
D5.2 EU Industry in India

Project:
INDIA GATE
ACCESS4EU - INDIA
(Contract Number 244442)

“Increasing the dialogue between India and Europe by improving EU awareness and access to Indian Research and Innovation technology Programmes”

Funding Scheme: CSA (Supporting)

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Start date of project: 01 January 2010

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SEVENTH FRAMEWORK PROGRAMME Capacities, International Cooperation



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Executive summary

This report has been prepared in the context of INDIA GATE project, which aims at supporting innovative actions and R&D collaboration between EU and India.

Focusing on a research sample of *24 European companies* based in India, it provides the business framework in which those companies undertake research activities and helps understand the current R&D landscape of the country.

The report finds that almost 42% of the companies are involved in industrial production, while 46% focus on R&D activities. Additionally, *environment* and *energy* are the major activities performed by 29% the European Companies, followed by *automotive, transport & logistics* and *healthcare* which involve 17% companies in each. In terms of employment, 48% of the companies employ more than 1000 people and 55% represent a turnover of more than 50 million EUR. Around 43% of them are involved in trade activities whereas 38% are wrapped in direct export.

Moreover, the analysis suggests that the *quality and price of product* are found as an internal problem which should be addressed effectively. Regarding the external difficulties, the *existing laws and regulations, corruption, political instability* and *insufficient government institutions* appear to be the most important barriers. Finally, 35% of the companies are the recipient of equity based FDI, 26% have adopted Joint Ventures, and another 26% are following Greenfield approach.

The report was prepared in 2012 by the INDIA GATE project partners.



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1. The INDIAGATE Project

The main objective of the INDIA GATE project is to increase the S&T cooperation between India and the EU by creating a “one-stop shop” for funding opportunities that are available in India for European organizations. The INDIA GATE project aims at identifying Indian research and innovation funding programmes, the obstacles that inhibit EU researchers and organizations from taking part in the identified opportunities and make the information available in a user friendly manner to stimulate, encourage and facilitate participation.

The strategic objectives of INDIA GATE are to:

- **Map and identify funding opportunities** open for European organisations in India with a focus on their reciprocity character, rules of participation and funding rates
- **Analyse** the obstacles for participation with focus on their reciprocity conditions
- **Review** the bilateral agreements between EU Member States and India
- **Improve** the flow of information on programmes and funding opportunities (Initiatives of the Government of India, Bilateral Programmes) designed to support scientific and technological cooperation between the EU and India
- **Enhance** know how on cultural differences in business conduct and working style via an user friendly e-training
- **Identify** and demonstrate mutual understanding, interest and benefit in S&T cooperation between the EU and India
- **Monitor the participation rate** of European organisations in Indian funded programmes
- **Develop feedback** and recommendations for decision makers and **provide expert input** to the Joint Committee meetings
- **Increase the mutual understanding** of respective research systems

The project has been segregated in different Work Packages (WP), and WP5 is aimed to understand the impact of existing activities, structures, and opportunities with regards to further boosting innovation in the future.



The main objectives of WP5/ Task 5.2 are:

- To investigate the presence and 'Research and Development' (R&D) activities of the European Industry based in India.
- To map the European industries with established operations in India.
- Develop a questionnaire to identify:
 - The modalities of establishing themselves in India.
 - The foreseen impact of their establishment in relation to technology development.

The INDIA GATE project started in 2010, January and will last for 36 months. Its consortium consists of seven partners from five different countries:

1. Agency for the Promotion of European Research – APRE, Italy (coordinator)
2. Foundation for Research and Technology Hellas – FORTH, Greece
3. Council of Scientific & Industrial Research – CSIR, India
4. Europa Media – EM, Hungary
5. EIRC Consulting Private Limited – EIRC, India
6. The Brussels Enterprise Agency - BEA, Belgium
7. Indian Institute of Foreign Trade – CITT, India



2. Methodology

The report was prepared under the supervision of the project team in 2012. Methodologically, it includes both primary and secondary research which was undertaken by the Indian and Greek partners based on the following:

- ***Desk Based Research***

During this part of study, the contact details of the European companies which are established in India were collected by the project members. The project members also met with General Manager of European Business Group (EBG) for easy access to its member companies and help in facilitation for conducting the study.

A questionnaire with 26 items was also developed by the project team which incorporated basic details of the European companies based in India, their activities, reasons for moving to India, market entry modes and problems faced by them while expanding business in India, (Questionnaire: see Appendices).

- ***Administering the questionnaire***

The questionnaire developed for the study was sent to European Companies based in India by e-mail questionnaire. This methodology was adopted because it is easy to cover a large number of companies rapidly through e-mail. For having the in-depth study, a few open-ended questions were also added up in the questionnaire which could help strengthen the understanding on the subject.

Around 250 European Companies had been contacted through mails, telephone and followed up by the project team members. Despite continuous follow up by the project team, we could receive only 24 responses (List of respondents: see Appendices). Perhaps, this may be due to the low level of motivation and large number of similar studies conducted for the European Companies.

- ***Data compilation and analysis***



The data has been tabulated after getting the questionnaires filled in by the representatives from European companies and analyzed appropriately. The report has been prepared on the basis of this analysis.

3. India's S+T+I system in brief

India has a long and recognized Science and Technology (S&T) tradition, occupying the 5th position in space launching technologies in the world. Its nuclear technologies are recognized as one of the advanced technologies including the completion of the nuclear cycle of production of source materials to waste management. The overall structure of the research system of the country is constituted by four main actors:

- Public research system under government and public enterprises;
- Academic research system and universities;
- Private research laboratories under business enterprises; and
- Non-governmental research institutions aided by both public and private sources

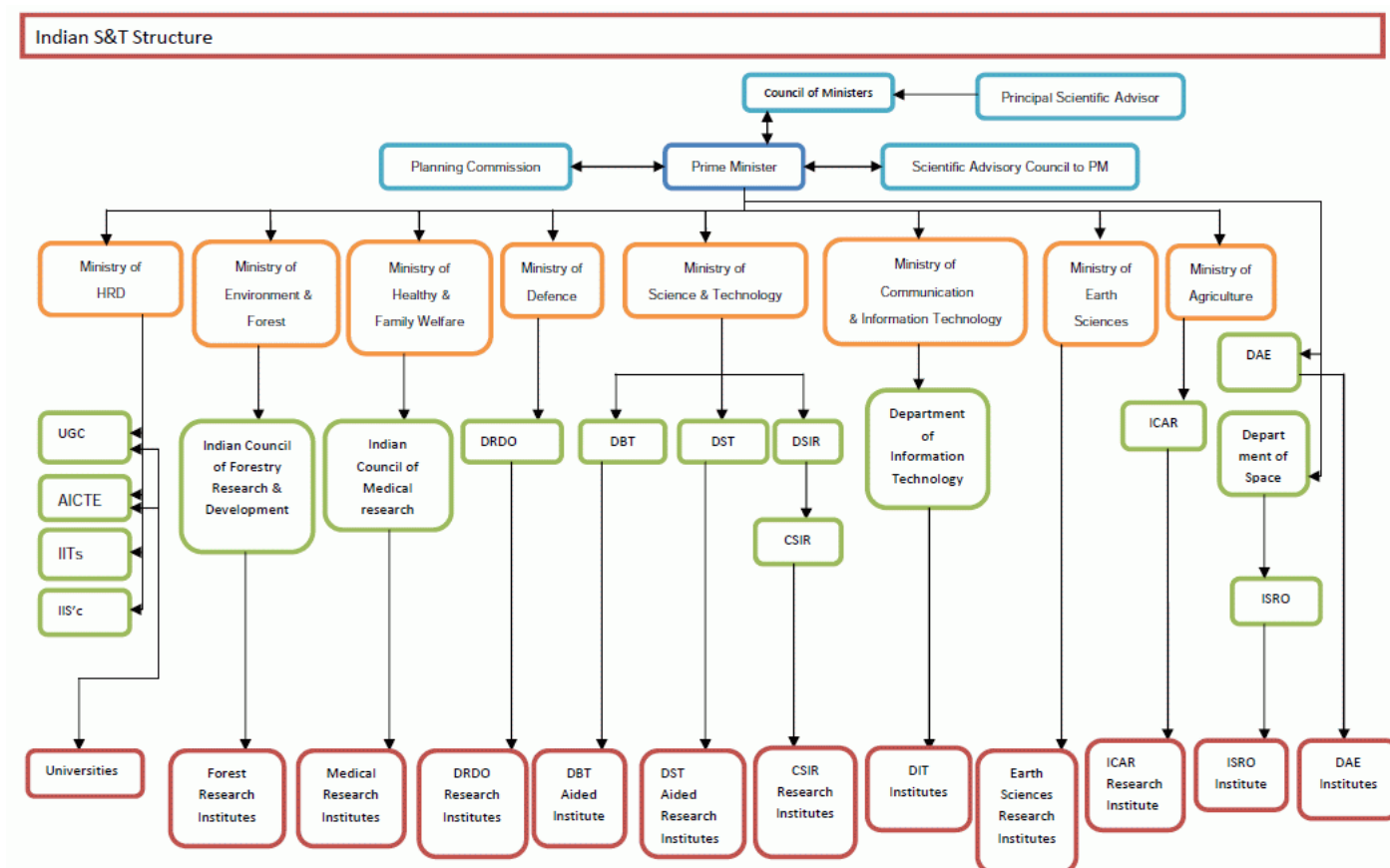
The different ministries set up by the government; fund, coordinate, promote, and oversee the scientific and research activities in the country through the implementing departments along with other major players responsible for policy formulation and coordination¹.

Currently, there are more than 400 universities in India of which nearly 25% provide quality research and development. A number of higher education institutions in India have gained international renown for their training, research, and development in the area of Science, Engineering & Technology. The Indian S+T+I system is illustrated in the following figure.

¹ For further information, see Appendices



Figure 1 The Indian S+T+I system



Source: Department of Science & Technology - DST, 2010

India as a federal form of government constitutes **28 States 7 Union Territories**. As a **whole, the country's** gross national expenditure on R&D by sectors is summarized in table 1, while the distribution of R&D expenditure by various states is given below in table 2:

Table 1 Gross National Expenditure on R&D by Sectors by %

Sector	1996-97	1998-99	2002-03	2004-05*
Central Government	61.2	67.2	66.2	66.7
State Government	10.0	8.6	8.5	8.5
Public Sector	6.0	5.4	5.0	5.0
Private Sector	22.8	18.8	20.3	19.8

Source: R&D Statistics 2000-01, 2004-05; Highlights of 2002-03, Department of Science and Technology

* Estimations by DST

Table 2 Distribution of R&D expenditure by various states

States in order of their expenditure	% of expenditure of total GERD
Maharastra	12.3
Karnataka	8.1
Gujarat	7.9
Punjab	7.0
Tamil Nadu	6.6
Haryana	5.4
Andhra Pradesh	5.3
Kerala	5.3
Uttar Pradesh	4.9
Uttaranchal	4.9
Madhya Pradesh	4.7
Himachal Pradesh	4.4
Jammu & Kashmir	4.4
Rajasthan	4.1
Assam	3.3
Jharkand	2.8
West Bengal	2.5
Orissa	2.3
Bihar	1.8
Manipur	1.2
Chattisgarh	0.8
Others	0.02
Total	100

Source: Department of Science & Technology, R&D Statistics 2007-08

The Indian patents system is governed by the Patents Act, 1970 which affords protection to patents for inventions (including patents of addition). After India became Trade-Related Intellectual Property Rights (TRIPS) compliant in 2005, the total number of patents filed in



India has been significantly increasing, indicating an environment conducive for innovation throughout the country. During 2009-2010, a total number of 34.287 patents have been filled. This trend of filling is approximately 6.8% decrease as compared to the previous year. The trends of last seven years in respect of patent and designed application filed and granted are given below.

Table 3 Trend in patent application

Year	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Filed	12613	17466	24505	28940	35218	36812	34287
Examined	10709	14813	11,569	14119	11751	10296	6069
Granted	2469	1911	4320	7539	15316	16061	6168

Source: Intellectual Property India, Annual report 2009-10

Table 4 Trend in designed application

Year	2005-06	2006-07	2007-08	2008-09	2009-10
Filed	4949	5521	6402	6557	6092
Examined	4719	4976	6183	6446	6266
Registered	4175	4250	4928	4772	6025

Source: Intellectual Property India, Annual report 2009-10

Research and Development activities in India

According to the analysis of the questionnaire, in terms of the R&D activities in the country, around 79 per cent of companies responded that they are involved in R&D. The reasons which attracted these companies for establishing their business in India are: availability of talent pool on cheaper cost, low cost of resources and proximity to the customers and market. Among these companies, around three-fourth companies are focused on product development through their research activities. Process development and applied research are the areas which involve 32 per cent companies in each. Only 16 per cent companies are found to be involved in basic and pure research.

Further segregation of R&D activities shows that around 68 per cent companies are doing prototype development, followed by 47 per cent companies whose R&D activities are focused to technology demonstration. 32 per cent companies are involved in market testing, quality control and pilot application in each. Clinical trials in medical research are being carried out by 11 per cent of the companies.



Innovation

On the issue of innovation, 79 per cent companies are involved in product based innovation whereas 29 per cent were involved in process based innovation. Management and organizational innovation is being carried out by 17 per cent companies. 33 per cent companies have evolved new technologies through innovation activities in India.

The data collected on business geographical area covered shows that 44 per cent companies have expanded their business on the international level whereas 38 per cent and 19 per cent companies are involved on national and regional level business activities in India respectively.

4. International cooperation

The European Union and the Republic of India benefit from a longstanding relationship going back to the early '60s. The Joint Political Statement of 1993 and the 1994 Co-operation Agreement, which is the current legislative framework for cooperation, opened the door to a broad political dialogue. Furthermore, in 2004 India became one of the EU's strategic partners, creating a Joint Action Plan in 2008 to help realize the full potential of this partnership in key areas of interest.

This Joint Action Plan which was drawn up for implementing this partnership contains a number of action points which have important S&T dimensions. The significance of EU-India cooperation in S&T has also been highlighted at the highest political level. The Joint Statement of the EU-India Summit held in Helsinki on 13 October, 2006 states that: "The EU and India recognize the critical role of science and technology (S&T) in striving towards their respective knowledge-based economies and the mutual benefits of further strengthening joint research and S&T cooperation. In the Summit in New Delhi on 30 November 2007, the leaders, in recognition of the critical role of science and technology in striving towards their respective knowledge-based economies, expressed their satisfaction with the outcome of the India-EU Ministerial Science Conference from 7-8 February, 2007. Within the framework of the India-EU S&T Cooperation Agreement which was renewed during the Summit, the leaders stated that they would welcome strengthened partnership initiatives such as joint



projects with co-investment of resources in selected fields of mutual priority. The two sides agreed to explore bilateral cooperation on space policies and programmes including global satellite navigation."

It is worth noting that current efforts include the following actions:

- Developing cooperation in the security field (in the light of the 2010 EU-India Declaration on International Terrorism);
- Migration and mobility issues;
- Ongoing negotiations for a Free Trade Agreement;
- Implementation of the Joint Work Programme on Energy, Clean Development and Climate Change adopted at the 2008 Summit and reaffirmed by a Joint Declaration for Enhanced Cooperation on Energy in 2012;
- Cooperation in scientific research and innovation (Joint Declaration adopted by the 2012 Summit).



5. Industrial cooperation of India with EU

5.1 History

India-EU relations have developed substantially since the adoption of the 1993 Declaration. An extensive bilateral political dialogue has evolved, which includes regular annual summits, Troika Ministerial and Senior Official level meetings covering a wide range of issues. In the economic sphere, ties have expanded and India and the EU have worked closely together to strengthen the multilateral trading system and to pursue a constructive dialogue on trade and investment and economic cooperation. India and the EU, as the largest democracies in the world, share common values and beliefs that make them natural partners as well as factors of stability in the present world order. India and the EU share a common commitment to democracy, pluralism, human rights and the rule of law, to an independent judiciary and media. India and the EU also have much to contribute towards fostering a rule-based international order - be it through the United Nations (UN) or through the World Trade Organisation (WTO). India and the EU hold a common belief in the fundamental importance of multilateralism in accordance with the UN Charter and in the essential role of the UN for maintaining international peace and security, promoting the economic and social advancement of all peoples and meeting global threats and challenges.

As the EU evolves and enlarges, and as India and the EU both face diverse and complex global challenges, it is critically important to expand our multifaceted relationship and build upon these foundations. India and the EU commit themselves accordingly to:

- Strengthening dialogue and consultation mechanisms;
- Deepening political dialogue and cooperation;
- Bringing together People and Cultures;
- Enhancing Economic Policy Dialogue and Cooperation;
- Developing Trade and Investment



India is an important trade partner for the EU and a growing global economic power. It combines a sizable and growing market of more than 1 billion people with a growth rate of between 8 and 10 % - one of the fastest growing economies in the world. Although it is far from the closed market that it was twenty years ago, India still also maintains substantial tariff and non-tariff barriers that hinder trade with the EU. The EU and India hope to increase their trade in both goods and services and investment through the Free Trade Agreement (FTA) negotiations that they launched in 2007.

India is one of the growing economies that will reshape the global economy in the twenty-first century

Trade in goods

- EU goods exports to India 2010: **€34.7 billion**
- EU goods imports from India 2010: **€33.2 billion**

Trade in services

- EU services exports to India 2010: **€9.8 billion**
- EU services imports from India 2010: **€8.1 billion**

Foreign Direct Investment

- EU outward investment to India 2010: **€3.0 billion**
- Indian inward investment to EU 2010: **€0.6 billion**

INDUSTRIAL POLICY

Cooperation between India and the EU on industrial issues and understanding of the regulatory framework has been growing in recent years. Under the 'Joint Initiative to Enhance Trade and Investment', the two sides jointly carried out general as well as eight sector specific studies on trade and investment matters. On the basis of the results of the studies, Indian and European business associations brought out a set of recommendations, which were placed before the 2001 and 2002 Summits.



Considering the potential for a further enhanced dialogue, both sides agree to:

- Establish a platform for the exchange of information and views on industrial policy and to enhance mutual understanding of regulatory frameworks;
- Continue and reinforce dialogue in existing and strengthened Working Groups and encourage discussion in various sectors;
- Exchange information on competition policy in areas of mutual interest, with a view to increasing cooperation;
- Develop a dialogue on best practices in the field of corporate governance;
- Establish a Working Group on Food Processing Industries.

Following the useful Joint Initiative studies, both sides also agree that a new initiative on enhancing bilateral Trade and Investment would be taken up.

BUSINESS COOPERATION

The close association of industry and business in India-EU cooperation as well as dialogue between businesses from both sides are crucial to achieving the common goal of enhanced trade and investment. Industry and business of India and the EU are not only competitors but also partners.

Regular business summits have been held since 2001. These summits have helped to create better understanding of the opportunities and obstacles in a broad variety of sectors. The recent phenomenon of Indian investments in EU especially in knowledge-based sectors of IT, Pharma, etc., has added a new dimension to overall India-EU economic relations.

Both sides should build on those experiences to promote a strategic discussion on improving business links. We have therefore decided to:

- Hold a Business Round Table on a regular basis together with the Business Summits.
- Industry Associations concerned on both sides will take appropriate action to continue the



Business Summit and Business Round Table initiatives. The Round Table will come up with innovative ideas to further trade and investment;

- Promote the development of networks for sectoral industrial cooperation and investment promotion;
- Further discuss strengthening of the existing information dissemination mechanism and explore the need for new instruments for facilitating EU-India trade and investment;
- Reinforce business-to-government dialogue based on the work undertaken under the Joint Initiative for Enhancing Trade and Investment, which should feed into the sectoral policy dialogues;
- Operationalise the Trade and Investment Development Programme (TIDP) Web portal to provide both sides with comprehensive information on trade and investment issues.

FINANCE AND MONETARY AFFAIRS

India and the EU have a strong and growing presence in international financial discussions. The introduction of the Euro has strengthened the EU's role and responsibilities in the international monetary arena. In an increasingly interdependent and global economy, where the financial and monetary policies of one major economic actor affect others, India and the EU share a common interest in developing an in-depth policy dialogue on global financial and monetary issues.

For this reason, India and the EU should promote exchange of views and information between relevant institutions and policy makers in the economic and financial domain. This would allow an exchange of views on macroeconomic and financial matters of common interest. Dialogue already taking place in various for a should be further strengthened.

To this end it is agreed to:

- Hold regular consultations at an appropriate senior level on matters of common interest as and when necessary for issues considered appropriate by mutual consent;
- Establish a regular macroeconomic dialogue on matters of common interest;
- Identify academic institutions on both sides for increasing academic cooperation and exchange in these areas;
- Exchange information on financial services regulatory policies, banking systems and accounting standards;



- Encourage the European Investment Bank to continue its involvement in investment in India, and to explore strengthening it in the future.

The EU-India FTA

With its combination of rapid growth and relatively high market protection India was an obvious partner for one of the new generation of EU FTAs launched as part of the Global Europe strategy in 2006.

The parameters for an ambitious FTA were set out in the report of the EU-India High Level Trade Group in October 2006, which was tasked with assessing the viability of an FTA between the EU and India. Other studies have reinforced the economic potential of an FTA between the EU and India.

Negotiations for such FTA were launched in June 2007 and, so far, eleven negotiating rounds have been held. The last EU-India Summit took place on 10 December 2010 in Brussels.

EU technical and financial trade assistance to India

To assist India in continuing its efforts to better integrate into the world economy with a view to further enhancing bilateral trade and investment ties, the EU is providing trade related technical assistance to India. €13.4million were allocated through the Trade and Investment Development Programme (TIDP) funded from the Country Strategy Paper (CSP) 2002-2006. At present, the follow-up programme to the TIDP is being designed and will be funded by the Country Strategy Paper 2007-2013.

Success Stories

United Kingdom: A Memorandum of Understanding was been signed on 9.2.1998 for cooperation in the area of Biotechnology and Biological Sciences between DBT and BBSRC, UK. Projects are being developed through interaction between experts. Areas identified are Food Biotechnology, Vaccines for communicable and non communicable diseases, Diagnostics for infectious and non-infectious diseases, Bioprocess engineering and downstream processing and Exchange of information on technology transfer.



- In a completed project titled 'Genetic and molecular analysis of anthracyclin' at MKU, Madurai, conditions were optimized for production of anthracyclin (Daunomycin and adriamycin) in *Streptomyces*.
- A project titled 'Role of co-stimulatory molecules in the regulation of anti-leishmanial immune response' is completed at NCCS, Pune.

Germany:

Five projects were completed one at University of Hyderabad and four at JNU, New Delhi. Three ongoing projects being implemented at GNDU, Amritsar, College of Fisheries, Mangalore and Drosophila Stock Centre, Indore have shown good progress. One project titled 'Enzymatic modification of *Cicer arietinum* as a nutritious food' has been approved for implementation at J.S.S.College of Pharmacy, Ootacamund during June 2001. The Department signed a new agreement with Forschungszentrum Julich GMBH (FZJ), Germany for cooperation in Biotechnology on 15.2.2001. Areas identified for cooperation include Isolation and characterization of microorganisms for production of metabolites; NMR-Spectroscopy-techniques for investigation of metabolic pathways/designs; Synthesis, regulation and transport mechanisms of secreted proteins in Gram-positive bacteria; Over expression of proteins and proteins design by genetic engineering; Development of Microbial processes for bio-transformation using microbiological, biochemical and genetic technologies; Development of bioreactors for laboratory and for industrial purposes; Reaction and process engineering techniques to obtain low molecular weight metabolites; Synthesis of chiral molecules and active substances using combined enzyme catalyzed and chemical reactions; Signal transduction and ion transport in sensory neurons and other cells; Neuroinformatics and New Applications for Bacterial Enzymes and New Cell Culture techniques. The cooperation also include the exchange and training of scientists, joint execution of scientific projects as well as reciprocal support in procurement of scientific equipment.



- Two Indian scientists have been identified for training in the FZJ and GBF laboratories in the areas of genome analysis and gene function focusing on range of infectious diseases, development of transgenic animals etc.
- Nine proposals have already been received for consideration of support and a joint workshop has been agreed for February 2002.



5.2 Governmental initiatives

Formal collaboration in Science and Technology (S&T) with India started with the signature of the European Community-India Science and Technology Cooperation Agreement on 23 November 2001. The agreement is implemented by the Directorate-General for Research for the European Commission and by the Department of Science and Technology for the Government of India.

S&T plays an important part in the EU-India Strategic Partnership. The Joint Action Plan which was drawn up for implementing this partnership contains a number of action points which have important S&T dimensions. The significance of EU-India cooperation in S&T has also been highlighted at the highest political level. The Joint Statement of the EU-India Summit held in Helsinki on 13 October, 2006 states that: "The EU and India recognise the critical role of science and technology (S&T) in striving towards their respective knowledge-based economies and the mutual benefits of further strengthening joint research and S&T cooperation. In the Summit in New Delhi on 30 November 2007, the leaders, in recognition of the critical role of science and technology in striving towards their respective knowledge-based economies, expressed their satisfaction with the outcome of the India-EU Ministerial Science Conference from 7-8 February, 2007. Within the framework of the India-EU S&T Cooperation Agreement which was renewed during the Summit, the leaders stated that they would welcome strengthened partnership initiatives such as joint projects with co-investment of resources in selected fields of mutual priority. The two sides agreed to explore bilateral cooperation on space policies and programmes including global satellite navigation."

The India-EU Ministerial Conference on Science in New Delhi on 7 and 8 February 2007, co-chaired by the German Federal Minister for Education and Research, Dr Annette Schavan, representing the EU's German Presidency, the European Commissioner responsible for Science and Research, Dr Janez Potocnik, and then Indian Minister for Science and Technology and Earth Sciences, Mr Kapil Sibal. The Conference has set the tone for future cooperation. The most significant recommendations of the Conference were the



establishment of joint nodes for networking innovation systems, efforts towards creation of joint infrastructure for advanced research and funding systems for symmetric programmes for promotion of S&T collaboration.

The “New Delhi Communiqué”, issued at the end of the Ministerial Conference, and co-signed by the Conference Co-chairs, underlined the importance of a strong science and knowledge base as a major prerequisite for competitiveness, and the strong role of international S&T collaboration. It confirmed that the S&T cooperation between the EU and India should be based on the principles of symmetry, reciprocity, mutual benefit and, where appropriate, the co-investment of resources in joint actions. The Ministers and their representatives recognised that important “windows of opportunity” existed for a significant increase in the breadth and depth of EU-India S&T cooperation, especially through the EU’s Seventh Framework Programme (FP7) for Research and Technological Development 2007-2013 and India’s 11th Five Year Plan.

One new feature of EU-India S&T relations is the launch of coordinated calls for proposals. At the India-EU Ministerial Science Conference in February 2007, the two sides committed themselves to spending €5 million each every year on joint research in areas of mutual benefit. Consequently, two Coordinated Calls for Proposals have been launched so far. The first such call, launched with the Department of Science and Technology on computation materials science, attracted 25 proposals, of which six will be funded. The Second Coordinated Call, launched with the Department of Biotechnology, with co-funding of €3 million each on food, health and well being, again attracted 25 proposals, of which two will be funded. Topics for future coordinated calls for proposals include research in energy, health and the environment.

Already in FP7, some 130 Indian research organisations have been short listed for funding in over 90 projects. The cost of these projects is over €317 million with the Indian partners receiving over €17 million.

FP7 builds on the success of an already strong and growing Indian participation in EU Research Framework Programme. Between 2002 and 2006, more than 80 projects were



funded within the Sixth Framework Programme (FP6) that involved Indian researchers. These projects, which cover most domains of research funded by the EU, received more than €250 million of funding, with the Indian partners receiving more than €11 million.

In addition, India is a valuable partner for the EU in major international projects such as the International Thermonuclear Experimental Reactor (ITER) project, GALILEO, the European Satellite Navigation system, and the interlinking of India's Education Research Network, ERNET, to its pan European equivalent GEANT2.

Five Steering Committee Meetings have been held to so far to operationalise the Cooperation Agreement. These meeting decided on the focus areas of cooperation and resulted in the organisation of several EU-India workshops, in areas such as materials research, transport research, health, biotechnology, climate change, etc.

At the 4th meeting in Brussels in November 2006, it was decided to give the cooperation a new impetus to move beyond the organisation of joint workshops to a more strategic one. A Joint Statement signed on the occasion called for strengthening the scope, quality and strategic dimensions of the cooperation based on principles of mutual interest and benefit as well as of appropriate reciprocity. Mechanisms to pursue this aim include the establishment of an "EU-India Strategic Workshop Series", the establishment of a high-level expert group to offer advice on research areas and related issues, and the co-investment of resources on coordinated calls for research proposals in areas of shared priority.

At the fourth Steering Committee Meeting it was decided to create a dynamic road map to provide a regularly updated overview of all the actions agreed and the prospects of cooperation to be developed in the coming three years. It is expected that this road map will provide a summary of main achievements and planned activities in the different research areas and will serve as a basis for monitoring progress under the European Commission - India S&T cooperation agreement.

The strong partnership between the EU and India, their great respective traditions in science and knowledge as well as the recent political impetus provided by the India-EU



Ministerial Science Conference are now being urgently translated into ambitious, high quality and mutually beneficial cooperative programmes, projects and dialogues.

EU policy

The EU has undertaken several initiatives to promote and support industrial cooperation between its member states and India in different sectors and areas. International cooperation has been encouraged through the Framework Programmes - FPs (following table) and their policy instruments: *EC bilateral S&T agreements* and *bi-regional S&T agreements*, which are important tools to promote the policy dialogue between EU and India. These agreements constitute a framework and a privileged forum to identify common research interests, priorities, and the necessary tools for S&T collaboration in the industrial sector.

Table 5 Framework Programme (4-6) projects with Indian participants

Framework programme	Total number of projects	INCO projects (%)	Other thematic projects (%)
FP4	33	33 (100 %)	-
FP5	32	24 (75 %)	8 (25 %)
FP6 (till June 2006)	60 *	20 (33.3 %)	40 (66.7 %)

Source: Pandey, 2006

EU-India relations and cooperation in research have substantially progressed in the last decade with the signing of the Science and Technology (S&T) Cooperation Agreement backed by regular revision & updating of Joint S&T priorities. India has become a valuable partner with the EU in major international projects such as the International Thermonuclear Experimental Reactor or ITER (www.iter.org) project, GALILEO (http://ec.europa.eu/dgs/energy_transport/galileo/index_en.htm), the European Satellite Navigation system and the interlinking of India's Education Research Network, ERNET, to its pan European equivalent GEANT2.

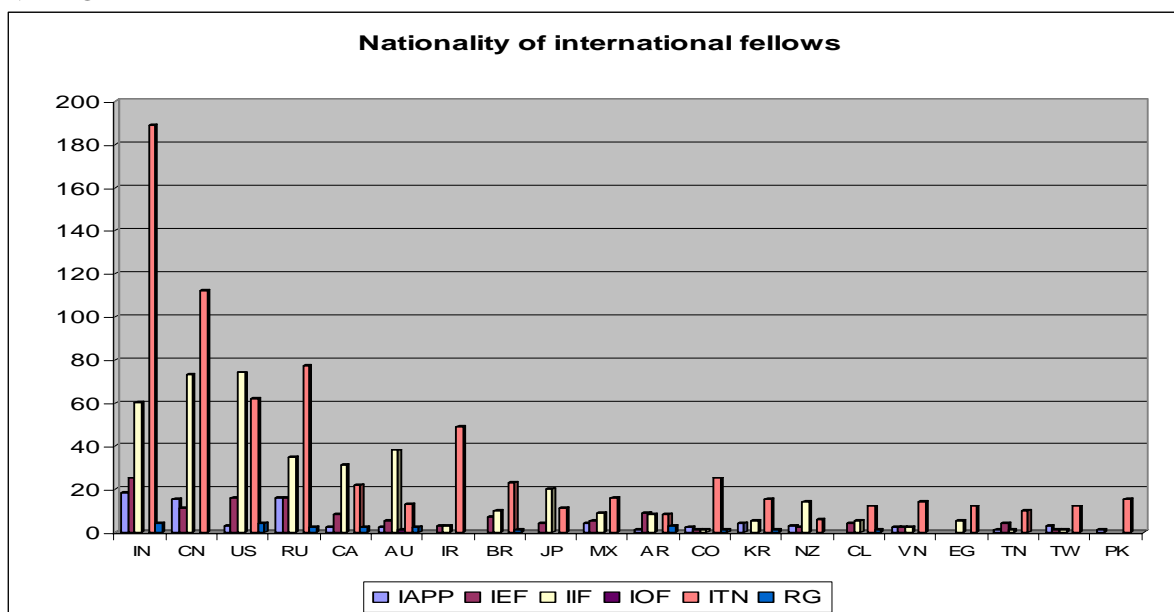


The importance of EU-India co-operation in S&T has been highlighted at the highest political level. The "New Delhi Communiqué", issued at the end of the Ministerial Conference in 2007 and co-signed by the Conference Co-chairs, underlined the importance of a strong science and knowledge base as a major prerequisite for competitiveness and underlined the strong role of international S&T collaboration. The Ministers and their representatives recognized that, at this time, important "windows of opportunity" existed for a significant increase in the breadth and depth of EU-India S&T co-operation, especially through the EU's 7th Framework Programme for Research and Technological Development 2007-2013 and India's 11th Five Year Plan.

Moreover, in fact, the European Community-India Science and Technology Cooperation Agreement was the first step in structuring the industrial cooperation between EU and India. Through FP7, researchers in India are eligible to participate and be funded in European research projects and mobility schemes. India ranks number 5 in terms of number of applications in FP7 (1275 applicants). Indian researchers participate in 182 short listed proposals (out of which 135 signed grant agreements, compared to 97 contract agreements signed in FP6). Most successful FP7 priority areas with India are: Health (51 grant holders), Environment (35), ICT (27) and Food, Agriculture and Fisheries, and Biotechnology (15). Another important area for developing links between research institutions is the mobility and training of researchers (currently 300 Indian Researchers participate in Marie Curie actions). Therefore, India has established strong relations with the European research area, and overall ranks among the top three countries in many FP7 programmes (following figures)

Figure 2 FP7 People Programme –Top 20 nationalities of international fellows

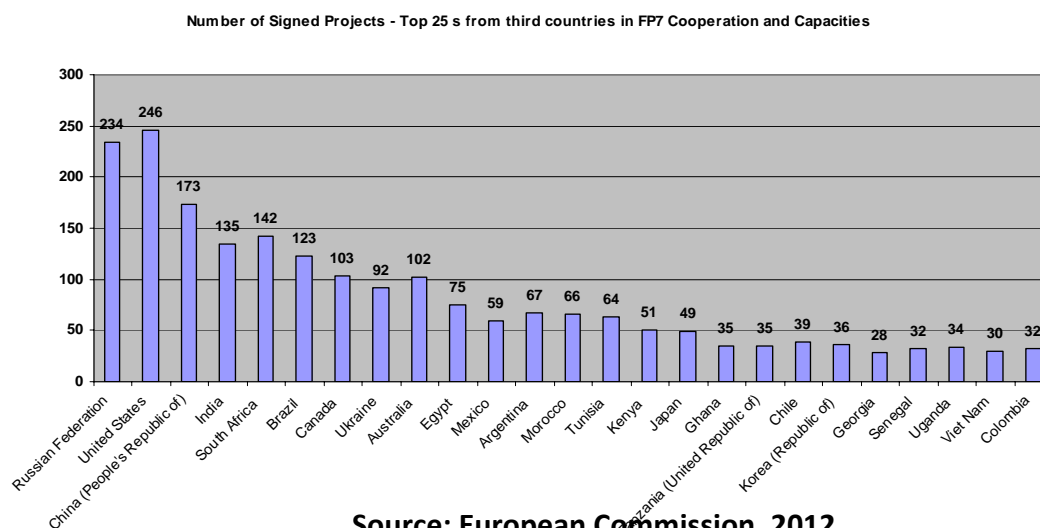




Source: European Commission, 2012

India is also among the top performing 3rd countries in terms of number of signed projects in FP7 Cooperation and Capacities:

Figure 3 3rd countries' signed contracts, Cooperation & Capacities

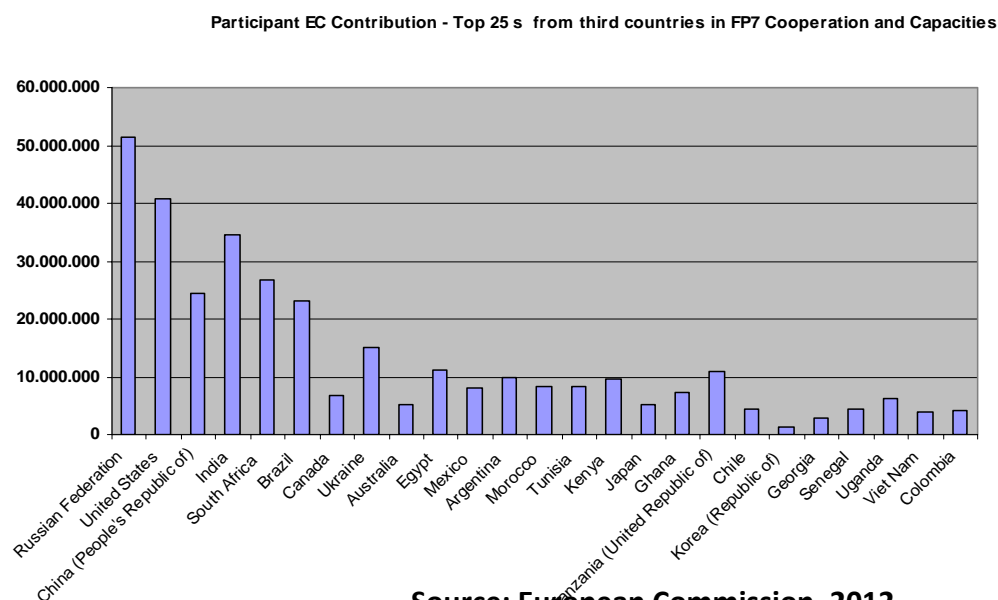


Source: European Commission, 2012

India is among the top 5 performing 3rd countries in terms of EC contribution in FP7 Cooperation and Capacities programme, with 35 contribution of 35 M€ whereas it ranks 6th in terms of ERC grants.

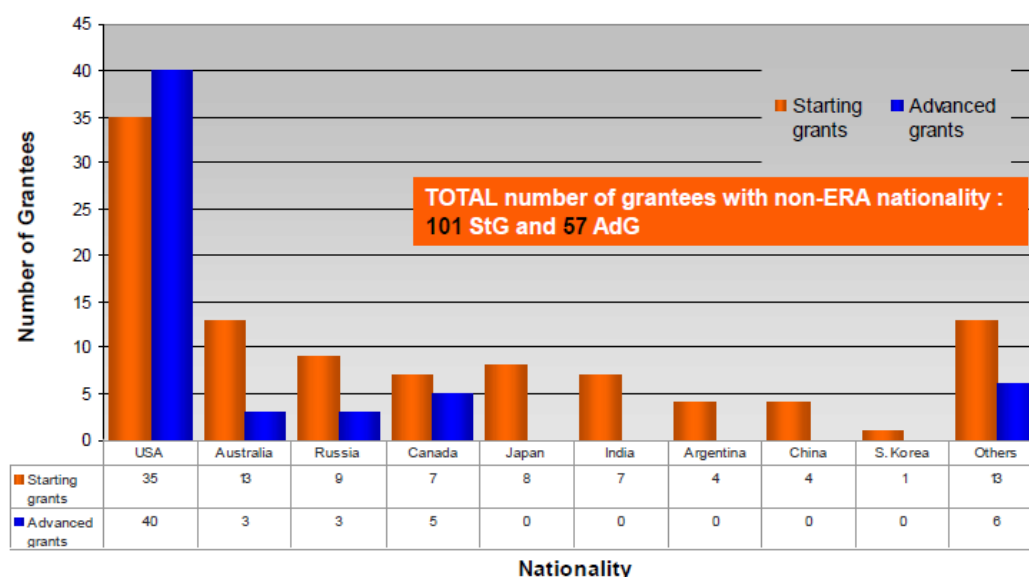


Figure 4 Contribution of top 25 3rd countries in FP7 Cooperation & Capacities



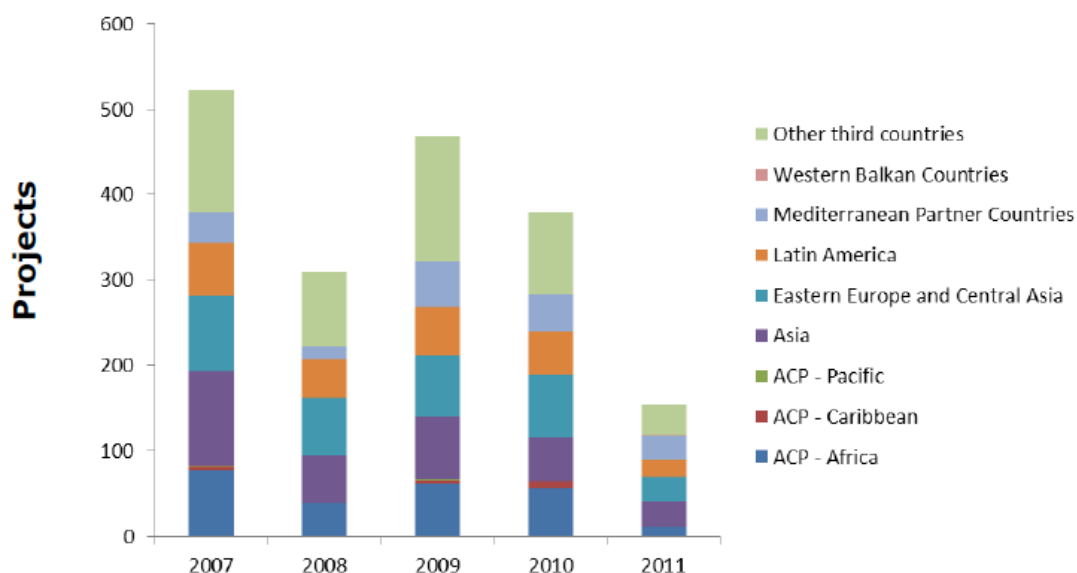
Source: European Commission, 2012

Figure 5 ERC grantees with 3rd countries 2007-2011



Source: European Commission, 2012

Figure 6 Distribution of 3rd countries in FP7 (Number of projects)








Source: European Commission, 2012

In order to further support the industrial collaboration, the ***Strategic Forum for International Science and Technology Cooperation (SFIC)*** was established. SFIC is today developing three pilot initiatives: the India Pilot Initiative, the China Pilot Initiative and the USA Pilot Initiative. The India Pilot Initiative on water and bio-resources challenges was launched at the Delhi EU/MS-India Stakeholders conference in 2010. To bring the process to a higher, more comprehensive and strategic level, SFIC decided in 2011 to work on a draft strategic agenda outlining a broader range of common challenges, objectives, priority areas and instruments for EU/MS-India cooperation for the coming years. This policy development process received a boost at the EU-India Summit on February 2012, when, at the initiative of the Indian side, a joint declaration on research and innovation was signed. The Joint Declaration aims at enhancing the scale, scope and impact of cooperation and at building an "Indo-European research and innovation partnership", with a focus on common societal challenges and enhanced synergies between India and the EU.

Next to this, there are also other significant initiatives which support the Indian-EU collaboration including projects, programmes and other related actions. The following table summarizes some of them and provides their links:



Table 6 Strengthening EU Indian industrial collaboration: EU initiatives

<p>BILAT</p> 	<p>ERA-NET</p> 	<p>ACCESS4EU</p> 	<p>ICT</p> 
<p>www.euinec.org</p>	<p>www.newindigo.eu</p>	<p>www.access4.eu/india</p>	<p>www.euroindia-ict.org</p>
<p>European Business and Technology Center</p> 	<p>ICT</p> 	<p>FAFB</p> 	<p>ICT</p> 
<p>www.ebtc.eu</p>	<p>www.euclid-india.eu</p>	<p>www.biocircle-project.eu</p>	<p>www.synchroniser.org</p>
<p>INCO-Wiki</p> 	<p>ICT NCPs</p> 	<p>Euraxess Links</p> 	<p>ICT</p> 
<p>www.ncp-incontact.eu</p>	<p>www.ideal-ist.net</p>	<p>ec.europa.eu/euraxess/links/india</p>	<p>www.euincoop.eu</p>

Source: <http://www.euindiacoop.org>

The solid partnership between the EU and India, their great traditions in science and technology as well as the recent political impetus provided by the EU-India Ministerial Science Conference, are now being translated into ambitious, high quality and mutually beneficial co-operative programmes, projects and dialogues.

India is also showing a growing degree of openness in the identification of mechanisms to support the co-funding of joint or coordinated calls for proposals with the European Union (EU). The report of the Steering Committee on Science and Technology, established by the Planning Commission of India for the 11th Five Year Plan covering years 2007-2012, stresses the importance of International collaboration initiatives in terms of R&D projects and also partnering in International projects. The Department of Science and Technology has proposed an outlay of approx € 70 million for International cooperation for the 11th Five Year Plan.



In fact, India is one of the few countries that have coordinated calls with the EU. The launch of the first ever EU-India Coordinated Call for Proposals on Computational Materials Science was a major milestone. Both sides have committed €5 million each to this Call. (Source: www.delind.ec.europa.eu).

Specifically in the ICT sector, one of the “courses of action” in the 11th Five Year Plan of Government of India, is to ‘*pursue international cooperation and partnerships in ICT for development*’, to address emerging needs in economic and social domains, and also in building infrastructure and competencies for R&D.

EU-India Cooperation in ICT in particular was significantly reinforced in 2001 when India and the EU took concrete steps to promote mutual cooperation in the development of ICT and a modern information society, as expressed in the Joint EU-India Vision Statement on IT adopted at the Second Summit in New Delhi in 2001.

During the India-EU Summit held at Lisbon in June 2000, it was agreed that an Indo-EU Working Group on Information Society would be set up for promoting bilateral cooperation in all areas of ICT. The first meeting of the India-EU Working Group on Information Society was held in January 2001 in New Delhi.

Areas of Common Interest - The EU and India have agreed to

- Enhance EU-India co-operation in the Seventh Framework Programme
- Exchange views on a regular basis on e-commerce, internet governance, and universal service
- Encourage India-EU joint research proposals and collaborative activities in 4G, e-government, e-education and e-health
- Exchange views on telecommunication spectrum management and on roaming and interoperability of telecommunication services
- Work towards GEANT-ERNET connectivity.

A Joint Working Group (JWG) on ICT was established under an institutional agreement between the European Union and the Government of India’s Department of



Electronics and Information Technology (DeitY) (Erstwhile Department of Information Technology). It meets annually and discusses agreed agendas and programmes for mutual cooperation, especially in the area of ICT research. The JWG considers the joint action plan and implementation reports of the preceding year and subsequently arrives at new or modified policy and regulatory frameworks for the subsequent year.

The JWG meetings are inter-governmental, closed-door meetings which follow a top-down approach. The JWG mainly comprises policy-makers from both regions and very few researchers and stakeholders. (Source:

http://cordis.europa.eu/fp7/ict/international/india_en.html)

Current initiatives for EU - India cooperation

While both Europe and India are increasing their capacities to innovate in a world of keen competition, representatives from EU and from the Indian Minister for Science and Technology and Earth Sciences met in Brussels on 31 May 2012 to strengthen their commitment to the long-term Indo-European Research and Innovation Partnership involving India, the EU and its Member States.

The Indo-European partnership complements, supports and builds on bilateral Member States cooperation actions with India, where it brings added value, in particular where coordinated or joint actions of the EU and Member States enable to achieve the scale and scope necessary to produce sustainable impact in addressing major societal challenges of common interest.

The Commissioner and the Ministers stressed the importance of the innovation-based growth strategies “*Innovation Union*” and “*Decade of Innovation*” in (i) creating the paths for mutual success, (ii) engaging with both public and private stakeholders in innovative cooperation actions, and (iii) leveraging complementary strengths of partnering entities from India and Europe.

Both India and Europe are aiming at accelerated sustainable inclusive growth wherein innovation plays an important role and win-win Indo-European collaborative actions



can be engaged. This could imply mobilizing industrial partners – with particular attention to SMEs– in the Indo-European research and innovation cooperation, addressing improved framework conditions and ensuring a level playing field.

Stressing the importance of the Joint Declaration on Research and Innovation Cooperation signed at the 12th EU-India Summit of February 2012, the Commissioner and Ministers underlined the three pillars of the Indo-European Partnership: (i) larger scale, scope and impact, (ii) focus on common societal challenges and (iii) enhanced synergies between India, the European Union and its Member States.

They took note and considered the following steps to be important for developing this Partnership:

Jointly define the scope and develop a Strategic Research & Innovation Agenda – a White Paper - on a medium to long term India-EU/Member States Partnership for accelerated sustainable and inclusive growth, and new pathways focusing on societal challenges of common interest (such as sustainable environment and water, bio-economy, agriculture, energy and transport, health, ICT) as well as covering the whole innovation chain from research to development and the deployment of innovative and affordable solutions. This *White Paper* may also address improved framework conditions to facilitate and encourage bottom up cooperation between stakeholders on both sides with or without public funding, including mobility of researchers, as well as to ensure a level playing field (ownership and access to IPR in collaborative research activities, standards, regulations). It will build on the work done by the EU and Member States Strategic Forum for international S&T cooperation (SFIC), taking into account the outcomes and recommendations of the 31 May-1 June EU/MS-India Stakeholders' Conference, and further consultations with relevant Ministries and stakeholders.

Establish a Group of Senior Officials (GSO) composed of officials from India, the Member States and the European Commission with a view to streamline the governance of Indo-European cooperation in its bid to identify the most effective mechanisms to provide solutions to major societal challenges of common interest. The GSO could help guiding, coordinating and monitoring the implementation of the Indo-European partnership. The



GSO may, where appropriate, make optimal use of available tools and resources of Member States, EU and Indian programmes and facilitate coordination of different funding mechanisms so as to reach optimal scale and scope in India-Europe cooperation.

Support setting up an industry-driven India-Europe stakeholder group for research and innovation. This group could ensure effective involvement of industry and other research actors in defining and implementing the *Strategic Agenda*. Particular attention may be given to promote cooperation between European and Indian SMEs notably for the co-development and for deployment of affordable and innovative products and services.

Organize a Ministerial meeting in India in 2014.

More coordination between the European Union and its Member States

International cooperation in research and innovation is one of the five areas in which the Member States launched "partnership" initiatives (European Research Area Groups) to increase cooperation. The objective is to implement the European strategy for international S&T cooperation. To drive it forward, the [Strategic Forum for International Science and Technology Cooperation \(SFIC\)](#) was established. SFIC is today developing three pilot initiatives: the India Pilot Initiative, the China Pilot Initiative and the USA Pilot Initiative.

[The India Pilot Initiative](#) on water and bio-resources challenges was launched at the Delhi EU/MS-India Stakeholders conference in November 2010. To bring the process to a higher, more comprehensive and strategic level, SFIC decided in 2011 to work on a **draft strategic agenda** outlining a broader range of common challenges, objectives, priority areas and instruments for EU/MS-India cooperation for the coming years. (<http://ec.europa.eu/research/era/docs/en/india-pilot-initiative-concept-note.pdf>).

This policy development process received a boost at the EU-India Summit on 10 February 2012, when, at the initiative of the Indian side, a [joint declaration on research and innovation](#) was signed. The Joint Declaration aims at enhancing the scale, scope and impact of cooperation and at building an "Indo-European research and innovation partnership",



with a focus on common societal challenges and enhanced synergies between India and the EU.

Current opportunities for the participation of India in FP7

Through the [7th Framework Programme](#) (FP7), the main programme for European Union science and technology funding, researchers in India are eligible to participate and be funded in European research projects (for example the COOPERATION programme) and mobility schemes (for instance Marie Curie fellowships under the PEOPLE programme). India ranks number 5 in terms of number of applications in FP7 (1275 applicants from India). Indian researchers are participants in 182 short listed proposals (out of which 135 signed grant agreements, compared to 97 contract agreements signed in FP6). Most successful FP7 priority areas with India are: Health (51 grant holders), Environment (35), ICT (27) and Food, Agriculture and Fisheries, and Biotechnology (15). Another important area for developing links between research institutions is the mobility and training of researchers (currently 300 Indian Researchers participate in Marie Curie actions).

One particular feature of EU-India S&T relations is the launch of coordinated calls for proposals. India and the EU committed themselves to spending €5 million each every year on joint research in areas of mutual benefit. Consequently, five Coordinated Calls for Proposals have been launched on

- Computational Materials Science (2007): Co-funding of 5M€ from each side (DST on Indian side); 6 projects on-going
- Food and Nutrition Research (2008): Co-funding of 3M€ from each side (DBT on Indian side); 2 projects on-going
- Solar Energy Systems (2009): Co-funding of 5M€ from each side (DST on Indian side); 3 projects on-going
- Partnering Initiative on Biomass and Biowastes (2010): Co-funding of 1M€ from each side (DBT on Indian side); 1 project on-going



- Water Research (2011): Co-funding of 16M€ from each side (10M€ from DST and 6€ from DBT on Indian side); 6 projects selected for funding.

An Overview of EU and Member States Research and Innovation Cooperation with India is currently in preparation and will introduce the main aspects of these cooperations, enabling readers to scan the range of schemes and quickly be able to grasp the key essentials of each cooperation. It will be available on this page.

Projects and initiatives providing support

The EU-India Cooperation Initiative is the single entry point to all available support measures for the promotion of EU India STI Cooperation. The approach is two-folded, aiming to:

- Offer scientists, companies, policy makers and other stakeholders structured and comprehensive information through the EU - India Window web portal
- Assist projects' cooperation for a coordinated approach, sharing of information and joint planning of activities

How can Indian researchers take part in FP7-funded projects?

In the **Cooperation Programme**:

All calls for proposals are open to Indian beneficiaries, provided that the minimum requirement for European participants is met.

In addition, **Specific International Cooperation Actions** (SICAs) in each thematic area are dedicated to India and other third countries where there is mutual interest on the basis of both the S&T level and the needs of the countries concerned.

The third possibility is a **Coordinated Call**. It is a Framework Programme call that is closely coordinated with a similar call issued by a funding agency in India. Through the alignment of content, resources, timing, evaluation criteria and procedures, a coordinated call aims at generating joint or tightly coordinated projects, entailing a balanced partnership.



Two such calls have been implemented so far, one with the DST (in Computational Material Sciences) in 2008, and with DBT (in Development of functional foods and ingredients and Valorisation of by-products in food processing).

In the **PEOPLE programme**, **International Incoming Fellowships** are available for experienced researchers: for knowledge transfer with Europe, and enrichment of research collaboration. Researchers from India will be offered support to undertake research projects in Europe with a view to enhancing the possibility of future collaborative research links with Europe. In addition, **International Outgoing Fellowships** at postdoctoral level and beyond (with an in-built mandatory return phase) allow European researchers to pursue their work in India.

"EURAXESS - Researchers in Motion" is a key initiative to enhance careers of researchers. It provides a one-stop shop for researchers seeking to advance their careers and personal development by moving to other countries. The EURAXESS portal comprises four sections – Jobs, Services, Rights and Links - which offer a wealth of practical information on living and working in the European countries involved. More info at <http://ec.europa.eu/euraxess/index.cfm>

EURAXESS Links is a networking tool for European researchers working outside Europe. Besides India, EURAXESS Links is present in the USA, Japan, China and Singapore. It provides information about research in Europe, European research policy, opportunities for research funding, for international collaboration and for trans-national mobility.

EURAXESS Links India: The network of European researchers working in and commuting to India. **EURAXESS Links India** is an information and networking tool for European researchers working in or commuting to India and Indian researchers with an interest in European research. It provides information about research in Europe, European research policy, opportunities for research funding, for international collaboration and for transnational mobility.

http://ec.europa.eu/euraxess/links/india/index_en.htm



On www.euindiacoop.org a guide is available to support the following issues: learning more about the STI landscape, finding a partner, funding opportunities, FP7 training and policy dialogue.

The network of National Contact Points (NCPs) in EU Member States includes [NCPs to facilitate INCO activities](#)

The [EUINEC](#) project provides opportunities for stakeholders in both the EU and India to learn what FP7 is about and how they can take part in FP7.

[Euro-India Research Centre](#) (EIRC) is a platform to facilitate collaboration between Indian organisations and EU organisations for conducting joint Research and Development. EIRC will also assist organisations in accessing and benefiting from EU funding under the Seventh Framework Programme.

The [Science and Technology pages](#) of the website of the [European Commission Delegation](#) to India provide an introduction to the European Union's research programmes and especially inform researchers and research organizations in India of the opportunities for participating in and receiving funding from these programmes.

FP7 International Cooperation, Work Programme 2013

The 4 specific programmes of FP7 are open to Indian researchers and research organizations, under the general principles of participation.



Figure 7 The 4 FP7 Specific Programmes

COOPERATION Collaborative research 10 Thematic Areas	IDEAS	PEOPLE	CAPACITIES
1 Health	Supporting, investigator-driven research projects carried out across all fields	Strengthening the human potential in research and technology in Europe	1 Research Infrastructures
2 Food, Agri & Biotech			2 Research for the benefits of SMEs
3 ICT		Initial Training of Researchers	3 Regions of Knowledge
4 Nano-sciences/technology Materials and new production technologies		Life-long training & Career Development	4 Research Potential
5 Energy		Industry-academia pathways	5 Science in Society
6 Environment		International Dimension	6 Support for the coherent development of research policies
7 Transport (incl. AERO)		Specific support action	7 International Cooperation
8 Socio Economic Sciences and the Humanities			
9 Space			
10 Security			

Source: European Commission

The Work Programme of actions for 2013, has a budget of over 9,4 billion €, including:

Project calls open for international partners	€ 4,84 billion
PEOPLE (Marie Curie Grants)	€ 0,97 billion
IDEAS (European Research Council Grants)	€ 1,75 billion
ITER	€ 0,94 billion
Other (special actions, general and other activities)	€ 0,89 billion

Against the backdrop of the current economic situation and increased global competition, the Union has defined a strategy to support growth and job creation, Europe 2020. The **Innovation Union Flagship** initiative supports this strategy through specific commitments. Research and innovation are key drivers of competitiveness, jobs, sustainable growth and social progress.

The work programme 2013 aligns with, and contributes towards, the objectives of **Europe 2020**, the Innovation Union Flagship, and other EU policies. There is a determined focus on fostering new ideas, supporting world class teams tackling significant societal challenges, and on ensuring that the fruits of our investments can be properly exploited. In



this way the work programme provides for a smooth transition towards the **new research and innovation programme for 2014-2020, Horizon 2020**.

The 2013 Activities of International Cooperation will support the international Science, Technology and Innovation (STI) dimension of the Europe 2020 Strategy and Innovation Union Flagship Initiative and ensure transition between the FP7 and Horizon 2020 Programmes. Activities will therefore promote the development of mutually beneficial partnerships, by focusing in particular on tackling common societal challenges, by extending cooperation beyond research to cover also innovation issues of common interest, and by fostering the establishment of a level-playing field in research and innovation. They will also reinforce the external dimension of the European Research Area (ERA) by promoting the attractiveness of Europe in the world, fostering coordination and joint actions between Member States and/or Associated Countries, and contributing to the implementation of the strategic framework for international Science and Technology (S&T) cooperation¹ and of initiatives of the Strategic Forum for International Cooperation (SFIC).

The 2013 activities will:

- Ensure continuity in supporting the development of cooperation with regions and countries for which ongoing actions are coming to an end in 2012/2013.
- Support the coordination of national policies and development of joint activities between Member States and/or Associated Countries and third countries where these actions are not focussed thematically or their focus is not defined a priori.
- Raise awareness in third countries about Horizon 2020.
- Support a new activity of mutual benefit to bridge the gap between research and innovation in European Neighbourhood Policy (ENP) countries.

The 2013 activities will build on the experiences and results of previous and ongoing actions of this programme and will take into account and promote complementarities with activities carried out under other EU programmes notably those related to external policies. In line with the Horizon 2020 objectives, this work programme promotes cooperation on innovation activities closer to market and focused on societal challenges:



- Bi-regional and bilateral cooperation activities (INCO-NET, BILAT) will promote cooperation across the whole STI chain in view of fostering the translation of research results into innovative market products and services.
- A new activity targeting ENP countries (R2I-ENP) will specifically address the gap between research and innovation, focusing on improving competences and cooperation between producers and users of knowledge to tackle societal challenges of common interest. This activity will complement INCO-NET and BILAT actions with ENP countries.

More information regarding the upcoming 2013 calls, at :

http://ec.europa.eu/research/participants/portal/page/fp7_documentation



6 European industrial companies in India

6.1 Mapping of European industrial companies in India

While mapping the European Industries, the questions related to type and sector of activities conducted by the European companies, size of business, type of research and innovation were evolved by the project team.

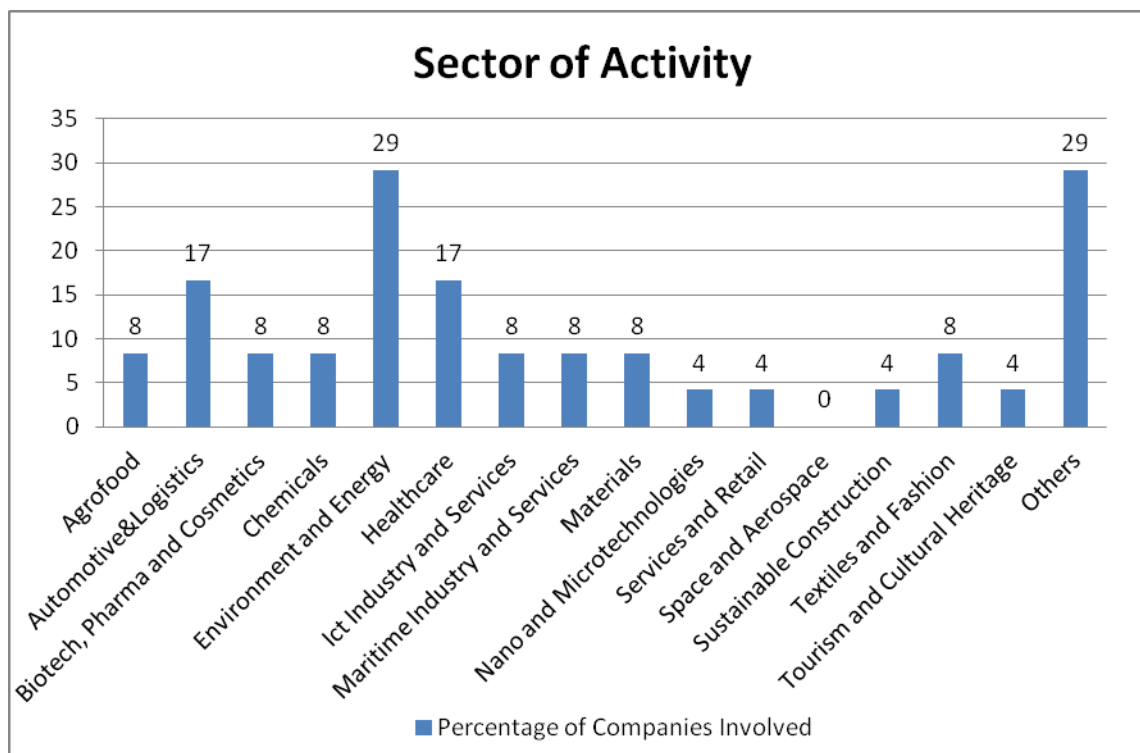
On the basis of the analysis of the data collected through questionnaires, it was found that around 42 per cent companies are involved in industrial production and 46 per cent companies focus on research and development activities. Sales have been identified as the prime activity in which around half of the surveyed companies are involved. There are 17 per cent companies involved in consulting and 13 per cent companies in financial services.

Sector of activities

During the study, it was found that Environment and Energy are the major activities performed by 29 per cent of the companies, followed by 17 per cent companies each involved in a) 'automotive, transport & logistics' and b) healthcare. Each of the sectors namely, Agrofood, Biotech, Pharma and Cosmetics, Chemicals, ICT Industry and Services, Maritime Industry, Materials and Textiles & Fashion comprise 8 per cent of companies. Micro-technologies, Services& Retail, Sustainable construction and Tourism & Cultural Heritage involve 4 per cent of companies each. The companies which come under 'Other' category are involved in infrastructure, manufacturing of equipments, engineering products, education and facility services.



Figure 8 Sector of activity



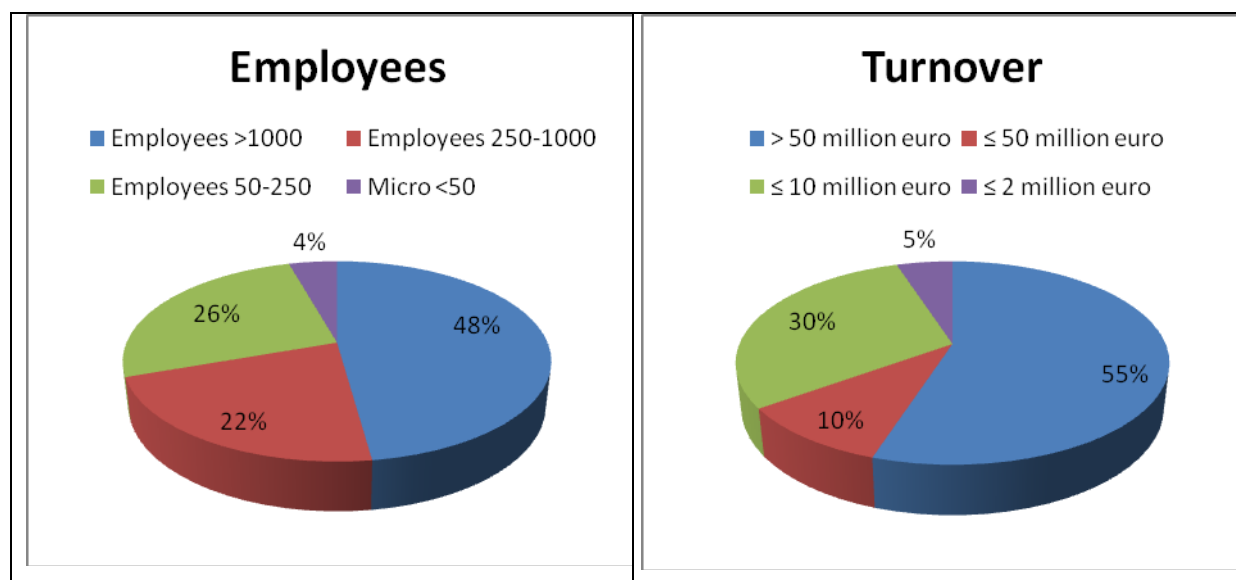
Source: Based on primary analysis

Employees and Turnover

The data was also collected for the categorization of the companies in terms of employees and turnover. There are 48 per cent companies having more than one thousand employees whereas 22 per cent and 26 per cent companies have been found having a range of 250-1000 and 50-250 employees respectively. Only 4 per cent companies are having less than 50 employees in their companies.

While considering the turnover of the companies, 55 per cent companies have the turnover more than 50 million euro, followed by 30 per cent companies which are having a turnover more than 10 million euro. 10 per cent of the companies have a turnover in the range of Euro 10 to 50 million. Only, 5 per cent of the companies have a turnover less than 2 million euro. This is represented in the pie charts below:

Figure 9 Size of Companies in terms of Employees and Turnover



Source: Based on primary analysis

6.2 Reasons/Motivations for establishing EU companies in India

There are multiple reasons which have motivated the companies to move to India. Seeking new markets is the major criteria of 83 per cent companies to move to India and resource seeking is another important issue for 67 per cent of the companies. Efficiency seeking, technology seeking and strategic asset seeking are the issues which were concerned by 29 per cent, 25 per cent and 21 per cent of the companies respectively for moving to India. We have studied the specific reasons behind the European Union companies' movement to India and have also tried to measure the intensity of responses. The summary of these responses are depicted in the table below.

Table 7 Reasons for moving to India

	Not Very important	Slightly Important	Moderately Important	Very Important	Extremely Important
Factors	(percentage of companies)				
Country background and macroeconomic conditions	4	9	26	26	35
Availability of Human resources (Labour Cost)	0	4	9	52	35
Favourable economic conditions	4	0	13	57	26
Sophistication of customer base	4	17	35	39	4
Market size and growth	0	0	13	35	52
Regulation and taxation	9	13	26	30	22

Source: Based on primary analysis

On the comparative analysis of the reasons which motivate the EU companies to come to India, we found that “Market size and growth” has been the key motivator for 30 per cent of the companies, whereas for 20 per cent companies consider “Country’s macroeconomic condition” and “Availability of human resources” as the major thrust for moving to India. “Favourable economic condition” and “Regulation and taxation” galvanize 15 per cent and 13 per cent companies respectively. Sophistication of Customer Base (2.5%) is the least important influencer.

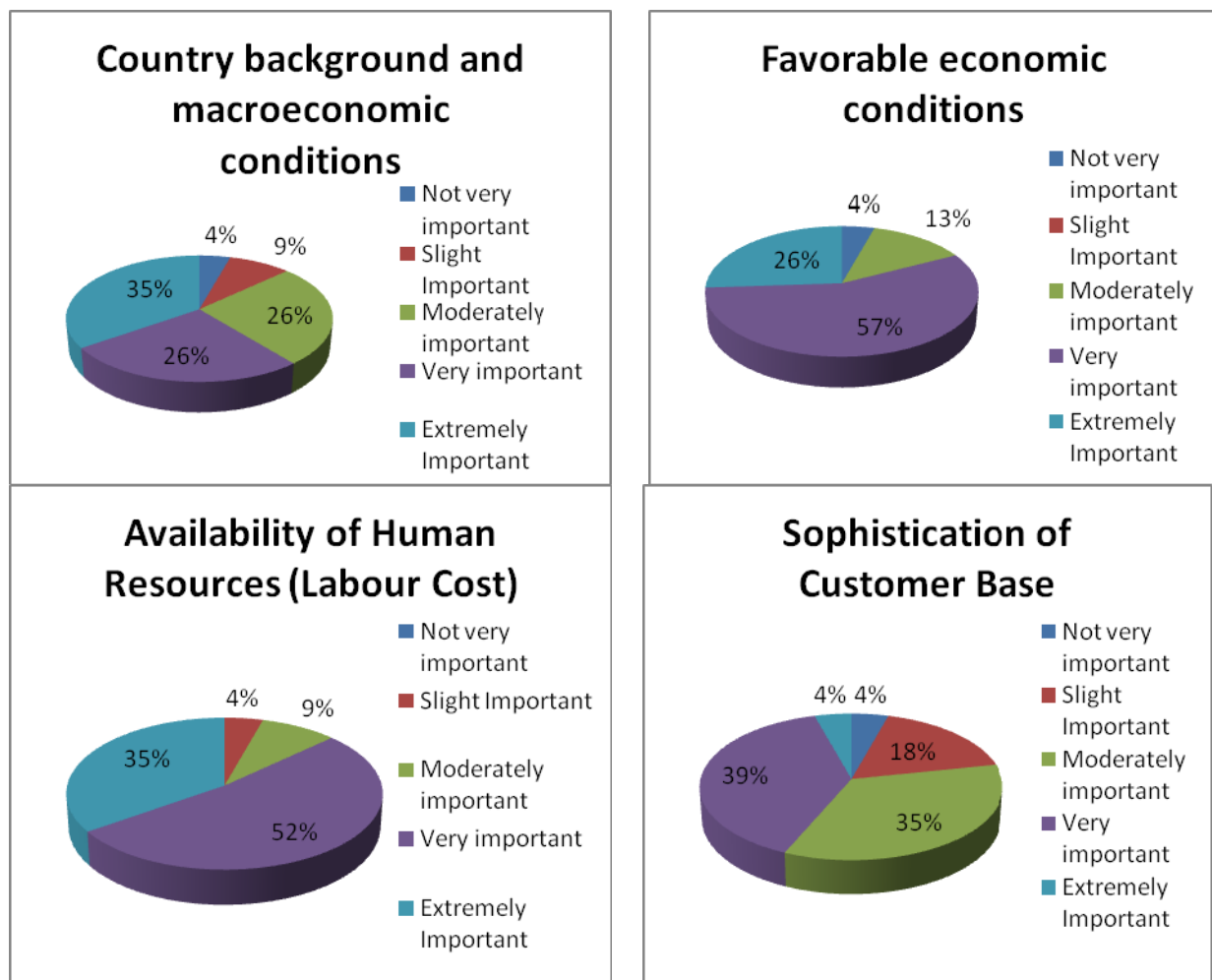
Only half of the surveyed companies responded that they receive government support for their business. Around 76 per cent companies are getting support from their national government as well as Indian government whereas Indian government supports 17 per cent of these companies and same percentage of the companies get support from their national government.

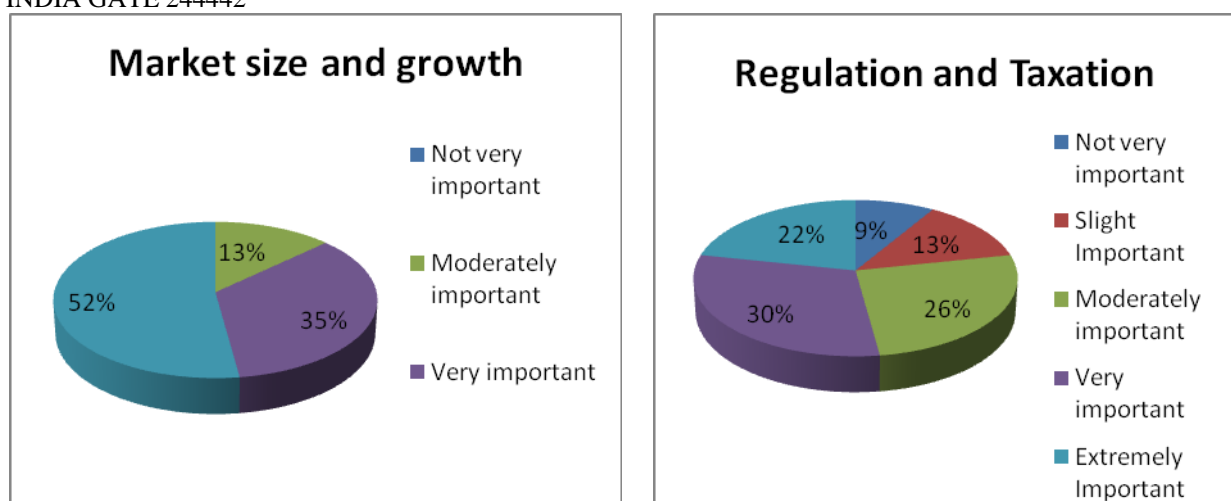
As regards type of cooperation, 40 per cent companies take it from local business in India followed by 30 per cent companies from academia. 17 per cent companies obtain the



cooperation from Public-Private Partnership whereas 13 per cent companies obtain it from other sources.

Figure 10 Factors considered by European companies to go International





Source: Based on primary analysis

6.3 Modalities and difficulties in establishing EU companies in India

Entry options: a general overview

Foreign companies can enter India through different options. The most important are: *Liaison Offices, Branch Offices and Subsidiary Companies*

Liaison Offices

These offices act as a communication channel between the foreign corporations and Indian customers. A liaison office is permitted by the Reserve Bank of India (RBI) to undertake the following activities:

Table 8 Permitted activities for a foreign company – Liaison Offices

- ▶ Representing the parent company/group companies in India
- ▶ Promoting export/import from/to India
- ▶ Promoting technical/financial collaborations between parent/group companies and organizations in India
- ▶ Acting as a communication channel between the parent company and Indian companies

Source: Ernst & Young, India 2010

Branch Offices

Foreign companies may open branch offices to conduct business in India and this process requires a specific approval from the RBI. In fact, a foreign cooperation cannot undertake any activity in India that is not specifically permitted by the RBI. The following table summarizes the activities which are allowed to be undertaken by foreign companies in order to establish their businesses in India.

Table 9 Permitted activities for a foreign company – Branch Offices

<ul style="list-style-type: none">▶ Export/import of goods▶ Rendering professional or consultancy services▶ Carrying out research work in which the parent company is engaged▶ Promoting technical or financial collaboration between Indian companies and the parent or overseas group company▶ Representing the parent company in India and acting as a buying/selling agent in the country▶ Providing IT services and developing software in India▶ Tendering technical support for the products supplied by parent/group companies▶ Undertaking activities for foreign airline/shipping companies
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Source: Ernst & Young, India 2010

It is worth noting that a branch office is not allowed to carry out trading, manufacturing activities (except within Special Economic Zones - SEZs) or processing activities in India. Typically, branch offices are allowed to be set up in SEZs to conduct manufacturing and service activities in India without any particular approval from RBI.

Subsidiary Companies

Foreign corporations can set up wholly owned subsidiary companies in India in the form of private companies. The subsidiary company, incorporated under the Indian laws, is treated as a domestic business for tax purposes.



An analytical comparison among these entry modes is illustrated in the following table, which might be of great importance in the decision-making process of any company who intends to expand in India.

Table 10 Entry options in India: A comparative summary

Particulars	Liaison office	Project office/ Branch office	Subsidiary/Joint venture
Setting up requirements	Prior approval of RBI (except in the case of insurance companies)	Prior approval of RBI for branches (other than SEZs) Prior approval not required to set up project office if certain conditions are fulfilled	If activities/sectors fall under the ambit of the automatic route, no prior approval but only post facto filings with RBI required Otherwise, government/FIPB approval and thereafter compliance with post facto filings required
Permitted activities	Only liaison/representation/communication role permitted No commercial or business activities allowed to be undertaken	Activities listed/ permitted by RBI allowed to be undertaken Manufacturing, (except in SEZ units) not permitted	Any activity specified in the memorandum of association of the company Wide range of activities permitted, subject to FDI guidelines
Funding of local operations	Local expenses to be met out of inward remittances received from abroad from Head Office through normal banking channels	Local expenses to be met through inward remittances from Head Office or from earnings from permitted operations	Funding to be through equity or other forms of permitted capital infusion or borrowings (local as well as overseas as per prescribed norms) or internal accruals
Limitation of liability	Unlimited liability	Unlimited liability	Liability limited to the extent of equity participation in the Indian company
Compliance requirements under Companies Act	Registration and periodical filing of accounts/other documents required	Registration and periodical filing of accounts/other documents required	Compliance needed with substantial higher statutory compliance and filing requirements

Compliance requirements under foreign exchange management regulations	Required to file an annual compliance certificate (from auditors in India) with RBI	Required to file an annual activity/ compliance certificate (from auditors in India) with RBI	Required to file periodic and annual filings relating to receipt of capital and issue of shares to foreign investors
Compliance requirements under IT Act	Generally, no tax liability, since it cannot carry out any commercial or income earning activities May be advisable to file an IT return	Company obliged to pay tax on income earned and required to file returns of income in India No further tax on repatriation of profits, which are permissible in both cases, required	Liable to be taxed on global income on a net basis Dividend declared freely remittable but subject to distribution tax of 16.995% on dividends declared/distributed/ paid, pursuant to which dividend is tax free for all shareholders – limited inter-corporate dividend setoff applicable
Permanent Establishment (PE)	LOs generally not having PE/taxable presence under Double Taxation Avoidance Agreements (DTAA) due to limited scope of activities in India	Generally constituting a PE and being a taxable presence under DTAA and domestic IT provisions	An independent taxable entity and not a PE of the foreign company unless it is subject to the provisions of the DTAA

Source: Ernst & Young, India 2010

As a part of the study, effort was made to assess the trading activities, business models and investment-related activities of European Union companies operated in India. Questions on these aspects were asked and around 90 per cent companies responded about the activities.

After analysing the data, it was found that around 43 per cent companies are involved in trade activities whereas 38 per cent companies are going for direct export. Only 19 per cent companies are found to be involved in indirect export.

Only 65 per cent companies shared their business models. Out of these 65 per cent companies, 47 per cent are adopting contractual model followed by 20 per cent companies which have adopted the turn-key model. Licensing model is used by 13 per cent of the companies and same per cent of companies are using franchising mode. 7 per cent of these companies follow Management Contracting model.

On the issue of investment, 35 per cent of the companies have gone equity based FDI. 26 per cent companies have adopted Joint Venture, and another 26 per cent are following



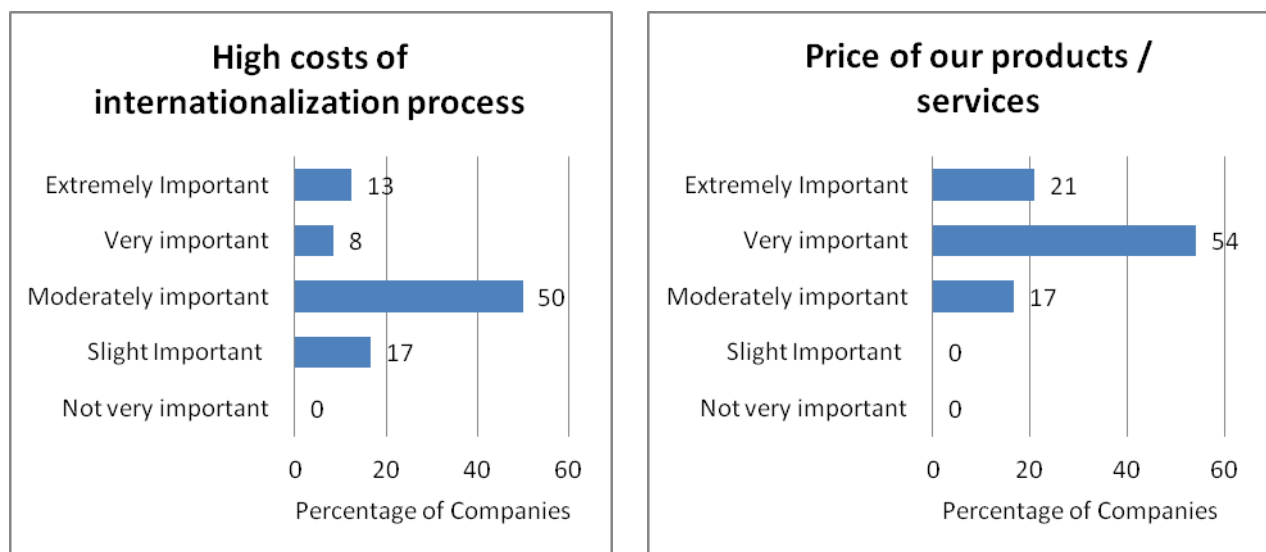
Greenfield approach. Only 13 per cent companies opted Merger and Acquisition strategy for their business.

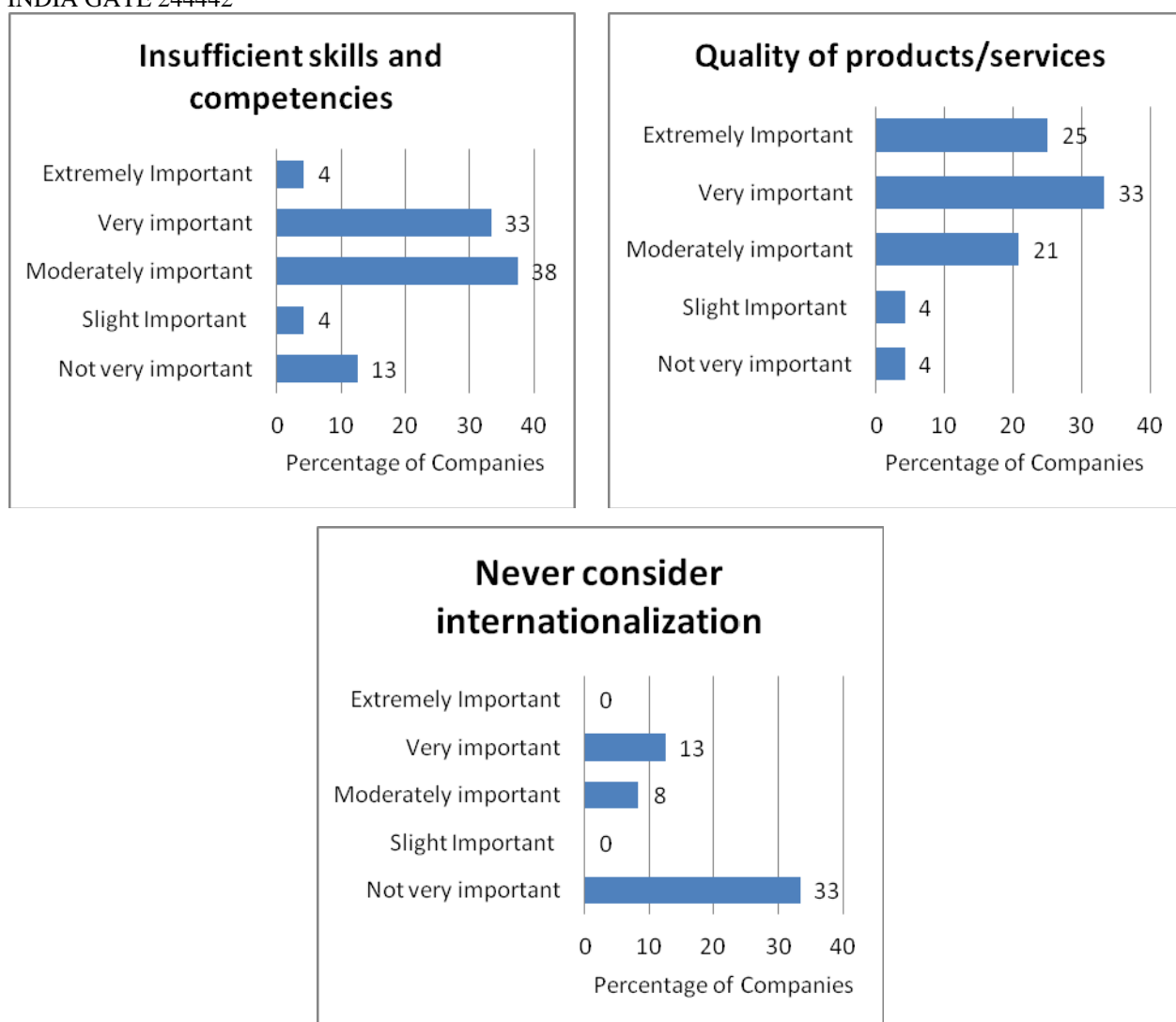
Problems Faced

Data regarding various types of problems faced by European Union companies has been collected on the rating scale to study the seriousness of the different problems.

High Cost of internationalization process, Price of Products/ services, Insufficient skills and competencies, Quality of products/ services and Consideration for going international are some of the internal problems faced by the companies. To understand the seriousness of these problems, the responses were taken on the 5 point Likert scale from extremely important (5) ----- not very important (1). The results are shown in the charts below:

Figure 11 Internal Problems Faced by the companies





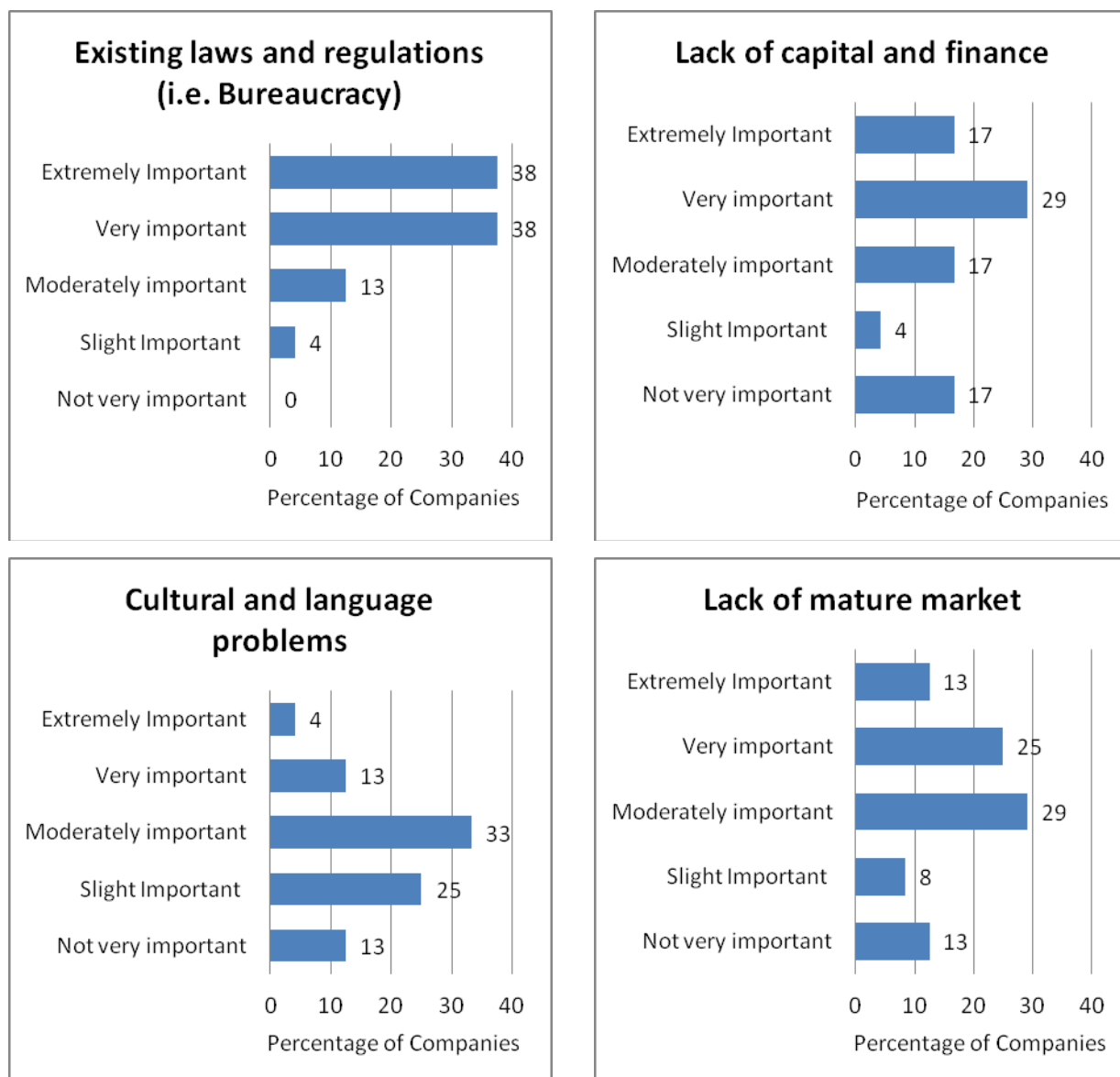
Source: Based on primary analysis

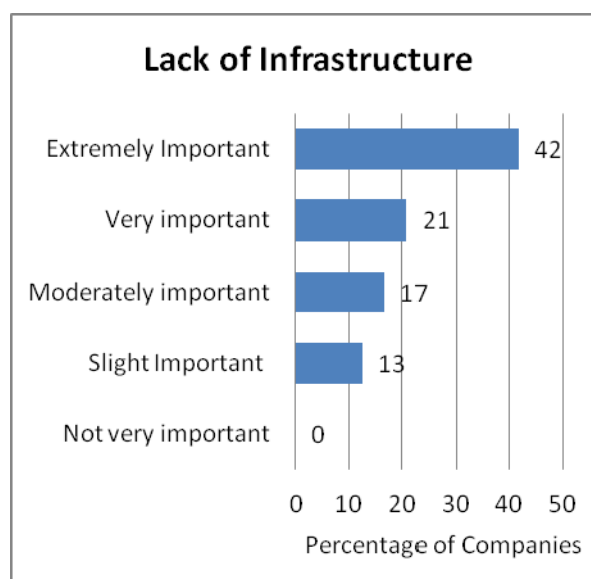
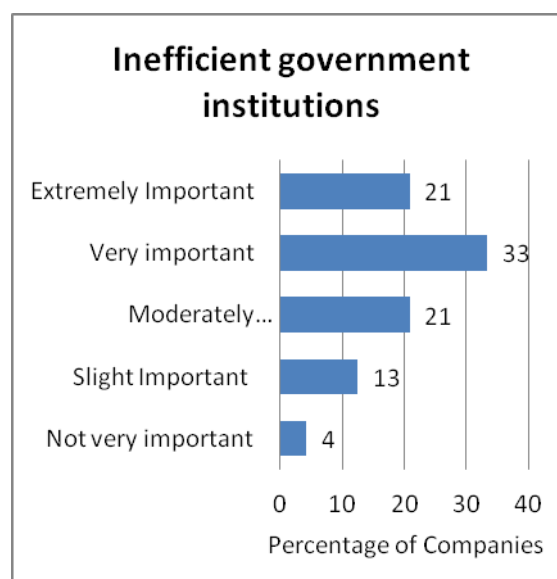
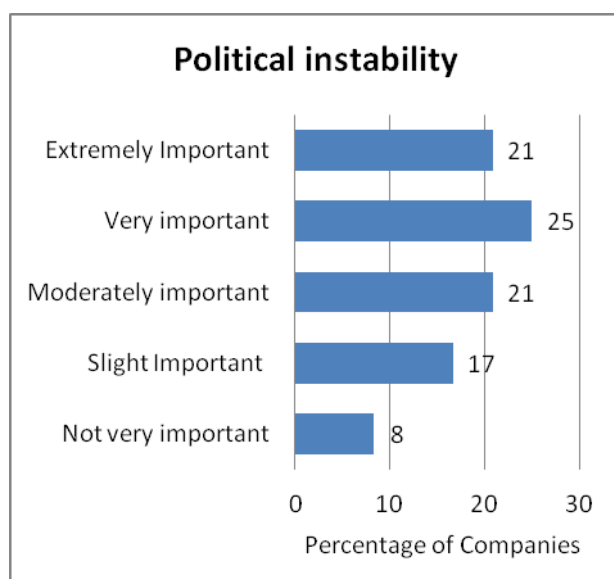
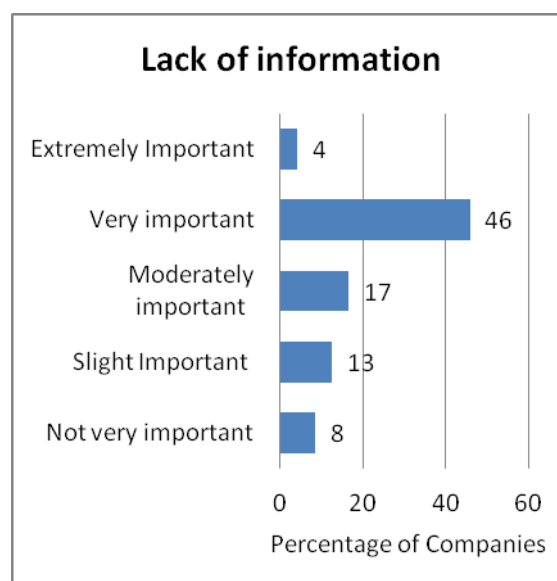
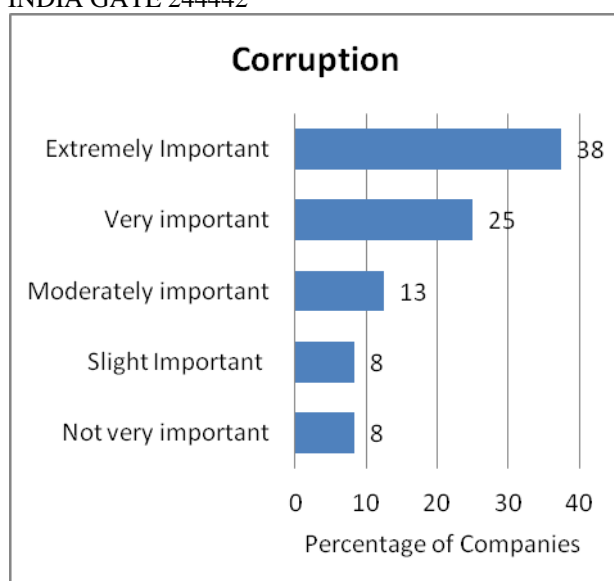
On analyzing the results, it is found that Quality of products/ services is the most serious internal problem with 40% of the responding companies find it most important, while 33% of the companies feel that Prices of products/ services is a problem. 31% felt that High cost of internationalization is a issue and only 6% felt that availability of Insufficient skills and competencies is a problem.

Besides internal problems, companies are also facing some external problems in the expansion of their business like Existing Laws and Regulation, Corruption, Lack of Infrastructure, Lack of Capital and Finance, Lack of information, Political instability, Lack of mature market, Cultural and language problems and Inefficient government institutions. Each of these problems were rated by the companies on the 5 point rating scale, rating each

problem from Extremely important (5) ----not very important(1). The results of the responses are shown in the graphs below:

Figure 12 External Problems Faced by the companies





Source: Based on primary analysis

On analyzing the responses, it is found that the EU companies found Lack of Infrastructure (20%), Existing Laws and regulations (19%) and Corruption (19%) as the biggest problems while working in India. Lack of Information (2%) and Cultural and Language problem (2%) are the least faced challenges.



7 Best practices









There are many European companies that have been successfully running their businesses in India. According to a study made by Boston Consulting Group in collaboration with Confederation of Indian Industries (2004), the following 10 tips for success in India have been recognised:

1. View India as a key focus area
2. Formulate bold, long term targets that drive decision making
3. Create processes that accelerate the integration as well as localisation of organisation
4. “Change the rules” regarding global metrics, standards to meet market challenges
5. Build for the long term in India regarding people, HR practices and relationship with external stakeholders
6. Define a value-added role for the country management
7. Establish local team credibility
8. Leverage India opportunities beyond the product market
9. Localise the value chain, based on scale and complexity trade-offs
10. Formulate India-specific business model strategies (product, value, pricing)

The following table summarizes some of the companies, which were able to capture substantial market share through market-customized strategies, introduce industry altering innovations, exhibit strong financial performance, and also use India to derive additional value for their organizations. These companies have recognized the tremendous potential India has to offer as a sizeable, growing market and a sourcing point for global competitive advantage, and view India as a great business opportunity.



Table 11 Successful European companies in India

Company example	Industry standing and industry altering innovations...	...strong performance indicators...	...and leveraging India for global business
	<ul style="list-style-type: none"> Providing the full range of banking products in India; Created special online offerings for Indian clients 	<ul style="list-style-type: none"> Achieving 45% sales growth and 70% growth in consumer banking See India as 4th major 'home' market for the group 	<ul style="list-style-type: none"> Reached significant cost savings through BPO Expanding to serve the BPO needs of other financial institutions
	<ul style="list-style-type: none"> Cutting edge products and solutions available in India 8 local manufacturing units and countrywide marketing and service presence 	<ul style="list-style-type: none"> 1,200 Cr. in sales in 2002 Over 20% revenue growth and over 30% profitability enhancement in 2003 Top performing share price 	<ul style="list-style-type: none"> First IT centre outside EU & US in India Significant export of products, solutions and services from India
	<ul style="list-style-type: none"> The industry leader in the chocolates and confectionary market Multiple innovations across products, price and packaging 	<ul style="list-style-type: none"> ~850 Cr. in sales Holds a 70% value share of the chocolate market Achieved growth of ~30% in both revenues and profitability during the 90's 	<ul style="list-style-type: none"> Exporting both finished goods and innovative concepts to Cadbury around the world
	<ul style="list-style-type: none"> Introducing the latest telecom technologies to India Transferred their full product range enabling end to end communication solutions 	<ul style="list-style-type: none"> Market share of 40% of connected subscribers on its systems Supplied 50% of mobile network systems in India 	<ul style="list-style-type: none"> Project 'Next Billion': Collaborating with Wipro to develop infrastructure and services in India for mobile networks in emerging markets across the globe
	<ul style="list-style-type: none"> Ranked as #1 pharma company in India Built a superior sales force and distribution network – currently used in joint marketing agreements 	<ul style="list-style-type: none"> Over 1,100Cr. sales and 128Cr. profits in 2002 Gearing up for significant growth post 2005 	<ul style="list-style-type: none"> Plans in place to develop India as R&D center, statistical & data management, sourcing for raw materials, and clinical trials
	<ul style="list-style-type: none"> Introducing superior engine technology, new 3 and 4 wheeler models, and innovative customized solutions to India 	<ul style="list-style-type: none"> Turned operation around to become profitable 1.5 years after initiating independent operations in India 	<ul style="list-style-type: none"> Plans to make India global hub for 3 wheeler mfg. and the launching pad for global expansion Planning components exports to the EU
	<ul style="list-style-type: none"> New technology and design expertise introduced to India Developed special products tailored to Indian market requirements 	<ul style="list-style-type: none"> Turnover of ~500Cr. Investing over 300Cr. in expanding capacity to satisfy expected global demand 	<ul style="list-style-type: none"> Have built an export business for both tractors and components Plan to increase exports 6 fold to 6000 units in 3 yrs
	<ul style="list-style-type: none"> Created and grew segments in the confectionary market from the ground up (especially deposited candy) 	<ul style="list-style-type: none"> Turnover of 350Cr.; growing 30-40% annually India is one of the top performing units for organization 	<ul style="list-style-type: none"> Exporting creative talent, innovation and ideas Local advertising is being used in other markets

Source: The Boston Consulting Group, 2004

8 Future opportunities and challenges for the EU industry

Opportunities

India presents a remarkable business opportunity by virtue of its sheer size and growth. Boston Consulting Group has identified the domestic market opportunity as well as the off shoring opportunity. These are presented as follows:

The domestic market opportunity

India's vast population is increasing its purchasing power

- While ~50% of the population was classified in the low-income bracket³ in 1994-5, this proportion is rapidly declining
- There is a rapid shift from the low-middle classes to the burgeoning middle class, and an even faster increase in the sizes of the high and upper middle class, fuelling growth in the economy
- Even more pronounced is the growth of a niche 'super-rich' class, now estimated to comprise of over 100,000 households with net worth of >\$1 mn each.

The growing size of the middle and higher consumer classes with increased income and paying capacity has spurred an increase in consumerism and brand consciousness

- Companies have been taking advantage of dramatic growth in such consumer markets as automobiles, motorcycles, computers, durable goods, and cellular communication – all exhibiting compounded annual growth rates (CAGR) of 6%-29% from 1996 to 2011(estimated).
- The domestic market opportunity will further be boosted by a likely increase in propensity to spend and by the growing consumption by the young generation in India.



The off shoring opportunity

- Off shoring provides a fast growing and increasingly important opportunity for MNCs. It is mainly derived from India's largest asset – its people. India is the largest English-speaking nation in the world with the second largest pool of scientists and engineers.
- Companies are able to realize significant cost savings by utilizing the highly qualified labor force at attractive rates, and translate this into an important competitive advantage.
- Many companies are seeking India for the superior management and technical talent base that it offers. Over 100 multinational businesses have set up R&D facilities in India and many have placed Indian talent in key positions in their organizations both locally and globally.
- India is considered a low cost leader in such areas as steel and metals and a regional base for the high quality production of some manufactured goods such as automotive components, engineering equipment, power equipment, and medical systems.



9 Conclusions

Taking into consideration the results of the analysis we can conclude on the following points:

- Around 42 per cent companies are involved in industrial production and 46 per cent companies focus on research and development activities. Sales have been identified as the prime activity in which around half of the surveyed companies are involved.
- 'Environment and Energy' are the major activities performed by 29 per cent of the European Companies, followed by 'automotive, transport & logistics' and 'healthcare' which involve 17 per cent companies in each.
- 48 per cent European Companies are found having more than 1000 employees and 55 per cent European Companies are having turnover more than 50 million Euro.
- Availability of talent pool on cheaper cost, low cost of resources, proximity to the customers and market are the major attraction for European Companies to establish their research and development centres in India.
- Product Development and Product Based Innovation have been the major issue behind adopting the research and development activities in India.
- Seeking new markets is the major criteria of 83 per cent European Companies to move to India and resource seeking is another important issue for 67 per cent of the companies.
- Around 43 per cent European Companies are involved in trade activities whereas 38 per cent European Companies are wrapped in direct export.
- 47 per cent are adopting contractual model followed by 20 per cent European Companies which have adopted the turn-key model.
- 35 per cent of the European Companies are the recipient of equity based FDI. 26 per cent European Companies have adopted Joint Venture, and another 26 per cent are following Greenfield approach.



- Quality of product and price of product are found internal problem which should be addressed effectively whereas Existing laws and regulations, Corruption, Political Instability and Insufficient government institutions are the external problems which have been confronted by the European Companies.



10 Bibliography

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Knowledgefaber (2009), *Complete Telecom Products-Made in India?*

Ministry of Commerce and Industry (2010), *Intellectual Property India, Annual report 2009-10*, India

Pandey V. (2006), *Impact assessment of the Scientific and Technological Cooperation Agreement concluded between the European Community and the Government of the Republic of India*

The Boston Consulting Group (2004), *Ten Tips from Successful European Companies in India*

The European Network of Innovation Agencies (2011), *Innovation Hot Spots in India*



11 Appendices

Table 12 Indian S&T System: Key players

Organization	Activity	URL
Council of Scientific and Industrial Research (CSIR)	CSIR is a premier industrial autonomous R&D organization. It gives a view on industrial competitiveness, social welfare, strong S&T base for strategic sectors and advancement of fundamental knowledge	http://www.csir.res.in
Department of Atomic Energy (DAE)	DAE is an independent department under central government. It informs about all the units/labs of atomic energy in India	http://www.dae.gov.in
Department of Biotechnology (DBT)	DBT website informs on the development of modern biology and biotechnology in India and also about the major R&D projects and several national and international programmes	http://dbtindia.nic.in
Department of Space (DOS)	DOS is an independent department under central government that informs about the development and applications of space technology and space science for the socio-economic benefits of the nation	http://www.sac.gov.in/dos.html
Department of Telecommunication (DOT)	DOT briefs about the research and development under telecommunication, international cooperation and private investments in telecommunication	http://www.dot.gov.in
Department of Science and Technology (DST)	DST website gives a detailed overview of the S&T activities in the country, technology development programmes relating to key sectors and development of international cooperation in S&T	http://www.dst.gov.in
Department of Scientific and Industrial Research (DSIR)	DSIR acts as a platform to promote research in industry and supports scientific laboratories and facilitates the transfer of technology between various stakeholders	http://www.dsir.gov.in
Indian Council of Agricultural Research (ICAR)	ICAR is an autonomous organisation. It guides and manages research and education in agriculture including horticulture, fisheries and animal sciences	http://www.icar.org.in
Indian Council of Medical Research (ICMR)	ICMR informs on the latest biomedical research and technological development through various research programmes	http://www.icmr.nic.in
Ministry of Communications and Information Technology (MOCIT) & Department of Information Technology (DIT)	The website provides information about latest projects and schemes undertaken in R&D under various aspects of information technology including research efforts in electronics and related fields	http://www.mit.gov.in
Ministry of Environment and Forests (MOEF)	MOEF informs about the promotion of environmental and forestry research, international cooperation and creation of environmental awareness	http://moef.nic.in/index.php
Ministry of Earth	This site creates awareness of the atmospheric,	http://www.dod.nic.in



Sciences (MoES) & Department of Ocean Development (DOD)	oceanic and seismic regime & provides information about development of technology and technological aids for harnessing of resources	
Ministry of Food Processing Industries (MFPI)	This site acts as a catalyst for guiding the industry, encouraging exports and creating conducive environment for healthy growth of the food processing industry	http://www.mofpi.nic.in
Ministry of Non-Conventional Energy Sources (MNES)/ Ministry of Renewable Energy (MNRE)	The website gives an overview about the functions relating to all aspects of renewable energy and also promotes national and international programmes in renewable energy	http://mnre.gov.in

Source: Access4EU, 2012



Questionnaire

Investigating the presence and research & innovation activities of European industry based in India



As recent studies show, India has become one of the top destinations for European enterprises traditionally thought to be shy of sending their operations to the country. Indeed, it is expected that the number of European enterprises migrating to India will increase in the next years, as well as the spending of those already in India will increase to further boost their local operations.

This questionnaire is designed in such a way to investigate the presence and research and innovation activities of the European industry based in India. Moreover to identify the various modalities of establishing themselves in India (type of industries, geographical factors, government support, and investments made) as well as the foreseen impact of their establishment in relation to technology development.

1. Brief details about your company/organization

1.1. Name of Organisation

1.2. Website of Organisation

1.3. Address

1.4. Name of CEO in India or the person to be contacted



.....

1.5. E-mail of CEO in India

1.6. Phone number of CEO in India

2. Mapping of European Industries

2.1. Origin of the business? Country:

2.2. Type of activity

- ☐ Industrial production
- ☐ Sales
- ☐ Consulting
- ☐ Financial services
- ☐ Specify the Product, area etc
- ☐ Research and Development

2.3. Sector of activity

- ☐ Agrofood
- ☐ Automotive, Transport and Logistics
- ☐ Biotech, Pharma and Cosmetics
- ☐ Chemicals
- ☐ Environment, Energy
- ☐ Healthcare
- ☐ ICT Industry and Services
- ☐ Maritime Industry and Services
- ☐ Materials
- ☐ Nano- and Microtechnologies
- ☐ Services and Retail
- ☐ Space and Aerospace
- ☐ Sustainable Construction
- ☐ Textile & Fashion
- ☐ Tourism and Cultural Heritage



☐ Other

2.4. Size of business

Enterprise category	Number of employees		Turnover	
Large	>1000	<input type="checkbox"/>	>€ 50 million	<input type="checkbox"/>
medium-sized	250 - 1000	<input type="checkbox"/>	≤ € 50 million	<input type="checkbox"/>
small	50 - 250	<input type="checkbox"/>	≤ € 10 million	<input type="checkbox"/>
micro	< 50	<input type="checkbox"/>	≤ € 2 million	<input type="checkbox"/>

2.5. Annual expenditure on Research and Development:

.....

2.6. Research and Development activities in India: Yes ☐ / No ☐

- ☐ Basic/Pure Research
- ☐ Applied Research
- ☐ Product Development
- ☐ Process Development²

2.7 Which kind of R&D activities you are involved in?

- ☐ Clinical trial
- ☐ Prototype Development/testing
- ☐ Market testing
- ☐ Quality improvement project (for example Six Sigma)
- ☐ Technology Demonstration
- ☐ Pilot application

If no continue to question 2.10 / If yes,

² *Basic research* is original experimental work without a specific commercial aim, frequently done by universities. *Applied research* is original experimental work with a specific aim. *Product development* is the improvement and extension of existing products. *Process development* is the creation of new or improved processes.

UNCTAD., & Expert Meeting on the Impact of FDI on Development (2005 : Geneva). (2005). *Globalization of R&D and developing countries: Proceedings of the Expert Meeting, Geneva, 24-26 January 2005*. New York: UN.



2.8 Reasons for establishing Research and Development activities in India:

.....

.....

.....

.....

2.9 Have any new technologies (innovations) come out of the Research and Development activities in India?

.....

.....

.....

.....

2.10 Type of Innovation?

- ☐ Product based innovation
- ☐ Process based innovation
- ☐ Management and organizational innovation

2.11 Business Geographical area covered in India

- ☐ Regional
- ☐ National
- ☐ International

Name of the city/Region where your office are located:

.....

3. Reasons for moving to India

3.1. Main reason to go international

- ☐ Resource seeking
- ☐ Market seeking
- ☐ Efficiency seeking
- ☐ Strategic asset seeking
- ☐ Technology seeking

3.2. Factors to consider to go international



Rate the following questions on the rank of 1 to 5 (1 = Not very important, 2=Slightly important, 3=Moderately important, 4=Very important, 5=Extremely important)

	1 = Not very important	2=Slightly important	3=Moderately important	4=Very important	5=Extremely important
Country background and macroeconomic conditions					
Availability of Human resources (Labour Cost)					
Favorable economic conditions					
Sophistication of customer base					
Market size and growth					
Regulation and taxation					

3.3. Governmental support: Yes ☐ / No ☐

if yes,

- ☐ National
- ☐ Indian
- ☐ Both

3.4. Type of cooperation

- ☐ PPP
- ☐ Cooperation with local business
- ☐ Cooperation with academia
- ☐ Other



4. Market entry modes

- 4.1. ☐ Trade
- ☐ Indirect export
☐ Direct export
- 4.2. ☐ Contractual
- ☐ Licensing
☐ Franchising
☐ Turnkey
☐ Management contracting
- 4.3. ☐ Equity-based FDI
- ☐ Joint venture (JV)
☐ Greenfield
☐ Merger & Acquisition (M&A)

5. Problems faced

Rate the following options on the rank of 1 to 5 (1 = Not very important, 2=Slightly important, 3=Moderately important, 4=Very important, 5=Extremely important)

5.1. Internal

	1 = Not very important	2=Slightly important	3=Moderately important	4=Very important	5=Extremely important
High costs of internationalization process					
Price of our products / services					
Insufficient skills and competencies					
Quality of products/services					
Never consider internationalization					



5.2. External

	1 = Not very important	2=Slightly important	3=Moderately important	4=Very important	5=Extremely important
Existing laws and regulations (i.e. Bureaucracy)					
Lack of capital and finance					
Cultural and language problems					
Lack of mature market					
Corruption					
Lack of information					
Political instability					
Inefficient government institutions					
Lack of Infrastructure					

End of questionnaire



S.No.	Name of Company	Country
1	AF Compressors India	Belgium
2	Foss India Private Ltd.	Denmark
3	ISS Facility Services	Denmark
4	Dalhof Larsen & Horneman	Denmark
5	DHI Water and Environment	Denmark
6	Danfoss Industries Pvt. Ltd.	Denmark
7	Initto Technologies	Denmark
8	Novozymes	Denmark
9	Degremont	France
10	STM Electronics	France
11	SAP	Germany
12	Bucher	Germany
13	Siemens AG	Germany
14	New Holland Fiat	Italy
15	Isolux Corsan	Spain
16	Ericsson	Sweden
17	Starrag India Pvt. Ltd.	Switzerland
18	Cambridge University	UK
19	Sannamsu	UK
20	Wienerberger India Private Ltd.	Austria
21	Tesco	UK
22	Philips	Netherlands
23	Ognibene	Italy
24	Akzonobel	Netherlands

Table 13 List of the European companies which have sent the response

