

BRICS SCIENCE, TECHNOLOGY AND INNOVATION



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Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA



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Background

- ❑ BRICS STI MoU/Agreement officially signed in March 2015
- ❑ BRICS Action Plan for Innovation Cooperation (tech transfer, science parks)
- ❑ BRICS Work Plan 2015-2020 (recently reviewed, new WP 2018-2022 being discussed)
- ❑ BRICS STI Ministerial Declaration (latest, Durban, July 2018)



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BRICS STI Objectives/Agenda

- ❑ To address common global and regional socio-economic challenges in the BRICS member countries, utilising shared experiences and complementarities in science, technology and innovation;
- ❑ To co-generate new knowledge and innovative products, services and processes in BRICS member countries utilising appropriate funding and investments instruments;
- ❑ To promote, where appropriate, joint BRICS STI partnerships with other strategic actors in the developing world



BRICS STI- Areas of cooperation

- The areas of cooperation include: exchange of information policies and programmes and promotion of innovation technology transfer; food security and sustainable agriculture; climate change and natural disaster preparedness and mitigation; new and renewable energy and energy efficiency; nanotechnology; **high performance computing**; space research and exploration, aeronautics, **astronomy** and earth observation; medicine and biotechnology; biomedicine and life sciences (biomedical engineering, bioinformatics, biomaterials); water resources and pollution treatment; high tech zones/science parks and incubators; technology transfer; science popularisation; **ICT**; clean coal technologies; natural gas and non-conventional gases; ocean and polar sciences; and geospatial technologies and its applications.



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Overview of BRICS STI

Cooperation Modalities/Initiatives

- Governance level
 - BRICS SUMMIT
 - BRICS STI Ministerial Meeting
 - BRICS STI SOM
- Technical/research level
 - BRICS Young Scientist Forum (YSF)
 - BRICS Global Research Advanced Infrastructure Network (GRAIN)
 - BRICS STI Enterprise (STIEP)
 - Thematic engagements, e.g. WGs, workshops, etc.
 - BRICS STI Joint Research Calls (next one closing in March 2019 –[astronomy prioritised](#))
- Funding Working Group





BRICS STI- Resolutions

6th BRICS STI Ministerial

- ❑ To establish a BRICS STI permanent Secretariat
- ❑ To establish a BRICS Vaccine Research and Development Centre, that will create synergies between the BRICS STI and BRICS Health sectors
- ❑ To establish a BRICS Virtual Centre on ICT and HPC, and Tech transfer Center.
- ❑ To establish the BRICS networks of science parks, technology business incubators and SMEs, and to establish a BRICS Technology Transfer Center under the direction of the BRICS (STIEP) Working Group.
- ❑ To establish inter-BRICS investment instruments for STI- to explore possible avenues of assistance for BRICS STI cooperation from the New Development Bank (NDB) and other development financing platforms

3rd BRICS Young Scientist Forum

- ❑ To establish BRICS YSF Coordinating Committee
- ❑ To maintain, as permanent features of the YSF, the
 - ❑ BRICS Young Women in Science Dialogues,
 - ❑ BRICS Young Innovator Prize,
 - ❑ BRICS Youth Innovation and Entrepreneurship Workshops, and
 - ❑ BRICS Seminars on Science Diplomacy, Advice and Communication
- ❑ Next meeting to be hosted by Brazil in 2019





BRICS STI- Resolutions

Funding Working Group Meeting

- ❑ 2nd BRICS STI Joint Call review (**excluded astronomy**)
 - ❑ 45% of the 462 formally accepted proposals did not pass the national eligibility check across all the funding parties
 - ❑ 255 proposals were shortlisted for scientific evaluation, and only 31 proposals were selected for funding based on the evaluations and funding available
 - ❑ The distribution per thematic area of the 31 selected projects for funding were as follows:



BRICS STI- Resolutions

Funding Working Group Meeting – 2nd BRICS STI Call

No of projects funded	Thematic Area
11	Material sciences including nanotechnology
6	Biotechnology and biomedicine including human health and neuroscience
4	Water resources and pollution treatment
5 (6)	New and renewable energy, and energy efficiency
3	Information technologies and high performance computing
2	Prevention and monitoring of natural resources

BRICS STI- Resolutions

Funding Working Group Meeting

3rd BRICS STI Call

Astronomy prioritised ([RSA to lead](#))

Opens October 2018 and will close in March 2019

Action	Date
Elaboration of thematic scoping for 3 rd Call for Proposals	September 2018
Announcement of the 3 rd Call for Proposals	October 2018
Deadline for submission of proposals	December 2018
Deadline for eligibility check	January 2019
Deadline for national evaluation and exchange of the results	May 2019
Consultation on the shortlist of the BRICS funding projects, BRICS STI funding meeting	May 2019
Final funding decisions taken, publication of the results	June 2019
Launch of projects	Second half of 2019



BRICS STI- Funding Instruments

- ❑ BRICS STI Joint Call
 - ❑ Each Party funds its own researchers participating in the BRICS joint projects
- ❑ New funding instruments being explored for innovation, mega/flagship projects and infrastructure, e.g. New Development Bank
- ❑ NDP currently doesn't have specific granting instruments/facilities but working on these ideas for the future



Future Outlook: 2019

- ❑ Brazil assumes Presidency/ Chair of BRICS
 - ❑ Implications- to host all the major events, e.g. Summit (Presidential), STI Ministerial, SOM, YSF
- ❑ Establishment of a BRICS Network for Academies of Science

**Thank you for your
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