

BRICS Working Group on Science, Technology, Innovation and Entrepreneurship Partnership (STIEP WG)

PROPOSED ACTION PLAN 2021-24





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BRICS STI COOPERATION ON RESEARCH & INNOVATION

THE OPPORTUNITY

Innovation refers to the embodiment of an idea in a technology, product, or process that is new and creates productive value. An innovation is the implementation of a new or significantly improved product (good or service), or process which derives from creative ideas, technological progress, a new marketing method or a new organizational method in business practices, workplace organization or external relations.

Innovation covers a wide range of domains with science, technology and innovation (STI) as the core. Innovation is one of the key driving forces of global sustainable development, playing a fundamental role in promoting economic growth, supporting job creation, entrepreneurship and structural reform, enhancing productivity and competitiveness, providing better services for the citizens and addressing global challenges. BRICS countries aim to encourage innovation through practical actions to promote sustainable economic growth today and lay a solid foundation for tomorrow.

BRICS PERSPECTIVE

The Concept of BRICS Science, Technology and Innovation Entrepreneurship Partnership (STIEP) emerged during the 4th BRICS STI Ministerial Meeting hosted by India in Jaipur, in 2016. The initiative was endorsed by the STI Ministers of the BRICS countries along with the BRICS Work Plan (2015-18) during the 5th BRICS STI Ministerial meeting in 2017 in China. Thereafter a 'BRICS Working Group on Science, Technology, and Innovation Entrepreneurship Partnership' was established to implement the BRICS STIEP, the BRICS Action Plan for Innovation Cooperation (2017-20).

The BRICS STIEP working group has so far met 5 times, the last meeting was held on 29-30 September 2021 hosted by India in its BRICS presidency. Significant action and recommendations proposed by the working group are as follows:

- 1. Creation of BRICS Technology Transfer Center (in distributed mode/ polycentric model) and its enabling framework for BRICS Tech Transfer (henceforth be called BRICS TECH Transfer Framework) to focus on Pan-BRICS tech transfer facilitation.
- 2. Building on the momentum of STI Ministerial in 2018 and taking note of Chinese node of BRICS Technology Transfer, each BRICS countries may designate a node for BRICS technology transfer in line with the BRICS Tech Transfer Enabling Framework being adopted in the 9th STI Ministerial Meeting 2021(India). The STIEP working group discussed the Brazil's proposal of enabling framework BRICS Tech Transfer (as annexed at A). Further, the working group proposed and



recommended that the BRICS TECH Transfer Framework may be adopted by BRICS S&T SOM and be endorsed by 9th BRICS S&T Ministers meeting. The key highlights of cooperation under BRICS Tech Transfer framework are given below:

- a. **Fostering the Intellectual Property protection**. To create a cooperation environment for increasing the Intellectual Property (IP) protection, by sharing the management of good practices and exchanges best practices
- b. **Expand opportunities for technology transfer.** To promote the exchange of opportunities for transferring technologies and research results developed in BRICS countries academic institutions
- c. **Capacity building**. To make the necessary efforts to organize joint-training courses for Knowledge & Technology Transfer Centers managers and experts in technology transfer
- d. Metrics: To create a common database of intellectual property assets and knowledge/technology transfer opportunities, to be shared with institutions and companies in each of the BRICS countries
- 3. Creation of the Innovation BRICS Network (iBRICS Network), during the 7th BRICS STI Ministerial meeting in 2019, in Campinas, with the objective to:
 - a. **Fostering dialogue and mutual knowledge**: To build and implement information sharing mechanisms, such as online platforms or focal points, that can be efficient and flexible.
 - b. **Capacity-building:** To make the necessary efforts to organize joint-training courses for managers and specialists of science parks, technology incubators and accelerators of the BRICS countries.
 - c. **Cross-incubation:** To facilitate the access of residents to science parks, incubators and accelerators from one BRICS country to the others.
 - d. **Soft-landing**: To facilitate the transnational establishment of high-tech companies in the member countries.

PROPOSED ACTION PLAN 2021-24

The Action Plan (2021-24) will continue to implement and support the initiatives created under the previous Action Plan, specifically as mentioned in the previous session (iBRICS Network and BRICS Tech transfer). Particular efforts will be made to keep the Steering Committees of these initiatives active and result-oriented. **The key elements of the Action Plan are**:

1. Sharing best practices and enabling policies under Innovation being implemented in BRICS countries.



- 2. Networking among BRICS Innovation ecosystem (Incubator-to-incubator, startup-to-startup, innovator-to-innovator)
- Creation of ICT based knowledge and technology exchange platform through STIEP working group or focal points.
- Mapping best practices in the Corporate-MSME-Start up alliances and in creating an enabling policy framework at national levels
- Creation of BRICS Innovation and Technology Databanks
- Organization of BRICS Tech Summits and Exhibitions
- Organization of joint consultation among MSME and Industry chambers from BRICS nations to jointly work towards development of enabling policy framework for mapping the best practices in the corporate-MSME-Start up alliances.

INNOVATION COLLABORATION & SUSTAINABILITY

BRICS countries have a robust start-up ecosystem. The start-ups in BRICS countries have attracted investments from across the globe. The Action Plan has the following objectives:

- Providing access to global markets to start-ups in BRICS Countries
- Mobilizing global capital for investments in start-ups in BRICS Countries
- Provide value to start-ups through mentoring and enabling access to investor and corporate engagement activities
- Empower the local start-up ecosystems in the BRICS Countries

These objectives shall be met by way of:

- BRICS Young Innovators Prize Competition (Part of BRICS YS Conclave)
- BRICS Start-up Forum to bring together BRICS start-ups, incubators, investors and public schemes to explore collaboration and market access.
- Impact Innovation Exchange Platforms: Open web-based platforms enabling cross country/market collaborations/partnership and capital flow to achieve sustainable development goals (SDGs) in BRICS Nations.
- Seeking for high quality technology demand raised by demand-side of technology commercialization led by Mechanism of BRICS Technology Transfer Centre.
- BRICS Technology Transfer Training Program to raise at least 500 international technology transfer, innovation and technology commercialization professionals.



• Best Practices for BRICS Technology Transfer Cooperation and BRICS Excellent Industrial Innovations & Technologies for Technology Commercialization.

PROPOSED TIMELINE FOR BRICS'21 ACTIVITIES

This is a provisional list of events recommended by the BRICS STIEP working group. Additional new actions may be added on year to year basis in due consultation and confirmation of BRICS STIEP working group. The members of the STIEP working group may be part of the coordination and/or organization of each BRICS event and support in preparing the agenda and deliverables of such events. The STIEP working group may accordingly advise the implementation agency in their respective countries to provide all necessary assistance and resources. Whenever possible, the above activities will be carried out by the initiatives already existing under the BRICS STIEP Working Group (iBRICS Network and BRICS Tech transfer).

In the period 2021-2024, the BRICS Action Plan on Innovation would comprise the following activities in consensus with steering group committee members:

PROPOSED ACTIVIT <mark>IES UNDER BRICS'21-24</mark>	PARTICIPANTS #	2021	2022	2023	2024
MSME Consultation	1000		X		
BRICS Young Innovators Prize Competition	100	X	X	X	X
BRICS Unicorn Roundtable	10			X	
BRICS Startup Forum	100		X	X	
BRICS Innovation Forum	100		X		X
BRICS Startup Knowledge Hub/ BRICS Innovation Launchpad (Online view)	As per Viewership	X	X	X	X
BRICS Open Innovation Challenge	1000				X
BRICS Technology Transfer Training Program	500				
BRICS Incubation Training and Network	50				



ANNEXURE A



Enabling Framework for the BRICS Centers for Technology Transfer Cooperation ("BRICS Techtransfer")

The STIEP WG recommends that the BRICS STI Senior Officials Meeting submits this document to the Meeting of the Ministers of Brazil, Russia, India, China and South Africa responsible for science, technology and innovation.

Acknowledging that, at the 5th BRICS STI Ministerial Meeting (Hangzhou, 07/18/2017), the BRICS countries adopted the "BRICS Action Plan for Innovation Cooperation 2017-2020" (Innovation Action Plan, hereinafter) as a tool to facilitate innovation-driven development for sustainable development of the world economy, which has as one of the deliverables the "encourage technology transfer among the BRICS countries, strengthening training of technology transfer professionals, developing platforms for collaboration among businesses and academia, enabling extensive and orderly transfer and translation of innovation achievements in the BRICS countries. Utilizing existing technological network platforms as instruments of search for foreign partners for technological collaboration and initiation of joint STI projects";

Taking into consideration the work carried out during the 4th Meeting of the STIEP Working Group, which took place in Moscow, Russia, from 20 to 21 April 2020;

Set forth the following Enabling Framework for the "BRICS Techtransfer":

I. MISSION STATEMENT. The "BRICS Techtransfer" intends to be a mechanism for dialogue and cooperation of the BRICS countries, which will promote the exchange of actions and good practices, by stimulating the transfer of technology aiming at increasing the competitiveness and innovation outputs of the BRICS countries.

II. GENERAL OBJECTIVES

- A. Fostering the Intellectual Property protection. The "BRICS Techtransfer" will seek to create a cooperation environment for increasing the Intellectual Property (IP) protection, by sharing the management of good practices and exchanges best practices to:
 - 1. Stimulate the protection of research results and reduce the respective costs of intellectual property (IP) protection in each country, with a view to expanding the scope of protection and dissemination of new technologies developed in the BRICS countries:
 - 2. Suggest the creation of specific mechanisms to facilitate the protection via patents in each BRICS countries;
- B. **Expand opportunities for technology transfer**. The "BRICS Techtransfer" will seek to promote the exchange of opportunities for transferring technologies and research results developed in BRICS countries academic institutions, by means of:



- 1. Expanding the scope of knowledge/technology transfer, with the active offer of Science and Technology Institutions protected technologies to companies in the BRICS countries and stimulate the creation of resources for multilingual dissemination material, training of professionals for active offers and contact with partners in each location.
- 2. Providing information on knowledge/technologies available for licensing, sharing mechanisms such as online platforms;
- 3. Fostering cooperation among Technology Transfer Centers on collaborative opportunities, projects and best practices;
- 4. Suggesting specific mechanisms to facilitate joint actions aiming to reduce time to market and costs of the scaling up of knowledge and technologies emerged in BRICS collaborative research projects;
- C. Capacity building. The "BRICS Techtransfer" will seek to make the necessary efforts to organize joint-training courses for Knowledge & Technology Transfer Centers managers and experts in technology transfer, by means of:
 - 1. The training of human resources at offered by each country.
 - 2. The professional qualification in short courses and webinars on specific topics, such as technology valuation, negotiation, searches on patent bases, patent analytics, among others.
- **D. Metrics.** The "BRICS Techtransfer" will seek to create a common database of intellectual property assets and knowledge/technology transfer opportunities, to be shared with institutions and companies in each of the BRICS countries, in order to:
 - 1. Share data collection instruments used in each country;
 - 2. Share measurement methods to establish common statistics regarding innovation and its impacts.

III - STRUCTURE AND GOVERNANCE

- A. The day-to-day activities of the "BRICS TechTransfer" will be governed by a Steering Committee comprised of representatives, which will act as national focal points to the network:
- 1. The Steering Committee consists of 10 members, two from each BRICS country;
- 2. The members will serve a three-year, renewable terms, mandate;
- 3. The nomination of the members of the Steering Committee is made by the official representatives of each BRICS country in the STIEP Working Group;



- 4. The members of the Steering Committee will not receive any financial rewards;
- 5. The Steering Committee will report on and receive guidance from the STIEP Working Group to implement this enabling framework.

IV. FINAL CONSIDERATIONS

- A. This Framework does not create any legally binding obligations for any Member, or between or among the Members;
- B. Activities under this Enabling Framework may continue for an indefinite period of time unless the Enabling Framework is discontinued by the determination of one of the members of the STIEP Working Group;
- C. This Enabling Framework may be modified upon determination of the Members of the STIEP Working Group.

