proportional contributions of RDIF and CIC. An additional amount of up to $2bn can be provided by new investors.

Russia-China Investment Fund (RCIF) was established in June 2012 by the Russian Direct Investment Fund and China Investment Corporation (CIC).

The fund received $2 billion in commitments from RDIF and CIC in equal share, with up to an additional $2 billion expected to be raised from international institutional investors.

RCIF focuses on projects that foster economic cooperation between the two nations and will invest at least 70% of its capital in Russia and CIS countries and up to 30% in China.

Since its foundation the Fund has committed 19 investments worth $1bn in wood processing, transport infrastructure as well as the financial, technological and consumer sectors. Joint investments of RCIF and its partners amount to $5 bn.

III.3 Russian Direct Investment Fund and National Investment and Infrastructure Fund (NIIF) are currently working on the creation of the Russian-Indian Investment Fund (RIIF) with a volume of $ 1 billion.

Russian Direct Investment Fund and TATA Power are working on a potential investment in the steam coal field development in Kamchatka, Russian Far East.

In partnership with the Chinese company Sinomec Russian Direct Investment Fund is implementing project on the construction of small hydropower plants in the Republic of Karelia (Russia), which is the first and so far the only project in the Russian Federation that received funding from New Development Bank.

III.4 Within the framework of the MAKS-2017 International Aerospace Show “Russian Helicopters “holding (part of the Rostec state corporation) concluded three contracts with United Helicopters International Group on supply of 10 helicopters to Chinese operators in 2017-2018.

As part of the Fourth China-Russia Expo, on June 16, 2017 in Harbin United Engine Corporation (UEC, a company of Rostec) and Harbin Turbine Company (HTC), a Chinese state-owned company, concluded a strategic partnership agreement on the development, manufacturing and delivery of small and medium-sized industrial gas turbine units.

On June 07, 2017 Rostec State Corporation and Beijing Petrochemical Engineering Company (BPEC) have concluded a memorandum of cooperation. Within the framework of the cooperation, the joint venture (JV) for the localization of state-of-the-art liquefied natural gas (LNG) technologies on the State Corporation facilities will be created, and Rostec will have a controlling interest in it.

Rostec State Corporation is also looking partnerships with Indian IT companies to implement its home-grown technologies in the fields of IT products and services, digital banking, e-commerce crypto-currency services and the like.

IV. Indian Chapter

IV.1 Engagements with China

- FICCI in collaboration with NITI Aayog and National Development and Reforms Commission of China (NDRC) organized **'India China Investment Conclave'** on 7th October 2016 in New Delhi for a group of 200 Chinese businessmen, city government representatives and officials. Eleven Indian states from across the country made presentations on the benefits and concessions available for investments to companies and highlighted projects where partnership with China would bring benefits to both sides. Representatives of Indian states also held one to one discussions with select Chinese companies.

- FICCI partnered with the Chinese embassy in India and organized the **'China India Business Meeting for Investment and Trade'** on 22nd February 2017 in New Delhi for a high-powered delegation of Chinese companies led by Mr. Lyu Xinhua, Chairman of the Council for Promoting South-South Cooperation (CPSSC), People's Republic of China. The delegation comprised representatives from diverse sectors such as finance, investment, railway construction, power generation, electronic products, real estate, waste management, medical equipment, lighting, industrial cables, culture and education. The aim of the delegation members was to forge beneficial partnerships with their Indian counterparts. FICCI provided investment platforms to Chinese and Indian investors to network and build a tangible business cooperation programme.

- FICCI in partnership with ICEC organized **'India – China (Shandong) Agriculture Trade Conference'** on 10th March, 2017 in New Delhi. The conference was an excellent opportunity for industry to deepen the India-China economic engagement and build tangible business cooperation between China's provinces and Indian states on a wide range of sectors from energy to food and infrastructure. The conference also had focused B2B meetings between Indian and Chinese companies.

- In partnership with Draphant, FICCI organized the **'India China Business Meeting'** on 12th May 2017 at New Delhi for an incoming delegation of financial sector representatives and institutional investors from China. It provided a good networking platform for Chinese investors to interact with Indian companies with over 150 B2B meetings.

- FICCI organized the **'India China E-Commerce Business Meeting'** on 29th May 2017 in partnership with China Council for the Promotion of International Trade (CCPIT), Xiamen for an incoming delegation of Chinese e-commerce companies. The meeting was a great platform for Chinese enterprises to connect with Indian E-commerce companies through formal B2B sessions.

- FICCI mounted a 25-member Indian SME delegation to the **Global SME Cross Border Investment and Trade Cooperation Conference** organized by Bank of China in the Tianjin province during June 5-6, 2017. The program and B2B match-making engagement, with special reference to SMEs from BRICS countries, was one of the largest of its kind and offered excellent business opportunities to participating companies in terms of presentations, industrial matchmaking events, project negotiations and business exhibitions. A detailed match-making analysis of business interests of Indian companies with those submitted by companies from China was undertaken along with pre-fixed video-conference, on-site business meetings and actual site visits.

IV.2 Engagements with Brazil

FICCI, in association with Ministry of External Affairs, organized an exclusive interaction of Indian and Brazilian Business Delegation with H.E. Mr. Michel Temer, President of the Federative Republic of Brazil and H.E. Mr. Narendra Modi, Prime Minister of the Republic of India, on October 17, 2016 in Taj Exotica, Goa. The Indian Business Delegation was led by Mr Jai Shroff, Chief Executive Officer, UPL Group, and the Brazilian side was led by Mr. Jose Rubens de la Rosa Chair, BRICS Business Council, Brazil Chapter. Various areas of co-operation that were discussed during a pre-meeting between Indian and Brazilian business leaders were Agriculture (including Cotton Farming & Poultry (chicken) Processing Technologies); Energy (renewables, oil & gas, and biofuels); Pharmaceuticals; Services (like IT, ITes), etc.

The Department of Chemicals and Petrochemicals, Government of India along with Federation of Indian Chambers of Commerce and Industry (FICCI) organized a delegation visit to Brazil from 16th April 2017 to 21st April 2017. Some of the key activities that took place during this visit included:

- Brazil and India are in need of research in biodegradable polymers and bio-plastics to promote manufacturing with environmental commitments. As BRICS countries, Brazil and India are keen for South-South cooperation. A Letter of Intent (LoI) was signed between Central Institute of Plastics Engineering & Technology (CIPET) and Sao Paulo State University, UNESP for collaboration in academics and research activities. CIPET and UNESP have been working together for quite some time but signing of this LoI would give strength to the collaboration in student's exchange.
- A meeting with industry was held which was attended by around 25 Industry Associations and senior industry representatives such as Abiquim and other relevant industry associations. The objective of the delegation visit was to promote bilateral trade, investments in chemicals and petrochemical investment regions and promote India-Chem 2018.
- A meeting of Indian industry members was held with Petrobras at Sao Paulo. Representatives from IOCL and OPaL expressed interest for cooperation with Petrobras in PCPIRs in India as part of their strategy for joint ventures in future.
- The delegation held meeting with ACU Port Development Company for collaboration in developing storage and logistics facilities and other infrastructure at ports in India and in Brazil.

IV.3 Engagements with Russia

FICCI organized several interactive meetings of Indian Industry with members of the business fraternity of Russia. These include:

- Business Meet with delegations from the Moscow & Sverdlovsk Regions from the Russian Federation at New Delhi in March 2017: The two sides agreed to focus on the following sectors – medical equipment, SEZs – with emphasis on warehousing and production facilities, water and waste water treatment, tourism (focus on MICE) and manufacturing. Discussions were also held to enhance trade and investment cooperation between India and the Russia and promote connectivity between India and Russia through the International North South Transport Corridor (INSTC).
- Business Meet with Gazprombank Member Companies from Russia in March 2017: FICCI and the leading bank of the Russian Federation Gazprombank organized a meeting in New Delhi between members of Indian Industry and a high-powered business delegation from Russia. The main focus of the Business Meet was on promoting B2B interaction between the Gazprombank group companies and India organizations from the Heavy Machinery, Oil and Gas services, Mining, Oil & Gas Safety, IT and Biometric Solutions and leading Indian stakeholders from the same industries.
- FICCI organized an interactive meeting with HE Mr Boris Dubrovsky, Governor, Chelyabinsk Region and accompanying business delegation in New Delhi on April 20, 2017. The main focus of the Interactive Meet was on promoting B2B interaction between the Indian and Russian organizations from metallurgy, automotive, fuel-energy, construction, agricultural-industrial complexes, education, enhance trade and investment cooperation between India and the Russian Federation and promote connectivity between India and Russia.
- FICCI organized a Business Meet with Delegation from the Altai Region, Russia in New Delhi on April 26, 2017. The main focus of the Business Meet was on promoting B2B interaction between the companies from the Altai region and India organizations from the thermal and nuclear power industry, agriculture, petrochemical and fuel additives.
- To further enhance the strategic relations between India and Russia and promote collaboration in the IT sector, FICCI led a delegation comprising leading representatives of India IT Industry to Russia to participate in IX International IT Forum at Khanty-Mansiysk, in June 2017. The visit was aimed at realizing the existing complementarities between India's prowess in IT services and Russia's high-quality software products. The Indian delegation

also explored possibilities of collaboration between Indian and Russian companies to co-create and develop world-class products for the global market. Members of India delegation also participated as Exhibitors at the Forum.

- Areas of prospective cooperation between Russia and India in the field of railway transport, including implementation of joint projects on modernization of railway lines, were discussed at the venue of XII International Rail Business Forum 1520 Strategic Partnership on June 6-8th, 2017 in Sochi. The Strategic Partnership 1520 is a bespoke international forum dealing with rail issues and is one of the largest industry business meetings on the Eurasian domain.

IV.4 Specific examples of Indian business co-operation in BRICS

- **Export Import Bank of India**

EXIM Bank of India is a major player in partnering Indian industry, particularly small and medium enterprises through a wide range of products and services. Some of the select financial assistance provided by EXIM Bank of India in BRICS countries are as under:

Supported an acquisition of sugar and ethanol unit by an Indian company in Brazil. Acquisition of USD 240 mn included two sugar and ethanol production facilities in the southern Brazilian state of Parana, with a combined cane crushing capacity of 3.1 million tonnes a year. The acquisition was strategic in nature with Brazil being the largest producer and exporter of sugar and India being the largest consumer of the sweetener in the world.

Provided a revolving line of credit of USD 100 mn to a wholly owned subsidiary of an Indian multinational conglomerate, based out of South Africa, for importing and exporting of commodities / automobiles. This South African Subsidiary employs over 1,500 people and operates in major business sectors such as automobiles, steel and engineering, chemicals, information technology, hospitality, food and beverages, energy and mining. The Indian multinational conglomerate has also formed a joint venture company with a leading Brazilian bus body manufacturer in India. This Joint venture company manufactures and assembles fully built buses and coaches targeted at developing mass rapid transportation systems.

Provided working capital limit of USD 16.50 mn to a subsidiary based out of China of a leading spice oils and oleoresins manufacturing company in India. This Chinese subsidiary of the Indian company has set up a manufacturing unit in China to procure the best quality Capsicum Paprika (a variety of Chilli with bright colour and low pungency) and manufacture paprika oleoresin.

Provided a Buyers Credit facility of USD 1 mn to a Joint venture company in South Africa formed by an Indian company which specializes in water treatment. The Joint Venture Company is engaged in the manufacture, distribution, and installation of flooring solutions in South Africa.

- **EXIM BANK OF INDIA BRICS ECONOMIC RESEARCH AWARD**

Exim Bank of India during India's Chairmanship of the BRICS grouping in 2016 instituted the Exim Bank of India BRICS Economic Research Award, with the objective to encourage and stimulate advanced research on economics related topics of contemporary relevance to the member nations of BRICS. The Award consists of a Citation and prize money of Rupees 1.5 million (approximately USD 20,000) supported by Exim Bank of India. The first BRICS Economic Research Award was presented to Dr. Joao Prates Romero of Brazil in October 2016 during the BRICS Summit held in Goa in India.

- **Infrastructure Leasing & Financial Services Limited (IL&FS)**

Infrastructure Leasing & Financial Services Limited (IL&FS) is one of India's leading infrastructure development and finance companies. For over 25 years, IL&FS has focused on commercializing infrastructure projects and creating value-added financial services to become a proactive partner in India's growth story. Widely acknowledged as the pioneer of Public Private Partnership (PPP) in India, the IL&FS Group has, through a variety of projects, benchmarked the private sector's role in and commitment towards infrastructure development in India.

- **IL&FS joins hands with BYD Company:** IL&FS's subsidiary, IL&FS Transportation Networks Limited (ITNL) and BYD Company have joined hands for exploring opportunities in the area of Smart & Green Urban Mobility across India. BYD Company Limited specializes in IT, automobile and new energy. BYD is the largest supplier of rechargeable batteries in the globe, and has the largest market share for Nickel-cadmium batteries, handset Li-ion batteries, cell-phone chargers and keypads worldwide.

IL&FS Energy Development Company Limited in collaboration with BYD is sourcing solar modules. The consortium is also exploring opportunities in the domain of Energy storage application for the upcoming Solar Hybrid Park & GIFT City.

- **Stake in Chinese State Owned firm:** ITNL has acquired 49% stake in YuHe Expressway, owned by Chongqing Expressway Group (CEG), CEG is an enterprise owned by State Owned Assets Supervision and Administration Commission of Chongqing (SASAC), with over US$ 150 million investment.

- **JV with CR 21:** IL&FS Engineering and Construction Company Limited (IECCL) and CR 21 are jointly evaluating and bidding for various road infrastructure projects in India.

- **Partnership with China Construction Eighth Engineering Division Co. Ltd (CCEED):** Maharashtra Housing and Area Development Authority (MHADA) has invited Technical Proposal and Financial Bids from parties interested in Engineering, Procurement and Construction basis for the redevelopment of BDD Chawl Worli to large scale building and housing projects during the specified construction period. CCEED in collaboration with IL&FS group companies (ITNL, IECCL and IL&FS Townships & Urban Assets Limited (ITUAL)) are jointly bidding for this mega housing & building project. CCEED, a Fortune 500 Company is a part of China State Construction Engineering Corporation (CSCEC).

- **Collaboration with Russian Company TechnoNICOL:** ITNL is evaluating the possibilities of collaboration with TechnoNICOL a world-leading manufacturer of materials for waterproofing. TechnoNICOL Corporation integrates 52 production sites in Russia and the company has gained excessive experience in producing thermal and acoustic insulation, roofing and waterproofing materials, as well as solutions for road building.

- IL&FS Maritime Infrastructure Company Limited (IMICL) is evaluating opportunities with Russian Ports, Terminals, Shipyards, Port based SEZ and Oil Tank farms.

- Adcorp ITNL and Aveng Grinaker-LTA have jointly evaluated and bided for road projects in South Africa. Aveng Grinaker – LTA is a multi-disciplinary construction and engineering group, anchored in South Africa and focused on selected infrastructure, energy, rail and mining opportunities in Africa.

V. South African Chapter

V.1 Russia- South Africa collaboration on Jobs of the future

This project has happened in a number of phases with Russia conducting a Foresight session on Jobs of the Future with Merseta and its chambers, and South Africa participating in a Russian project on Jobs of the future in the Metals industry. A signed agreement says that Russia will conduct a trainer project on the methodologies to build local capability in this research, which will happen this year. The total project is worth about R100M.

V.2 BRICS skills group white paper on Industry 4.0

Under the Chair of India the Skills group put together research into the impact of the 4th industrial revolution on the manufacturing sector in BRICS economies. A number of South Africans participate in the research, including the CSIR, Department of Science and Technology, Adcorp, Aerosud, Manufacturing Circle, Chieta and Merseta.

All country Skills groups presented at the FICCI Skills Summit in Delhi in India 2016 and the final report was presented at the Mid Term Summit in March 2017.

The project has an estimated value in terms of input costs of R25M but the benefits to manufacturing companies are potentially unlimited. The final report can be found at http://indiainbusiness.nic.in/newdesign/upload/whitepaper-summary-skill-development-for-industry-4-0.pdf.

V.3 BRICS Skills Development Working Group - Technical skills for jobs of the future

Under the Chair of China the Skills Development Working Group is conducting skills competitions for skills of the future, including welding, 3D printing, product life cycle management and intelligent manufacturing. The aim of these competitions is to develop technical future jobs skills and enhance curriculums and knowledge. South Africans participated in the welding competition (and won a gold medal) and will participate as observers in the remaining competitions via Merseta and Adcorp. This project will continue over time and is therefore valued at approximately R50M per annum.

V.4 Beijing Automobile International Corporation (BAIC) automotive plant investment

BAIC plans to build a completely knocked down, or CKD, automotive manufacturing plant in the Coega Industrial Development Zone. The investment is valued at R11 Billion. The project is supported by South Africa's state owned Industrial Development Corporation (IDC). Construction of the plant has commenced.

V.5 Sinopec buys 75% of Chevrons South African assets

This is Sinopec's first investment in an oil refinery in Africa although it has been active on the continent for more than 20 years, mainly in oil and gas exploration. Apart from the refinery, Sinopec Corp is buying a lubricants plant in Durban, 820 service stations and 220 forecourt convenience stores in SA and Botswana and storage facilities. It will hold 75% of the South African assets and 100% of the Botswana assets, subject to regulatory approval of the deal.

V.6 New Development Bank Loan to Eskom

The NDB provided a $180 Million loan to Eskom, the South African energy utility, for a renewable energy transmission project expected to generate 670MW of renewable energy.