

IT tool for the BRICS' Open Innovations

How to stimulate e-commerce among technological SMEs?

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UNIDO request: a modern IT-tool to support Technology Transfer within BRICS

Barriers	Approaches	Tools	Outcomes	Effects
Finding an appropriate foreign market partner is a main barrier to the internationalisation (Kneller and Pisu, 2007) Limited company resources Lack of managerial skills Lack of market knowledge Cultural differences	Open Innovations Search of partners rather than customers Support internationalisation, not only exports	BRICS Technology Transfer Network (IT Platform, network participants, technology brokerage tools, etc.)	Joint venture license agreement Technical cooperation Research cooperation Technical assistance Manufacturing cooperation Services cooperation	Increase in the company turnover New or retained jobs in companies; New products, services, business processes acquired by companies New customers /partners at foreign markets; Access to new markets

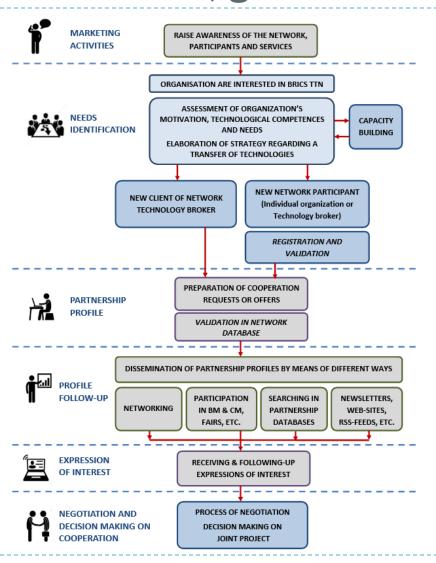


UNIDO Networking Platform: concept and key services

- Open Innovations. The Platform was designed to realise the Open Innovation concept. To implement the Open Innovation model, a company has to establish a network/ innovation ecosystem of external partners that have deep expertise in the required technologies. Partner search is a key service in Open Innovations.
- Internationalisation of SMEs. The Platform includes services and tools supporting various forms of SME internationalisation:
 - Technology Transfer (license, joint ventures, technology cooperation etc.)
 - ▶ B2B cooperation (export, import, subcontracting etc.)
 - R&D cooperation (joint research)
- The quality of communications and information is first factor of successful partnership building. The Platform provides services and tools to do this effectively for:
 - creation of databases of technologies and technology providers (Roster)
 - **complex structure of the Network**, including Customers, Technology providers, Experts, Support organisations, Marketing players, Regulators.
 - **tools for assessment** (validation) of technological information in accordance with specific regulations (standards)
 - tools for supporting the "follow-up" communications between network members
 - supporting the expert community (community of practice)
- The Platform includes solutions for supporting networks focused on **specific technological areas** (like Green, Biotech, Advanced Materials, etc.):



UNIDO Networking Platform: participants, types of information, guidelines



3 Types of Network Members:

- innovative companies, R&D centres, universities, competence centres, etc. that offer or request innovative technologies;
- technology brokers professional intermediary organisations;
- national Network Coordinators

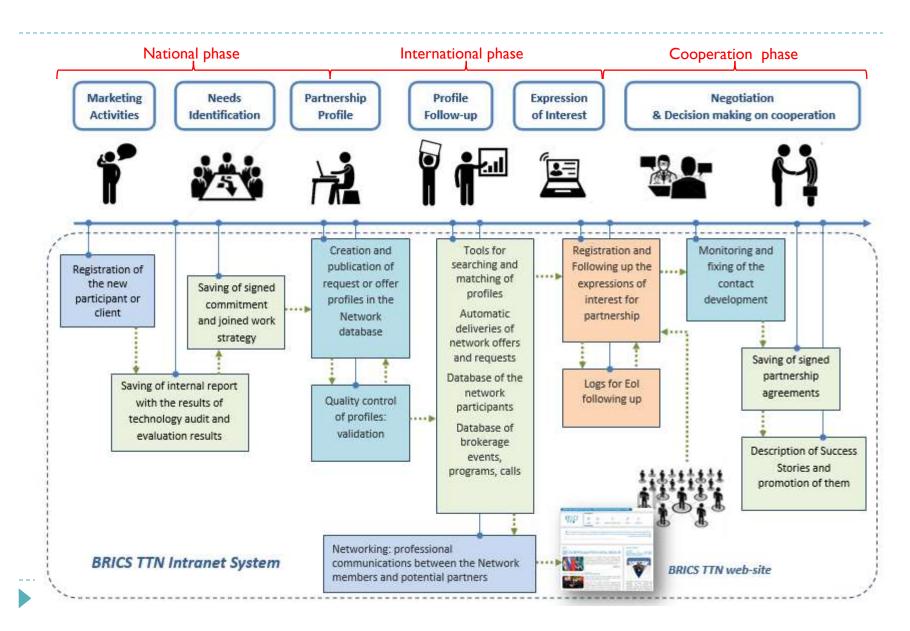
5 Types of the Cooperation Profiles harmonized with major international technology transfer systems:

- Technology offers and requests,
- Business offers/request
- Request for joint R&D.

6 Guidelines for the Network Members:

- technology audit,
- > preparation of good profiles,
- platform user guide, etc.

BRICS Technology Transfer Process & IT support



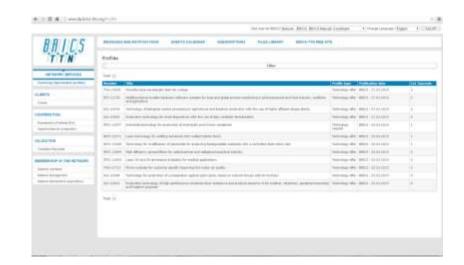
BRICS Technology Transfer Networking Platform

Web-site: brics-ttn.org



Intranet System

Access: itp.brics-ttn.org



Specificity of the IT Platform

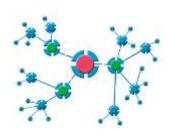
- IT platform realised as SaaS solution based on ASP.NET technology
- IT platform supports the **complex non-linear business process of the technology transfer** communications
- IT platform includes software solution for **Integration** with other datastores and platforms, e.g. National Technology Transfer Platforms/Initiatives (reducing efforts for integration up to 5 times)
- IT Platform includes convenient information objects and user-friendly interfaces for **different types of potential network members**: companies, technological brokers and governmental agencies (Network Coordinators)
- IT Platform has an **open module architecture** for future improvements and adaptation in line with participants' requests
- The Platform is specially designed to ensure a **flexible support for different types/ structures of technology transfer networks**, taking into account the specificity of national SME and technology transfer support instruments and organisations



"Star" type of network



Network of National coordinators



"Network of National networks" (Network of technology brokers)



Scenarios for practical use of the UNIDO platform

- **Direct use** by companies or by technology brokers, for promotion of cooperation profiles and partner search
- **Integration** of National platforms/projects into the UNIDO platform: exchange of technology/business offers & requests, follow-up process, joint services, etc.
- 3 Creation of National or Sectoral (e.g. Bio-, Agro- ...) Technology Transfer Networks on the basis of the UNIDO platform



Use of BRICS-TTN for partner search within multilateral R&D cooperation program

BRICS Science, Technology and Innovation Cooperation Framework Program was announced in 2015. This initiative supposes the calls for multilateral cooperation projects realised by R&D consortia (min. from 3 countries).

Partner search among R&Ds, SMEs or Industry is a critical success factor

The first BRICS Coordinated call for multilateral projects - Pilot Call 2016 (May- August 2016) demonstrated a very typical situation:

- The Call raised great interest: 320 eligible applications
- Partner search was the most demanded assistance
- ► The number of applications with SMEs participation 7 (2%!)
- The budget requested many times exceeded the budget dedicated for all sponsoring agencies, except FASIE (Russian Foundation supporting innovation SMEs)
- This witnesses much less favourable position of SMEs as compared to academy science
 - lack of experience of international projects
 - lack of established partner links



Practical example: BRICS-TTN use for the BRICS Pilot Call 2016

- BRICS-TTN Platform was offered to the Pilot Call participants as a tool for searching partners from other countries
- In the Call period the number of BRICS-TTN participants twice increased (to 42 members, including 5 from India, 2 from Chine, 2 from Brazil, 12 from Russia)
- 12 innovation projects were published by companies for searching partners. 3
 negotiations were started.

BRICS-TTN is a practical tool for partnering among SMEs and R&Ds within BRICS

Benefits	Challenges
 The published projects are interesting for BRICS countries Allows fast and easy communication of remote partners Partners reveal themselves on the basis of their own interest, which raises relevance Powerful and easy-to-use tool 	 Globally under-used tool Requires promotion in BRICS countries, awareness raising among potential participants Requires national moderation in each country (presently, only RTTN in Russia) Pro-active promotion of published profiles would increase the response considerably



How to use BRICS-TTN for the e-commerce?

Is it possible to sell BRICS technologies through e-TTN?



Join the BRICS TTN!

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