



DIGITAL PARTNERSHIP

– transformation through ICTs

BRICS Working Group on ICT Cooperation

ICT Development Agenda and Action Plan

2nd Meeting of BRICS MINISTERS OF COMMUNICATIONS,
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i. Background

The leaders of the Federative Republic of Brazil, the Russian Federation, the Republic of India, the People's Republic of China and the Republic of South Africa, met on 9 July 2015, in Ufa, Russia, at the Seventh BRICS Summit, which was held under the theme "BRICS Partnership – a Powerful Factor of Global Development. The UFA conference adopted the Ufa Declaration and the Strategy for the BRICS Economic Partnership to provide key guidelines for cooperation in several socio, economic spheres including in science, technology and innovation, connectivity and ICT cooperation among the BRICS members.

To realize and strengthen cooperation in the area of ICTs, including internet, the leaders decided to constitute a BRICS Working Group (BRICS WG) on ICT cooperation¹. Considering complementary strengths and potential as a market, cooperation in ICTs among BRICS through this standing cooperation mechanism forebodes a great beginning for working together and contributing to developing BRICS countries as knowledge societies. 'Digital Partnership' for sustainable development would be an explicit enabler to address challenges and exploit the opportunities. Acknowledging this implicit need for Digital Partnership, the 'Strategy for BRICS Economic Partnership' identified 'Information and Communication Technology'² as one of the priority areas for cooperation under 'Science, Technology and Innovation'.

In this context, the BRICS WG on ICT Cooperation proposes 'BRICS ICT Development Agenda and Action Plan', a live document, to engage key stakeholders of the BRICS members on a continuous basis to accomplish concrete and time bound results. The document is prepared based on summit declarations and international research on BRICS strengths & gaps. **Summit Declarations identified B2B engagement, R&D and Innovation platform and Capacity building as important elements to enhance role of BRICS in the Digital Economy.** Active and enhanced cooperation in 'Trade in ICTs, Innovation and new technologies and Market practices' are planned to overcome geographical and language barriers. The BRICS WG envisages to facilitate active and effective cooperation in ICTs, in key areas including creating an enabling environment for ICTs development, security in use of ICTs and driving BRICS agenda for international norms and governing structures, coordinated positions on public policy issues at international platforms. The leadership acknowledged that 'Sustainable Development and Innovation' are the key components of the BRICS ICT collaborative platform in going forward.

The Digital Partnership enunciated under the ICT Development Agenda and Action Plan provides the way forward for the BRICS members to develop a collaborative framework for cooperation in the ICT space. The BRICS WG believes that there is a significant scope for collaborative research, trade, engagement, people to people connectivity among the BRICS members to harvest their full potential.

¹ Section 33 – Ufa Declaration

² Para II.5 - The Strategy for BRICS Economic Partnership

The digital infrastructure plays an important role in socioeconomic development, security and stability of society and hence its protection is of paramount importance. In view of transboundary nature of virtual world and cyber security challenges, effective international cooperation is important to accomplish concrete outcomes. The ‘Working Group of Experts of the BRICS states on security in the use of ICTs’ has been entrusted with the responsibility to work on BRICS cooperation on this front. This WG on ICT cooperation agrees to actively cooperate with the ‘WG of Experts of the BRICS states on security in the use of ICTs’ and will provide inputs as appropriate.

Finally, the BRICS leadership committed to focus on expanding universal access to all forms of digital communication and to improve awareness of people in this regard.

ii. VIII BRICS Summit³, Goa

India hosted the 8th BRICS Summit on 15-16 October 2016 at Goa. The BRICS WG welcomes the theme of the Summit ‘**Building Responsive, Inclusive and Collective Solutions**’ as being relevant in driving ICTs for Development. The five-pronged approach⁴ viz. **Institution building, Implementation, Integrating, Innovation, Continuity** will provide the necessary impetus to drive the BRICS WG agenda.

BRICS Goa declaration emphasizes the importance of BRICS solidarity and cooperation based on our common interests and key priorities to further strengthen our strategic partnership in the spirit of openness, solidarity, equality, mutual understanding, inclusiveness and mutually beneficial cooperation. ICT expansion is a key enabler for sustainable development. Considering the importance of security in use of ICTs in digital economy and leading role of states on the subject, joint efforts to improve cooperation between technical, law enforcement, R&D and capacity building institutions is necessary.

BRICS engagement is committed to bridge digital and technological divides. The BRICS partnership advocates open and secure internet and states should participate on an equal footing involving relevant stakeholders in respective roles and responsibilities.

³Summit section provide the theme and approach of the then ‘Current Chairmanship’ considering the fact that this is a live document. The theme of India’s BRICS Chairmanship is **Building Responsive, Inclusive and Collective Solutions**.

⁴The five pronged approach envisaged under its chairmanship is:

- (i) **Institution building** to further deepen, sustain and institutionalise BRICS cooperation;
- (ii) **Implementation** of the decisions from previous Summits;
- (iii) **Integrating** the existing cooperation mechanisms;
- (iv) **Innovation**, i.e., new cooperation mechanisms; and
- (v) **Continuity**, i.e., continuation of mutually agreed existing BRICS cooperation mechanisms

Sharing expertise and experience in e-government , digital content services would be valuable for BRICS engagement. The Goa summit laid emphasis on the meeting of BRICS Ministers of Communications to further strengthen cooperation, including on technology, standards developments, skills development and policy frameworks.

iii. Digital Economy⁵ and Potential areas for cooperation in ICTs

	Action Plan Agenda	Lead Countries
1	National Digital Agendas	Brazil, South Africa
2	B2B engagement	China, Brazil
3	R&D and Innovation	India, China, South Africa
4	Capacity Building	Russia, South Africa
5	e-Government including mobile applications	India, Russia
6	International Engagement and coordination	Chair and following Chair

The lead countries are encouraged to form subgroups / focus groups on these agenda items to develop concrete and detailed work plans.

iv. Annual BRICS Working Group Meeting

The meeting of WG on ICT cooperation will be held annually and separately ahead of the BRICS Communication Ministers meeting as a two (2) day meeting in the respective BRICS host country along with Business Delegations to enable concrete deliberations on the agenda, so that outcomes could be presented to the Ministers during the Communication Ministers meeting for their approval. A brief meeting of WG will also be held as part of the meeting of Ministers of Communications to brief the Ministers and review the plans. The champion countries will develop a work plan on areas reflected under item iii above to take forward the engagement.

⁵OECD Digital Economy Outlook 2015: The digital economy is growing quickly. It permeates the world economy from retail (e-commerce) to transportation (automated vehicles), education (Massive Open Online Courses), health (electronic records and personalised medicine), social interactions and personal relationships (social networks). Information and Communication Technologies (ICTs) are integral to professional and personal life; individuals, businesses and governments are increasingly inter-connected via a host of devices at home and at work, in public spaces and on the move. These exchanges are routed through millions of individual networks ranging from residential consumer networks to networks that span the globe. The convergence of fixed, mobile and broadcast networks, along with the combined use of machine-to-machine (M2M) communication, the cloud, data analytics, sensors, actuators and people, is paving the way for machine learning, remote control, and autonomous machines and systems. Devices and objects are becoming increasingly connected to the Internet of Things, leading to convergence between ICTs and the economy on a grand scale.

Digital Partnership - ICT Development Agenda and Action Plan

1. National Digital Agendas

National digital agendas are considered critical for boosting economic and social growth, and play a pivotal role in nurturing and developing domestic ICT ecosystem. Being key enablers, the national policies play an important enabling role to expand universal ICTs access, mitigate various forms of digital divide and promote ICT ecosystem to contribute to the digital economy and improve the quality of life.

Action plan

BRICS members could actively lead and cooperate to strategize synergies in the following areas.

1. Sharing of information and case studies on ICT policies and programs in creating enabling environment;
2. Encourage deployment and use of high speed broadband access to the internet as an important part of BRICS ICTs strategies;
3. Exchange visits of experts, senior management workshops in key areas including Policy, Regulatory, Market systems in capacity building of the respective institutions;
4. Encourage direct communication among ministries, government institutions, agencies to meet the learning and growing needs of responsive environment;
5. Identify challenges and good practices in policy, regulatory, security domains to strengthen institutions and practices to meet the ever changing needs ICT environment due to convergence, new services and disruptive technologies;
6. Explore the opportunity to build BRICS submarine cable network to cater to BRICS & global needs through public-private partnership to cater to exponentially growing data needs.

2. B2B Engagement

ICT industries including SMEs, Startups are a major source of developing cost effective, innovative solutions and generating employment and they constitute the backbone of inclusive, sustainable growth. Therefore, it is necessary to promote B2B engagement through enterprises, business associations and government delegations to build the BRICS network of business partnership overcoming geographical and language barriers. Platforms, including but not limited to BRICS information sharing and exchange platform⁶ and BRICS Business Council, could be extensively used for strengthening B2B engagement.

⁶<http://www.brics-info.org/about-the-platform/> BRICS Information Sharing and Exchange Platform is a project approved by the Third BRICS Economic Ministers Meeting during the 2013 BRICS Summit, as

Action plan

1. Facilitate business to business (B2B) engagement between ICT companies and industry associations;
2. Encourage ICT industry to exchange cases studies and best practices and make it available on all relevant platforms on BRICS engagement;
3. Encourage market access and participation of the ICT industry in projects and support international networking and exchange of good practices;
4. Encourage mobility of high skilled professionals;
5. Engage and cooperate in manufacturing and R&D by exploiting complementary strengths and unique sets of resources of BRICS for mutual benefit;
6. Cooperate among the governmental agencies especially State Owned Companies (SOCs), and Academia in order to create and promote new technologies and applications.

3. R&D and Innovation

The Ufa Declaration and Strategy for Economic partnership provides a clear direction for strengthening partnership in Science, Technology and Innovation (STI) and proposes establishment of Joint Research & Innovation Networking Platform, promote technology transfer and standardization in ICTs. The ICTs have potential to transform processes, applications, transactions in a whole new manner enabling businesses, governance initiatives. The BRICS⁷ members have unique strengths and competitive advantages to build synergies. Accordingly, collaboration is proposed under the framework of BRICS WG.

Action plan

1. Linkages with STI for research and innovation in ICTs.
2. Work out the terms for establishing BRICS Institute of Future Networks to realize synergetic collaboration of complementary skillsets of BRICS members⁸.

the first of the eight cooperation projects that are going to be promoted by the BRICS countries together during 2013-2014 in the “BRICS Trade and Investment Cooperation Framework” adopted at the meeting. BRICS Information Sharing and Exchange Platform is the authoritative platform of BRICS-related information jointly developed by the Center for BRICS Studies of Fudan University and the BRICS Business Council.

⁷ As per 2014 figures, BRICS contribute for 2.8 billion mobile connections (40% of global), 266 million BB connections (35% of global) with over 43% of world population.

⁸The BRICS institute of Future Networks is envisaged to

1. Provide a Joint research & Innovation Networking Platform
2. Develop roadmap for future networks and partner with world partnerships in concerted efforts on the subject
3. Build collaboration platform for R&D in future networks among various institutions and organizations in BRICS economies (as there are several components and elements as building blocks)

3. Promote demo projects in respective country's priority areas;
4. Cooperate and share best practices in management of spectrum;
5. Promote collaboration in the development of mobile technologies, platforms, IOTs, M2M, Smart City applications, green technologies etc.;
6. Promote collaboration in devising solutions for digital literacy and digital empowerment.

4. Capacity Building

Digital Economy has significant impact on employment, productivity and quality of life. Today's world is characterized by a tremendous increase in the volume of information and knowledge flows. Capacity building plays an important role in bridging the digital divide and ushering in the opportunities of the digital economy.

Action Plan

1. Encourage communication and cooperation among ICT skill development entities;
2. Encourage connectivity among knowledge networks in the BRICS for collaboration among the institutes acknowledging the fact that the national and global information networks can support the rapid upgrading of new applications;
3. Enhance capacities and skills to develop competitive and open software and equipment in BRICS countries towards diversification of software and IT equipment world market;
4. Encourage talent exchange and training among BRICS member countries in the fields of ICTs;
5. Encourage public private partnership models to assist in developing a pool of skilled people, including youth and women in advanced hardware / software development;
6. Expand cooperation in the fields of R&D, education, training of research personnel and joint research programmes through capacity building;
7. Develop capacities in measuring and monitoring of ICTs penetration and use, including statistics to provide effective policy inputs;
8. Accelerate technology diffusion by providing low-cost online platforms for training workers in the new technologies (e.g. Massive Open Online Courses (MOOCs), enables students anywhere to gain free access to high-quality university courses).

5. E-Government including Mobile Applications

E-Government including mobile applications E-government significantly improves inclusion and access, effectiveness and efficiency, accountability and transparency of public institutions to citizens to make governance people-friendly. As the world moves from an industrial to an information age, progress in e-government is a vital component of a country's

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4. Collaborate and coordinate with BRICS SDOs for Standardization of network elements, devices
 5. New Network trials

overall economic, social and political development. Institutions may have to be designed or adapted to meet the needs of the digital era.

Action plan

1. Exchange information and best practices for enhancing e-Government programme in development of e-services in BRICS countries.
2. Promote institutional cooperation among academic and training institutions for capacity building in the sphere of e-government;
3. Cooperate in the development and the promotion of innovative e-government e solutions through pilots or demo projects;
4. Exchange materials and information on current developments in e-government e, exchange of good practices, publications and documentation, organizing of joint workshops, seminars and other activities.

6. International Engagement and Coordination on ICT related issues

Due to their complementary strengths and huge markets for ICT, BRICS member states should strengthen cooperation towards seeking to shape global views for sustainable economic and social growth and to bring transformational change in the ICT sector for the benefit of developing countries. This entails reinforced exchange of views and coordination in international organizations such as ITU etc.

Action Plan

1. Enhance coordination within ITU and other International Organizations on ICTs in promoting new technologies, standardization and global spectrum harmonization in tune with the huge BRICS market requirement for ICT products and services and promoting ICT ecosystem;
2. Enhance intra-BRICS dialogue on important issues of ICTs including Security of Critical Information Infrastructure, Internet Governance and concrete efforts to accomplish the objectives of the Connect 2020 agenda, the SDGs and the WSIS + 10;
3. Encourage active participation in international fora based on open discussion and exchange of views with the aim of developing common and /or coordinated positions and approaches, where feasible;
4. Contribute to enhancing and strengthening cooperation among BRICS member states and also encourage external relations with participating member states including dialogue partners.
