Global Innovation & Technology Alliance (GITA)

© Global Innovation & Technology Alliance

A Joint Venture 'not–for–profit' Company promoted jointly by

Confederation of Indian Industry

Technology Development Board
Department of Science & Technology
Government of India

Contents

- Background

- About GITA

- The GITA Innovation Ecosystem

- Board of Directors

- Ongoing DST Programs

- Forthcoming programs in 2015

- Bilateral program structure

- Types of Projects for Financial Support

- Focus Sectors

- Current Projects

Background

- **Business Expenditure in R&D (BERD) in the Economy** is one of the key indicators of Innovation driven economy. India ranks low in BERD (0.03% of GDP) compared to even many Asian Nations.

- Govts in other countries **stimulated BERD through direct and indirect incentives.** In India, Tax incentives on limited expenditure in R&D by industry leads to low BERD.

- Direct Govt incentives through flexible funding support to industry for R&D with writing–off of failures has been missing in India.

- Industry–Institute research collaborations & their Global partnerships in technology development, refinement to suit local conditions & finally deployment for business and social development have been a missing link in India for many years.

- The Sub–Committee of PM's Council on Trade & Industry recommended incorporation of a Govt's Arm's Length entity under PPP mode to professionally manage government fund for providing to industry through flexible mode of funding like grant, loan and equity with option of writing–off fund invested in failed R&D.
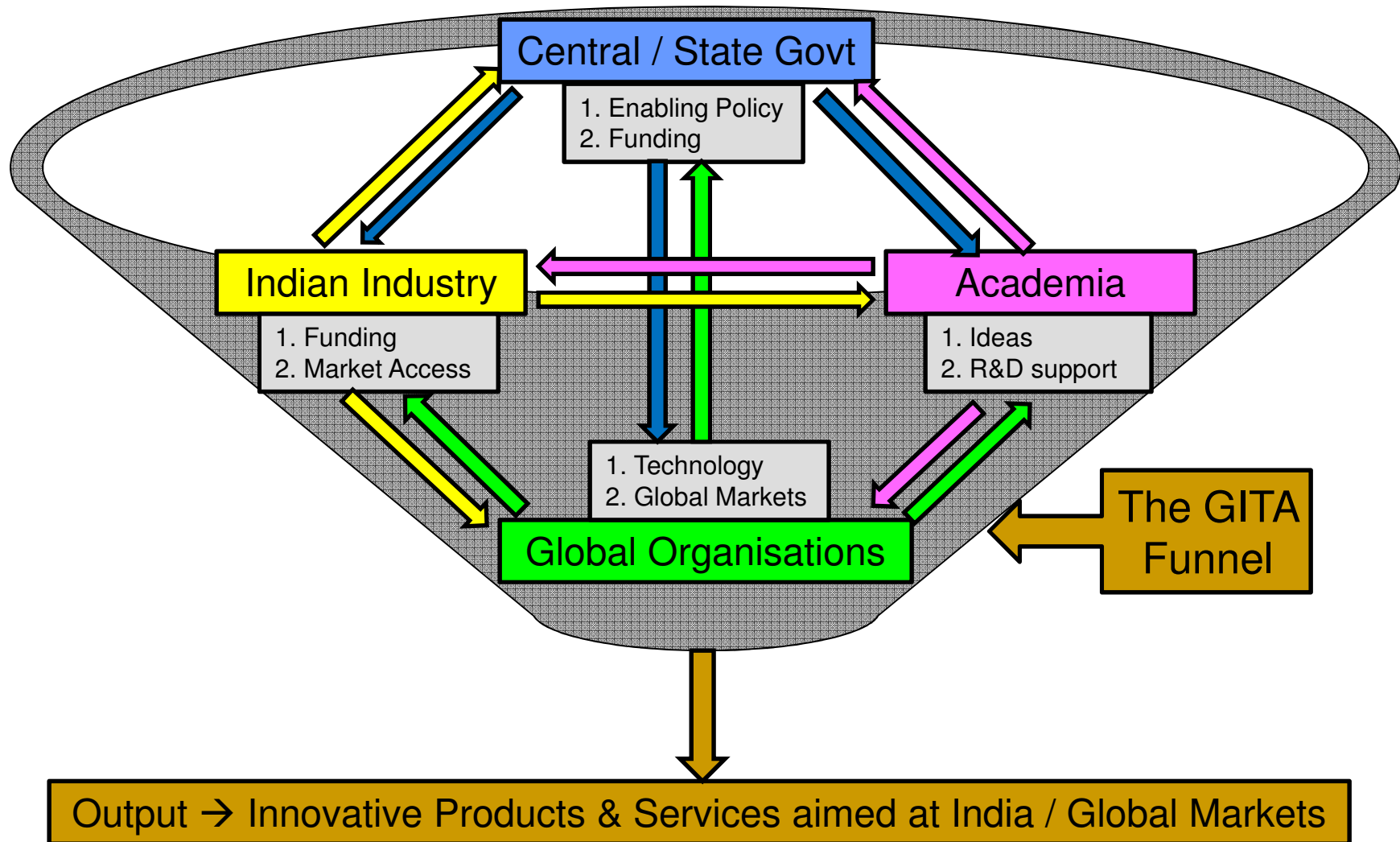
Establishment of GITA

Finally, on 29 November 2011, a PPP, not–for–profit (Section 8) Company named "Global Innovation & Technology Alliance" (GITA) has been incorporated jointly by the Technology Development Board (TDB) of the Department of Science & Technology (DST), Govt of India and the Confederation of Indian Industry (CII) with a mandate to implement Govt schemes/funds to attract Industry investment in R&D, Technology Development & Demonstration with Institutional partnerships & Global collaborations to deliver tangible research outcomes.

GLOBAL
INNOVATION &
TECHNOLOGY
ALLIANCE

What is GITA ?

- **A unique institution** for providing demand–driven Technology solutions through Institutional & Global alliances via a competitive process

- **An one–stop–shop** for forging frontline Global technological alliances for Indian companies for achieving leadership in Global & Domestic markets

- **An Innovative mechanism** between Govt of India and Indian industry for attracting Indian industry's investment in technology by **Mapping** technology gaps, **Evaluating** technology offers across the globe on appropriateness from techno–economic perspective for India, **Connecting** among technology developers, providers, commercializers, **Funding** last phase of technology development that connects the market and **Demonstration** of technology solutions

The GITA Innovation Ecosystem

Central / State Govt
1. Enabling Policy
2. Funding

Indian Industry
1. Funding
2. Market Access

Academia
1. Ideas
2. R&D support

1. Technology
2. Global Markets

Global Organisations

The GITA Funnel

Output → Innovative Products & Services aimed at India / Global Markets

GLOBAL
INNOVATION &
TECHNOLOGY
ALLIANCE

GITA's USP

- **Unique Public–Private–Partnership** (PPP) between the Govt of India (GoI) and Indian Industry (CII), leveraging on the collective strengths.

- Manned by **Professionals** for effective **Fund Management**, Transparent **Evaluation** of project proposals and quick & efficient **Disbursal** process.

- **Flexible funding mechanism** (Loan / Grant / Equity) to cater to different needs through **Competitive Process**

- For the **Govt** – GITA provides outreach to Industry, Technology & Markets, not only in India but across the world.

- For **Global Organisations** – GITA is the gateway for access to the Indian market & Technology partners.

- For **Academic Institutions** – GITA is the link for funding of Industrial R&D and providing market access for their R&D output.

- For **Industry** – Access to Technology, Funding & enabling Project Management support.

Board of Directors (as on date)

From **Industry**

- Mr Vikram Kirloskar, Chairman, GITA & Vice Chairman, **Toyota Kirloskar Motors Pvt.Ltd.**

- Mr S Gopalakrishnan, Co–founder **Infosys Ltd.**

- Mr Chandrajit Banerjee, Director General – Confederation of Indian Industry **(CII)**

- Mr R Mukundan, Managing Director, **Tata Chemicals Ltd.**

- Mr Deep Kapuria, Chairman, **Hi–Tech Gears Ltd.**

- Mr Navroze Jamshyd Godrej, **Godrej & Boyce Mfg.Co.Ltd.**

From **Govt of India**

- Dr Inder Jit Singh, Co–Chairman, GITA & Secretary, **Technology Development Board (TDB)**

- Dr Arabinda Mitra, Adviser & Head – International Bilateral Co–operation, **DST**

- Mr J B Mohapatra, JS & Financial Adviser, **DST**

- Dr Ajay Kumar, JS–**DeitY**

- Mr S N Tripathi, JS–SME, **MSME**

- Mr Soumen Bagchi, JS–ES&ITP, **MEA**
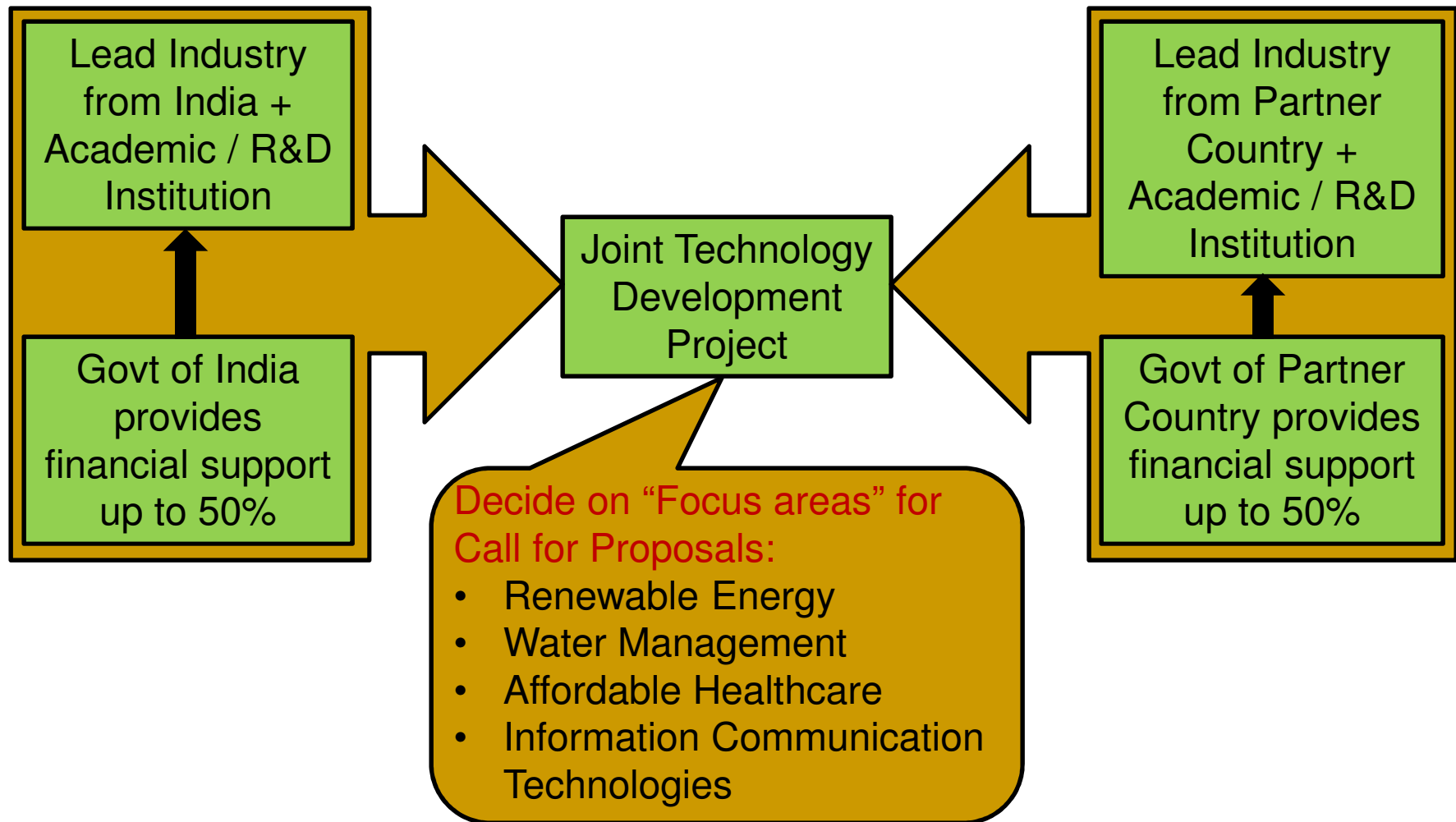
Govt Funds being managed by GITA

Ongoing Programs of DST

1. India–**Israel** Industrial R&D Fund
2. India–**Canada** Industrial R&D Fund
3. India–**UK** Industrial R&D Fund
4. India–**Spain** Industrial R&D Fund
5. India–**Finland** Industrial Fund
6. India–**South Korea** Industrial R&D Fund
7. **ASEAN**–India Science & Technology Development Fund (AISTDF)
8. India–**Taiwan** Scientist Exchange program

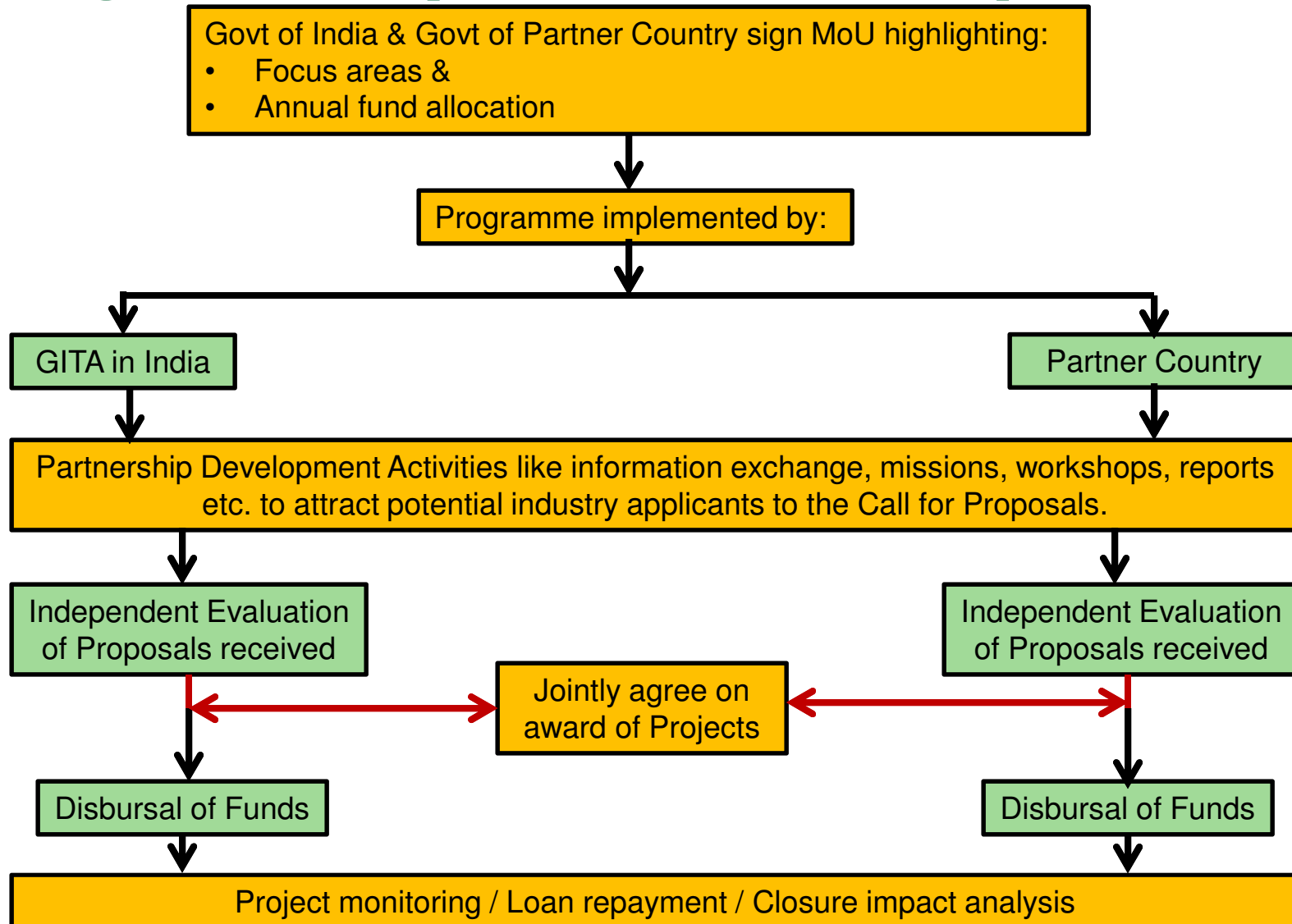GLOBAL
INNOVATION &
TECHNOLOGY
ALLIANCE

Forthcoming programs in 2015

1. DST's India–**Japan** Industrial R&D Fund

2. DST's India–**Sweden** Industrial R&D Fund

3. DST's India–**Norway** Industrial R&D Fund

4. DST's India–**Netherlands** Industrial R&D Fund

5. DST–**TWAS** Fellowship program for pan–African students

6. **DeitY**'s Bilateral Industrial R&D Fund

7. **MSME**'s India–**Germany** Industrial R&D Fund

8. **DIPP**'s Technology Acquisition & Development Fund (TADF)

9. **MoD**'s Technology Development Fund (TDF) for the Defence sector

© Global Innovation & Technology Alliance

Bilateral Program Structure

```
┌─────────────────────┐                    ┌─────────────────────┐
│ Lead Industry       │                    │ Lead Industry       │
│ from India +        │                    │ from Partner        │
│ Academic / R&D      │                    │ Country +           │
│ Institution         │                    │ Academic / R&D      │
│         ↑           │   Joint Technology │ Institution         │
│                     │→  Development      ←│         ↑           │
│ Govt of India       │   Project          │ Govt of Partner     │
│ provides            │                    │ Country provides    │
│ financial support   │                    │ financial support   │
│ up to 50%           │                    │ up to 50%           │
└─────────────────────┘                    └─────────────────────┘
```

Decide on "Focus areas" for Call for Proposals:

- Renewable Energy
- Water Management
- Affordable Healthcare
- Information Communication Technologies

GLOBAL INNOVATION & TECHNOLOGY ALLIANCE

Program implementation process

Govt of India & Govt of Partner Country sign MoU highlighting:
- Focus areas &
- Annual fund allocation

↓

Programme implemented by:

↓

GITA in India → Partner Country

↓

Partnership Development Activities like information exchange, missions, workshops, reports etc. to attract potential industry applicants to the Call for Proposals.

↓

Independent Evaluation of Proposals received ←→ Jointly agree on award of Projects ←→ Independent Evaluation of Proposals received

↓

Disbursal of Funds   Disbursal of Funds

↓

Project monitoring / Loan repayment / Closure impact analysis

© Global Innovation & Technology Alliance

Funding under Bilateral programs

- Funding cap of **Rs 1.5 crores** for Indian companies by way of Grant & Soft Loan @ 3% rate of interest, repayable over 10 years

- Participating Indian company will need to contribute equal amount for the project

- For more details on currently open Request for Proposal's (RFP's) & to apply for funding support, please log–on to http://gita.org.in/rnd.html

Technology Readiness Levels (NASA model)

GITA project support

Technology Readiness Level (TRL)	1	2	3	4	5	6	7	8	9
Activity	Discovery & Research		Innovation					pre Commercialisation	
TRL description	Basic principles observed & reported	Concept or application formulated	Experimental proof of concept	Concept or process validated in laboratory	System or component validated in relevant environment	System model or demonstrator in relevant environment	System prototyping demonstrator in an operational environment	Actual system completed and qualified test & demo operational environment	Actual system mission– proven in successful mission operation

Types of Projects for Financial Support

- Joint Research & Development

- Joint Deployment through Pilot Production, Testing, Market Access, etc.

- Projects should be Innovative, user–need based and market–driven, leading to New Product or Process & eventual Commercialization

- Duration of the project should not be more than 24 months from the date of receipt of fund

Focus Sectors

- Agriculture / Food Processing

- Healthcare

- Renewable Energy Technologies

- Water Purification / Waste Water Treatment

- Information & Communication Technologies (ICT)

- Bio–Technology

- Earth Sciences & Disaster Management

- Nanoscience / Nanatechnology

- Space Science & Technology

- Life Sciences

- Treatment of Municipal / Industrial / Bio–hazardous Waste

- Energy Efficiency – covering Appliances, Industrial Energy Efficiency & Green Buildings

- Green Mobility

- Clean Technologies

Current GITA Projects (of DST)

No.	Project Funded Under	Project Title	Sector	Indian Project Partners	Foreign Project Partners
1	Canada	Design and Development of an Aircraft Integrated Development Environment Tool for a New Generation Regional Transport Aircraft	Aviation Technology	• National Aerospace Laboratories (NAL), Bangalore • CAE India, Bangalore	• CAE Inc, Montreal, Québec
2	Canada	Indigenization of Broadband over Power Line Technology to Connect Adjoining Villages in India using Existing Power Lines	Information & Communications Technology / Broadband	• Indian Institute of Information Technology (IIIT), Allahabad • Maple Leaf India Private Limited, New Delhi	• Corinex Communications, Vancouver, BC
3	Canada	Application of Bio-Fuels for Aviation	Cleantech	• Indian Institute of Petroleum (IIP), Dehradun • Indian Institute of Science (IISc), Bangalore • Indian Institute of Technology (IIT), Kanpur • Indian Oil Corporation Limited (IOCL), Faridabad • Hindustan Petroleum Corporation Limited (HPCL), Mumbai • Infotech Enterprises Limited, Hyderabad	• Pratt & Whitney Canada, Longueil, Québec • Laval University, Québec City, Québec • McGill University, Montreal, Québec • Ryerson University, Toronto, Ontario • National Research Council of Canada- the Institute for Aerospace Research, Ottawa, Ontario.

     © Global Innovation & Technology Alliance

GLOBAL INNOVATION & TECHNOLOGY ALLIANCE

Current GITA Projects (of DST)

No.	Project Funded Under	Project Title	Sector	Indian Project Partners	Foreign Project Partners
4	Canada	Creating the next generation of interoperable GeoPortal (iGP) technology solutions for the Spatial Data Infrastructure market	Information & Communications Technology	• Infotech Geospatial Enterprises Limited, Hyderabad • Jawaharlal Nehru Technological University (JNTU), Hyderabad	• CubeWerx Inc., Gatineau, QC
5	Canada	Commercialization of Biopanels Manufacturing from Rice Straw and Digestate Using Green Adhesives	Sustainable Environmental Technologies & Alternative Energy	• Sarda Plywood Industries Ltd , Kolkata • Indian Plywood Industries Research & Training Institute (IPIRTI), Bangalore	• Bayview Flowers Ltd, ON, Canada • University of Toronto, Canada
6	Canada	Intelligent City Framework – a Scalable Information Infrastructure for Urban Decision Support	Information & Communications Technology.	• Navayuga Spatial Tech Pvt. Ltd., New Delhi, India • Geo Spatial Delhi Ltd, Delhi, India	• Galdos Systems Inc, Vancouver, B.C.
7	Canada	Mobile Authentication & Fraud Detection	Telecom / Banking and Finance	• MobME Wireless Solutions Pvt. Ltd., Kacheripadi	• Zighra, Ottawa, Canada • Carleton University, Canada
8	Canada (Ontario)	Decision Support System to Enhance Safety of Railway Track Workers	Information & Communications Technology	• Indian Institute of Technology (IIT), Kanpur • IAITO Infotech Ltd., Kanpur • Indian Railways	• McMaster University, Canada • Bombardier, Canada
9	Canada (Ontario)	Microfibre-based Innovative Structural Auto-parts	Clean / Green Tech	• Central Institute of Plastics Engineering & Technology (CIPET), Chennai • Harita NTI, Chennai	• Ford Motor Co, Canada • University of Windsor

         © Global Innovation & Technology Alliance

Current GITA Projects (of DST)

No.	Project Funded Under	Project Title	Sector	Indian Project Partners	Foreign Project Partners
10	Canada (Ontario)	Enabling Technologies for Intelligent Wireless Sensor Network for Health and Environmental Monitoring	Information & Communications Technology	• Indian Institute of Technology (IIT), Rajasthan • Indian Institute of Technology (IIT), Kanpur • Freescale Semiconductors India Pvt Ltd., Noida • Infosys Tech Ltd., Bangalore	• University of Waterloo, Canada • Research in Motion (RIM), Canada • ON Semiconductor, Canada • TR Labs, Canada
11	Canada (Ontario)	Advanced Smart Grid RxD, Demonstration & Commercialization Utilizing Distributed Energy Storage	Clean Technology: Advanced Smart Grid	• Larsen & Toubro (L&T) Technology Services, Mumbai	• eCAMION Inc., Ontario
12	Canada (Ontario)	Mechanism for delivering clean water by use of immobile Photocatalytic media produced by HVOF spray	Clean Water	• Associated Plasmatron Pvt. Ltd., Navi Mumbai	• Simulent Inc, Ontario
13	Canada (Ontario)	Development of Software Defined Networking Controller and related applications	Telecom / Information & Communications Technology	• Tejas Networks Ltd, Bangalore	• Solana Networks, Ontario
14	Israel	Hand Held Thermal Imager (HHTI) for Home Land Security	Homeland Security	• Alpha Design Technologies Private Ltd., Bangalore	• ITL Optronics Ltd., Israel
15	Israel	Technology for detecting and screening attentiveness cognitive abilities	Affordable Healthcare- ICT Applications for Medicine / Healthcare	• Excelsoft Technologies Pvt Ltd., Mysore	• Neurotech Solutions Ltd., Ness Ziona

    © Global Innovation & Technology Alliance

Current GITA Projects (of DST)

No.	Project Funded Under	Project Title	Sector	Indian Project Partners	Foreign Project Partners
16	Israel	Development of Data Analyzer (DPX-Anal) System for Analyzing data feeds from Internet websites (RSS / non-RSS), Social media websites & blogs for corporate / security information Reports	Information & Communication Technologies (ICT) / Instrumentation	• Sunworks Consultants Pvt Ltd., Gurgaon	• IntuView Ltd., Herzliya
17	United Kingdom	Multi-Condition Robust Biomass Gasifier for Power Generation	Cleantech	• CHOGEN Powers Private Ltd., Secunderabad	• Geocapita Group Ltd, London
18	United Kingdom	Improving Process for Stable Liposomal Amphotericin B Formulation: Removing Cumbersome Pre-Processing Before Administration to Enhance Global Clinical Acceptance & Commercial Success	Affordable Healthcare	• Lifecare Innovations Pvt Ltd, Gurgaon	• Wockhardt UK, Wrexham
19	United Kingdom	Advanced Real-time Refinery Monitoring and Optimisation	Cleantech	• Bharat Petroleum Corporation Ltd, Greater Noida	• Process Systems Enterprise Ltd., London
20	United Kingdom	Sustainable Dengue Prevention	Affordable Healthcare	• Gangabishan Bhikulal Investment and Trading Limited (GBIT), Mumbai	• Oxitec Ltd, Oxfordshire

Confidential   © Global Innovation & Technology Alliance

www.gita.org.in