

LocoMotive



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LOCOMOTIVE

“Dissemination of knowledge concerning current R&D localisation motives of large regionally important private sector organizations”

Coordination Action

Regions of Knowledge 2

Proceedings of Final LOCOMOTIVE Conference

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Managing the Links

Global Trends and Regional Policies in R&D Location

- Hamburg, 5-6 June 2007 -

With the Lisbon Strategy, the European Union shows its desire to become the most dynamic and competitive knowledge-based economy in the world by 2010. The EU member states have committed themselves to increase substantially their R&D expenditure, especially through private sector investment. To achieve this objective, many actions are required. Improving collaboration between all the innovation stakeholders and knowledge transfer between public research and industry is vital to enhancing Europe's economy. Furthermore, Europe needs to tackle the competition faced from the attractiveness of some developing countries as not only a location to do business and profit from rapidly expanding markets, but as a place to locate research. Europe has to show its capacity to retain and to attract multinational investment in research.

The LOCOMOTIVE project was set up under the Framework 6 Programme "Regions of Knowledge" to address some of these issues by looking at these from a regional perspective. It provided a framework for interviews to be conducted with Chief Technology Officers/R&D Directors of industrial multi-nationals with activities located in the regions of the partners to tease out their perceptions of what regional policy makers could do to improve the attractiveness of a region as a location for research. These were then complemented by regional roundtable sessions bringing together leading representatives of academia, the multi-nationals and regional authorities. The findings of these and the interviews is has been compared with research undertaken by the academic partners in the project.

The aim of the *LOCOMOTIVE Conference “Managing the Links: Global Trends and Regional Policies in R&D Location”* held in Hamburg 5-6 June, 2007 was to provide an opportunity for a wider discussion of some of the issues. The conference brought together speakers from industrial multi-nationals, academia, regional authorities and those involved in working with these. The objective of the conference was to allow dialogue and exchange of points of view between all actors engaged in the knowledge-based economy and to reflect on the way we work together.

This short report attempts to capture in a summarised form what was presented and discussed at the conference to allow readers at least a taste of the issues raised. The presentations and further information and findings of the project are available from the web site www.locomotive-project.org. Further information may be obtained from the coordinator of the project **TuTech Innovation** by email locomotive@tutech.de.

As a conclusion it can be said that the project and the conference could only scratch the surface. Much more dialogue is necessary if European universities, regional authorities and other local actors are to become more effective in ensuring Europe remains attractive as a base to do research and thereby attract investment to exploit knowledge. The response to the invitation to the conference which was targeted at regional policy makers, showed that more needs to be done to convey an understanding of the bigger picture and raise the level of interest. There is still a tendency to prioritise resources to regional self-promotion rather than to understanding the true underlying issues. As was pointed out in the introduction to the conference, there are many regions which claim world leading clusters in Information and Communication and bio technologies apparently oblivious to how the regional strengths might appear from a global viewpoint. The fixation of EU and regional policies on the role of small and medium enterprises (SMEs) has perhaps overlooked the importance of engaging with multi-nationals (MNEs) at a regional level. These are hugely important to the economy not only as employers, but as entities which are able to support longer term knowledge creation and above all exploitation on a global scale. In this way they act as vital hubs in the context of both the global and regional economy and provide SMEs with opportunities to grow as suppliers of innovation and services. But they also act as important sources of information about what is going on in other regions from which regional policy makers could profit.

The paradigm of Open Innovation provides new opportunities for all who can engage with people working in different contexts at both a regional and global level. LOCOMOTIVE has highlighted some of the issues to be addressed by policy makers if their policies are to be effective. It has also opened up channels of communication between the partners and companies interviewed and provided a means for cross communication between regions. Since the conference, these links have continued. It is the engagement and willingness of people to work together that is of lasting value.

The organisers of the conference would like to thank all those who took part for their willingness to enter the dialogue, express well founded and qualified opinions and contribute in other ways to what was a highly rated event.

Programme

Day 1 - Industrial perspectives and the changing role of universities

<i>Opening and introduction</i>	
09:30-09:45	<i>Opening and welcome</i> Reinhardt Stuth, Director Senatskanzlei (Mayor's Office), Free and Hanseatic City of Hamburg
09:45-10:15	<i>The LOCOMOTIVE Project</i> Monica Schofield, LOCOMOTIVE Project Coordinator
<i>Research and innovation in Europe: threats and opportunities</i>	
10:15-11:00	<i>Enabling Europe to Innovate</i> Andrew Dearing, General Secretary European Industrial Managers Association (EIRMA)
11:00-11:45	<i>The role of multi-nationals in regions</i> Rob van Tulder, Professor Erasmus University Business School
12:00-13:30	Lunch
<i>Can Europe compete as a research location? Some views from industry</i>	
13:30-13:55	<i>The Good and The Bad ... A Global Perspective of Europe R&D</i> Carlos Orzoco, Dow Chemicals Global R&D Director for Performance Plastics and Chemicals
13:55-14:20	Francisco Escarti, Director General, Boeing Research and Technology Europe
14:20-14:45	<i>Why Indians invest in Europe</i> Risto Niva CEO Wipro Technologies-Wireless Solutions
14:45-15:15	Coffee
<i>Advancing the role of universities as partners for innovation</i>	
15:15-15:45	<i>Innovation Systems and Culture in Oxford University</i> Mark Mawhinney, General Manager ISIS Enterprise, Oxford University
15:45-16:15	<i>E-learning: an opportunity or a threat for regionally based inter-working between universities and industry</i> John Slater, Professor Institute of Educational Technology at the UK Open University
16:15-16:45	<i>Merging the boundaries between science and innovation: The Biocatalysts 2021cluster Initiative</i> Dr Helmut Thamer, CEO TuTech and Hamburg Innovation
16:45-17:45	<i>Panel debate: What can regions do to attract researchers and research investment?</i> Moderation: Mary Lisbeth D'Amico, Journalist
19:00-	Cocktails and networking dinner at the Museum für Völkerkunde (Museum of Ethnology)

Programme

Day 2 - Creating regional policies for global links

Creation of regional brands to support research clusters:	
09:30-10:00	<i>The Toulouse Cancerpole : an example of public/private diversification strategy based on R&D</i> Cécile Chicoye, Director of the Association Cancéropôle, Toulouse
10:00-10:30	<i>Promoting R&D Development in the Czech Republic</i> Jiri Krechl, Director of R&D Support Department CzechInvest
10:30-11:00	<i>Establishing a reputation as a region for innovation: practical experiences</i> Tatu Laurila, CEO Greater Helsinki Promotion Ltd.
11:00-11:30	Coffee
New approaches to inward investment promotion in Europe, North America and Asia.	
11:30-13:00	<i>Panel discussion : Shaping Innovation Environments by opening innovative markets, partnerships and unique knowledge resources.</i> Moderation & Introduction: Christer Asplund, Interlace-Invent ApS and former Managing Director Stockholm Economic Development Agency <i>Shanghai Biomedical Centre and Hongkong Shipping Services Cluster: Two examples of inner city investment environments.</i> Sascha Haselmayer, Interlace-Invent ApS <i>22 @Barcelona: Shaping an Urban Innovation District,</i> Sergi Guillot, Director Corporate Development 22@Barcelona S.A. <i>Supporting Regional Innovation in Toronto</i> Jen Nelles, Research Assistant Munk Centre for International Studies, University of Toronto
13:00-14:00	Networking lunch
From policy to action: EU initiatives in support of using research and innovation as part of regional development	
14:00-14:30	<i>European Initiatives in support of regional development</i> Robert-Jan Smits, European Commission Directorate-General for Research
14:30-15:15	<i>Summary & Conclusions</i> Helen Lawton Smith, Oxford Economic Observatory Fabienne Fortanier, University of Amsterdam
15:30	Close

Day 1:

Industrial perspectives and the changing role of universities

Research and innovation in Europe : threats and opportunities

“Closed innovation is obsolete...” »

Andrew Dearing reminded us that the concerns and priorities of firms are completely different from those of political decision makers. For a company, R&D investment is made in order to increase profits. Today, companies recognise that they belong to a network and they realise that partnership is essential to innovate. Consequently, it is very important for the European Union to create an environment that promotes open innovation, by creating technology platforms, promoting technological transfers between actors, and creating efficient innovative ecosystems. Open innovation implies lots of challenges in terms of organisation of the business environment.

In this context, multinational firms, which play a very important role in the new economy, have not all chosen open innovation. If closed innovation is obsolete, even impossible today, open innovation is not necessarily the best way.

Questions, remarks: *Some policy makers tend to minimise the role played by multinational firms and to focus their efforts only on SME. Such a position is very risky: aids from policy makers are an important determinant of R&D center location.*

Can Europe Compete as a Research Location? Some Views from Industry

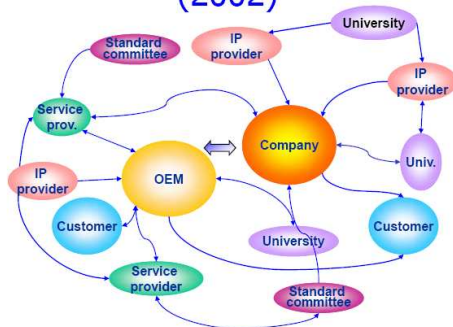
“Yes, Europe can compete as a research location. But efforts still have to be made...” »

Europe is a very good place for R&D. Companies appreciate that Europe can rely on various assets. However, to keep on being competitive as a research location in front of emerging countries, **Francisco Escarti** underlined the necessity for Europe to prove its capacity to produce research, pushing its strengths forward and working on its weaknesses.

Rob van Tulder added that this new form of innovation is very complex and poses new challenges not only in terms of business environment, but also in terms of organisation inside the firm. The question is not only at the R&D and innovation department level, but also at the production, marketing and distribution chain levels. Today, the company must be able to manage these links and succeed in recovering the value created from the links established between all these departments.

The three invited companies – Dow Chemicals, Boeing and Wipra – explained which factors determined their R&D location choices. They provided a list of Europe's strengths and weaknesses. According to **Carlos Orzoco**, R&D must be linked to business reality. Indeed, before each localisation decision, they pay attention to three specific points: the quality of infrastructure, the availability of talent and market opportunities. Cost is an issue, but not the main driving force. The European Union has many advantages such as its cultural

A World of Opportunities (2002)



diversity (in languages, culture, ideas), its geographic situation, its historical research capabilities, its scientific skills and the fact that industry/university collaboration are easier than in the US.

Europe is also a market in which it is important to be present for firms from developing countries. **Risto Niva**, CEO of Wipro, an Indian software company, considers it is very important to be localised close to customers and hire local employees to really know the market. The company has already opened 11 development centres in Europe and employs 4000 people – most of them are native employees.

However, many more efforts still have to be made. Europe should change its labour laws, which are still too protective, and not enough flexible. Its immigration laws do not facilitate immigration of talents from all over the world. Retirement policies are not efficient because they can force some key professors to retire.

economy. Oxford University has not abandoned its two core activities – teaching and research – but it also accepts the importance of technology transfer and relations with industry. It decided to implement instruments to boost this collaboration and hired people to be intermediaries between industry and the academic world. It has developed science parks, composed of innovative companies, spin-offs, founded by external business angels. Oxford University also developed an intellectual property policy and assists researchers who want to commercialise research. Many instruments have been developed, to boost collaboration and technology transfers between university and companies.



Questions, remarks : *Why has Boeing decided to locate its European R&D centre in Spain? In fact, Boeing had to make its choice between several possibilities. At first, the company was looking at the United Kingdom. But UK is not really Europe because of its US mentality. Germany was also a possibility but it is the land of Airbus. What about France? Well, France... "Ah, la Frrrance..."*

John Slater, from the Open University in the UK, looked at the role of universities as providers of education and training, and the impact of the new generation of students brought up with the internet. He called for a more flexible approach in working in partnership with multinationals and the need to accept education is also a global commodity. On the other hand, multinationals should perhaps take more notice of what is available to them locally.

Advancing the role of universities as partners for innovation

“Promoting collaboration between university and industry...”


Universities have a very important role to play in the knowledge-based economy. It is very important to specify it in this new ecosystem. Although many companies consider that industry/university collaboration is easier in Europe than in the United States, there is still a need for reforms. Universities must develop new instruments to create links with industry.

Mark Mawhinney presented the work that has been made at Oxford University to support exploitation of its research. Oxford University has been good in reinventing itself. Although it has an old culture, it has succeeded in adapting itself to the new

« Biocatalysis 2001 », presented by **Helmut Thamer**, is a good example of what can be done to boost technological transfers between industry and university. This cluster, which works like a consortium, is composed of 10 universities, 11 large companies and 16 SMEs which work together on a common cross disciplinary projects with funding from industry national and regional governments and demonstrates how a technology platform can be put together to serve the needs and interests of all.

Questions, remarks : *In general, the projects in a cluster receive funding from the State only for a very short term. It is thus difficult to create a sustainable project (for example, in the UK, projects are funded for only 3 years). The European Commission should deal with this problem, and should be funding for a much longer term.*

What can regions do to attract researchers and research investment?

 *European Union should focus on some specific niches »*

Several determinants have an impact on R&D location choice. Some of them are more important than others. Nowadays, most European Nations want to be R&D attractive as much as possible.

According to **Carlos Orzoco**, low costs and taxes can be an incentive, but it is not essential. One of the main R&D location determinants continues to be the access to talent, high skilled people, with a good English level and the possibility to attract good researchers. Besides scientific criteria, access to market is also essential. As **Francisco Escarti** presented, Boeing chose to settle its European R&D centre in Spain due to several factors. First, Madrid is big enough to attract and retain people. Then, cultural proximity with Europe and Latin America is very attractive for an American Company.

Virtual and physical communication quality is also very important. **Rob van Tulder** added that the sophistication of the market is also essential: the quality of a market is not only determined by the number of potential consumers, but also by its sophistication.

The issue of intellectual property is important. It is a very important determinant of R&D location in some sectors. The problems with the operation of the patent system in China may have acted as a barrier in the past, but this may not be the case in the future.

Regarding all these criteria, Europe is still a very attractive place for R&D investment.

Besides scientific offer and market sophistication, collaboration between industry and universities is actually much easier than in the United States, according to some of the panelists. Furthermore, according to **Francisco Escarti**, European framework programs are a very efficient instrument to boost research collaboration. At least, European Union can rely on a specific asset that developing countries do not have: "Europe" is a brand in itself. Indeed, **Xiaming Liu**, professor at London University, stressed that China has attracted many foreign R&D centres thanks to the increasing sophistication of its market and the facilities to support R&D activities. But China is not a brand, and it is very dependent on foreign R&D expenditures.

To reach its objectives, Europe still has to make many more efforts. For instance, labour laws are not flexible enough. Immigration laws and policies often conflict with the need to attract foreign skilled people. Furthermore, according to **Andrew Dearing**, to be efficient (in terms of market, universities, skills, partnerships...) Europe needs to identify some specific niches which it can dominate. It cannot expect to be strong in every sector. According to **Francisco Escarti**, funding clusters in collaboration with industry would be very beneficial for Europe. Regional authorities have a very important role to play in R&D attractiveness issues. Somebody in the audience underlined that tax incentives for company investments can be very harmful for the local economy. **Francisco Escarti** answered that regional authorities have to create the environment that will link companies to the region, included through a good IPR policy, creation of clusters, incentives for partnerships with local companies. In this respect, we are facing the question of the best size for a region. According to **Carlos Orzoco**, the creation of a meta-region could be interesting.

Day 2:

Creating regional policies for global links

Creation of regional brands to support research clusters

“ Industry/ university collaborations are essential to create ambitious research projects... »

Capabilities and skills are often concentrated in a few cities and metropolises. These can then present themselves as brands: they compete to be visible at the European and world level. They elaborate real development strategies and use very effective communication investments to achieve their goals of being visible, easily identified and attractive to foreign companies, talent and international capital. In this respect, the contrasting examples of Helsinki, Toulouse and Czech Republic are very interesting to note

Thanks to its differentiation strategy, Helsinki is now one of the most attractive European cities, according to Silicon Valley's ranking.

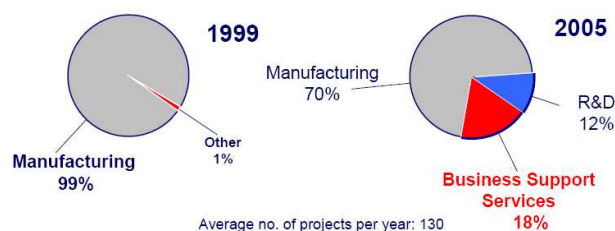
Main criteria for metropolis ranking



Its main strengths are: good availability of a well qualified workforce, less expensive salaries and good business environment. Helsinki's innovation policies are based on the increase of the internal appeal of researchers and expertise (Helsinki works a lot to attract talents and promote higher education). The city also developed knowledge-based clusters as a way to conceptualise their offer in a complex innovation environment. But, according to **Tatu Laurila**, Helsinki still has to

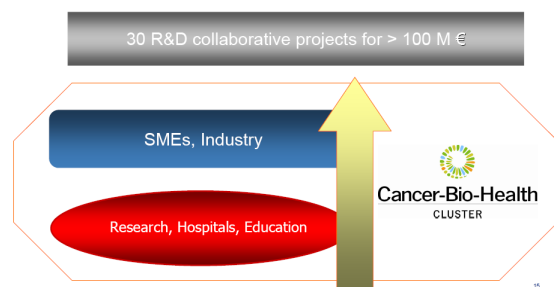
work on issues such as quality of infrastructure and industry/university collaboration. In the future, Helsinki wants to focus its development strategy on three pillars: being effective (ie well-functioning, good networks...), being efficient (ie simplified procedures) and being creative (for convincing foreign companies that Helsinki would provide better solutions to their problems than other cities).

Czech Republic's experience is quite different from Helsinki's. **René Samek** presented a country which used to attract manufacturing activities for its low salaries, but which has decided nowadays to base its development on innovation. Indeed, in 2000, Czech Republic has started to promote itself as a place for R&D and marketing, instead of as a place purely for manufacturing investment. The country had to work on its image of high-tech country. It thus developed some selected science parks and incubators to promote industry/university collaboration, worked on the quality of its infrastructure. The policy seems to be working: recently, foreign companies have been settling their R&D centers without having any previous activity in the country. With this new investment driven phase, Czech Republic enters the innovation phase.



As far as France is concerned, the country has decided to make its scientific offer more visible, by creating clusters on territorial approach. The Toulouse Cancerpole is one of the 68 projects selected by the French Cluster policy (2004). It results from the close collaboration between policy makers, industry and the academic world. It is composed of universities, hospitals, start-ups and industries related to prevention, diagnostic and treatment of the Cancer disease. The creation of the cluster was supported by Pierre Fabre company, which considers that collaboration is essential in

research. According to **Cécile Chicoye**, these collaborations between all those partners were the pillar of the successful project.



Questions, remarks : Concerning the Toulouse Cancerpole, what have been the difficulties of clustering? According to **Cécile Chicoye**, convincing the public part to collaborate was the most difficult. Collaboration is not in researchers' culture, especially in medical fields. It was also difficult to incite private sector to work with other sectors.

New approaches to inward investment promotion in Europe, North America and Asia

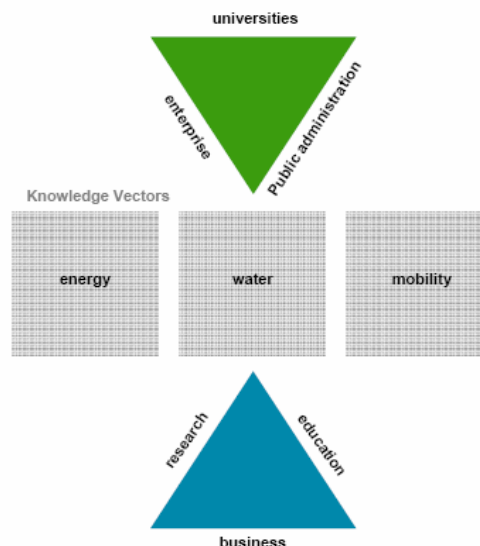
“ Reaching a critical size »

Nowdays, there are clusters everywhere. But to be visible and efficient, it is essential to reach a critical mass, included through the development of connections between clusters. Cities have a crucial role to play in the development of cluster. Nowdays, cities can be compared to transaction points for knowledge. A new urban model is now emerging. A lot of cities around the world have started to develop very important projects based on collaboration between innovation agents.

Sacha Haselmayer presents Shanghai's medical cluster. One of its distinctive characteristics is that companies were invited to compart the building team of the project. Indeed, companies involved in collaboration with various partners have built a new urban innovative environment.

Barcelona also wanted to create an innovative urban district. The goal of 22@Barcelona

project, coordinated by **Sergi Guillot**, was to put several knowledge-based sectors in a single place: media, ICT, energy and biotechnology. The idea was to concentrate all these activities in order to have a critical mass.



Across the Atlantic, Toronto region has created regional innovation networks. The idea was that partnership and knowledge transfer can help to keep the R&D centers in their region. The region thus tried to encourage these transfer networks.

Questions, remarks : Do you lack of managerial capacities in Toronto? According to **Jen Nelles**, Canada has lots of engineers but the problem is to find good managers.

Someone in the audience commented that Torontians, and Canadians in general, spend all their time looking at the US. This obsession with the US is really a problem.

Remarking on the Shanghai project, **Sasha Haselmayer** explained that there is no medical care system in China. The idea of the project was to try to make investors participate in the creation of a Chinese medical care system. Furthermore, Shanghai lacks international quality standards. One issue is to introduce them.

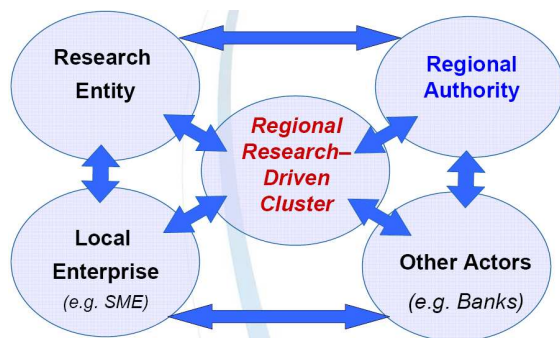
Concerning innovation monitoring, currently, we have very different indicators and surveys to assess the efficiency of innovation in Europe. Do we have a good understanding of which instrument can give a good image of the current health of innovation? We have too many different indicators, which make it difficult to compare and make a benchmarking.

From policy to action : EU initiatives in support of regional development

“Regions are the base of the strategy »

According to **Robert-Jan Smits**, regional authorities have to find together strategies to attract and retain R&D activities in Europe. Compared to US and Japan, Europe still has lacks in research, education and innovation. But this situation is improving. Thanks to regional activity Europe will reach the objectives fixed by the Lisbon agenda.

As a matter of fact, the 7th Framework Programme tends to boost innovation in Europe, looking more and more at the regional level and promoting collaborative R&D. Structural funds are also focusing increasingly on knowledge-based activities. The goal is to create “regions of knowledge”, which could be compared to “Knowledge Clusters” that associate several agents on a common project.



Questions, remarks: A member of the audience stressed the fact that European goals and programmes can be unclear due to overlapping instruments, which makes collaboration with Brussels difficult. The dialogue between all parties is often very confusing, contradictory. According to Robert-Jan Smits, lots of things have improved, like interaction between staffs...

Another person pointed out that during the conference we highlighted how important links between innovation agents are. The problem is that if we do not clearly identify the major actors of research, we cannot develop research and attract R&D sectors. In that way, big companies play a very important role that we cannot minimise.

Someone else pointed out that from all the presentations that made during the conference, we realize that regions have extremely different strategies. It is very complex to link them. According to **Robert-Jan Smits**, there is a huge problem in transposing research into innovation. In Europe, we do not have only one sector of excellence. It is very important to put all these sectors together in order to have a critical size.

Nowadays many indicators are used to analyse convergence between regions, but comparisons between different sets is very difficult making reliable benchmarking almost impossible. According to **Robert-Jan Smits**, statisticians in Europe produced a good database which allowed for a very good benchmarking between regions. The European scoreboard provides a very good measure.

Speakers Biographies

Christer Asplund

Christer Asplund has been described as one of Europe's leading consultants in the field of building more attractive investment infrastructures at the local place, innovative cluster-building and placemarketing strategies.

Since joining Interlace-Invent as a partner, he holds responsibility for Place Branding activities, with projects being carried out in Shanghai, Barcelona, Scandinavia, the Baltic States among others. As founder of the mCity Stockholm, Asplund is a leading European driver of the Living Labs Europe initiative to advance attractiveness of places through advanced mobile solutions.

Asplund held the office of Managing Director of the City of Stockholm Development Agency and was Managing Director of Business Arena Stockholm. In this office he held responsibility for the branding, marketing and inward investment activities of the City of Stockholm.

He is former senior consultant and co-founder of EuroFutures - a Stockholm-based research and consulting company. During a ten years time he devoted his full capacity to EuroFutures. He has written several books and articles on regional development, industrial policy, innovations, information technology and marketing. His latest book, "Marketing Places Europe", published by Financial Times, is a joint project with the world leading marketing guru, professor Philip Kotler. Conventional regional policies are abandoned here and instead the concept of attraction policy is introduced. He was formerly managing director of a regional promotion agency involving private and public sectors. The main task was to promote innovative businesses.

Asplund was Chairman of the Swedish Inventors Association and is currently chairman of MentorPool.

Cécile Chicoye

Director of the Toulouse cancerpole association

Cecile Chicoye is presently and since 2004, part time director of the Toulouse Cancerpole association and part time advisor of the « Préfet of the Midi Pyrenees region » for competitiveness issues. As director of the Toulouse cancerpole association, she is in charge of all the aspects relating to the development of this great project which aims to set up Toulouse as an internationally positioned center of excellence in the field of

research against cancer and the development of new therapeutics.

Cecile Chicoye is issued from the ENA (Ecole Nationale d'administration) : before leaving for Toulouse, she has worked mainly in the economic development policy field at national and european level in the ministry of industry where she was director of the international and European affairs department and before that in the "DATAR" (government agency in charge of regional policy) where she was in charge of European structural funds policy. She left for Toulouse in 1998 where she was deputy director general of the regional council of Midi Pyrénées until 2003.

Mary Lisbeth D'Amico

Mary Lisbeth D'Amico is a Munich-based freelance journalist with extensive experience covering business, innovation, technology and finance-related topics. The roster of publications to which she has contributed includes the *Wall Street Journal Europe*, *Business Week*, *Red Herring*, *Science Business*, *Communication Director*, *Real Deals*, and *Total Telecom*. She is also a freelance editor for in-house publications and helps companies structure and write English-language web sites. Between 2000 and 2002 Ms. D'Amico served as senior editor at *Tornado Insider*, an Amsterdam-based magazine that covered technology startups. Prior to that she was Munich-based technology correspondent for the *IDG News Service*, the news arm of IDG, a Boston-based publisher of IT-related magazines. Before moving to Europe, Ms. D'Amico, who originally comes from New Jersey, worked as a reporter for several financial publications in New York, including the *International Financing Review*.

Andrew Dearing

Andrew Dearing is Secretary General of the European Industrial Research Management Association, a networking organisation for companies that engage in research and development to drive their businesses. EIRMA helps to strengthen these firms' competitiveness through well-managed, well-organised research and development, and has a membership of 150+ companies based throughout Europe and across all sectors of industry.

Dr Dearing has held positions in the private, public and not-for-profit sectors, including 20 years spent with Royal Dutch Shell, beginning as researcher and research manager, then responsible for the planning and coordination of the company's longer-term R&D portfolio, its

external relations in science and technology, and its research and technology strategy planning.

He acts as advisor to the European Commission on aspects of industrial innovation and research policy. He is Chairman of the Technology Committee of the OECD's industry advisory body, BIAC, and a member of the Board of Administration of the Maison de la Chimie, France.

Hervé Dexpert

General Secretary of the Scientific Advisory Board Midi-Pyrénées Regional Council

Dr Hervé Dexpert is Research Director at the French National Centre for Scientific Research. As a scientist involved in several fields of Materials Science, he has been concerned for many years by the understanding of the relationships between the description at the nanometer scale of different classes of materials (rare earth compounds, heterogeneous catalysts, amorphous phases) and their macroscopic physico-chemical properties. He developed structural and electronic investigations by electron microscopy and X rays absorption in several research centres, from Paris (CNRS Rare Earth Laboratory and French Institute of Petroleum), Cambridge (Cavendish Laboratory), Orsay (National Centre for Synchrotron Radiation) to Toulouse (Materials Centre). He has been the supervisor of many PhD thesis and the head of two large laboratories (LURE-Orsay and then CEMES-Toulouse).

Since 2000, he is the General Secretary of the Scientific Advisory Board of the Region Midi-Pyrénées. This Committee of 80 members gathers representatives of academic institutions (Universities, Research Centres) and industrial companies (SMEs and large enterprises). He has in charge the promotion of the activities linking research, innovation, technology transfer and economic development. To fill this objective, he participates to different programmes and tools as regional calls for projects, grants supports for PhD students and post-docs or to the establishment of inter-regional actions at the French and European (ERA NET) level.

Francisco (Paco) Escartí

Paco is currently Managing Director of the Boeing Research & Technology Europe in Madrid. The BR&TE is involved in research topics within the fields of aviation safety, environment friendly aerospace

products and processes, and also develops advanced air traffic management systems.

Prior to his assignment to the Boeing Research & Technology Center Paco worked as vice president of Business Development – Boeing ATM in Europe developing and implementing strategies and negotiating business agreements in the region.

In 1985, Escartí became general director of Iberia Airlines, where he was involved in creating three new airline operations for charter, regional and cargo services. He also introduced a yield management system for the Iberia Group, negotiated fleet acquisitions, and helped develop the worldwide reservation system, AMADEUS.

Early in his career, Escartí worked as an engineer in the United States where he gained experience in air traffic control systems and radar data processing. In 1975 he returned to Spain and joined CESELSA (later INDRA), a diversified engineering group. He established a small department for air traffic systems, which has since grown into a respected provider of air traffic control solutions in Europe.

Escartí drew on his extensive industry experience in 1992 when he founded Services Improvement, a consulting company to civil aviation authorities, airports and air Navigation service providers.

His 1998 election to the EUROCONTROL Performance Review Commission, which independently analyzes and evaluates the European air traffic control system, provides a regulatory perspective.

Fabienne Fortanier

Fabienne Fortanier holds an MScBA from the Rotterdam School of Management (RSM), Erasmus University. She currently works on a PhD research project at the University of Amsterdam (UvA) Business School (Faculty of Economics and Econometrics), where she also teaches on International Business and its impact on developing countries, on Sustainable Management and Corporate Social Responsibility, and on Statistical Methods. Ms. Fortanier's research and publications focus on the interaction between multinational enterprises and host governments in developing countries, and on the impact of those business-government interactions on economic growth and sustainable development.

In addition to her research activities, Fabienne Fortanier is also active in various consultancy projects. She is a (founding) member of ECSAD, the Expert Centre on Sustainable

business and Development cooperation, which joins researchers from the University of Amsterdam, the RSM, Nyenrode, and the Maastricht School of Management in order to advise governments and non-governmental organizations. She acted as (external) consultant for the Dutch Ministry of Economic Affairs; the Dutch Directorate General for Development Cooperation (DGIS) of the Ministry of Foreign Affairs; ICCO (Dutch Non-Governmental Organization), KPMG, UNCTAD; and the European Commission.

Prior to joining the UvA Business School, Fabienne Fortanier worked at the OECD in Paris as a consultant on corporate social responsibility by developing country firms, and on the relationship between foreign direct investment and sustainable development in host economies. She has worked as research associate for the SCOPE Expert Centre on Multinational Enterprises (at the RSM), and continues to coordinate projects for SCOPE aimed at updating and upgrading the databank that documents the strategies of the world's largest corporations.

Sergi Guillot Pichot

Mr. Sergi Guillot is the Director of Corporate Development of the 22 ARROBA BCN, S.A. in Barcelona since 2004, where he is developing a transformation strategy of an industrial district in Barcelona into a pole of business, scientific, technological and cultural activities.

Mr. Guillot speaks several languages and has a long national and international business career, including Business Unit Director of Amitech Pipe Services S.L., Spain, Director of Strategic Purchases of Vogt Electronic GmbH/Siemens Witten, Germany, and team leader and project manager at the Catalan Institute of Technology at projects in Portugal, France and Spain.

Mr. Guillot holds a Master's Degree in Economics from IESE University of Navarra, an MBA from Columbia Business School, and a Master's Degree in Industrial Engineering from Polytechnic University of Catalonia.

Sascha Haselmayer

Sascha Haselmayer is an expert in the field of knowledge and innovation intensive urbanism in international environments. Trained as an Architect at the Architectural Association in London, Haselmayer has worked on a wide range of design & strategy intensive urban and socio-economic development projects across Europe, Asia, Latin America and Africa for non-

governmental, public and private organisations.

Currently, Haselmayer is a co-founding director of Interlace-Invent, an international research-based consultancy headquartered in Copenhagen. Living Labs Europe™ was founded by Interlace-Invent ApS as a network of leading European cities with a commitment to innovation and advancements in mobility.

Furthermore, Interlace-Invent ApS coordinates the Europe Innova mClusters networking and policy advice expert group on mobile technology clustering involving leaders from 9 European mClusters.

He is responsible for several leading-edge strategy projects in for clients in Shanghai; the cities of Barcelona and Sant Cugat, Spain (Living Labs Catalunya and other innovation projects); Nogent Technology Park (France); and with partners Euroland Projektierungen the projects for development of the Competence Centre Konstanz (Germany), Easylease, and the Barcelona Health Innovation Building (with 22@Barcelona). Furthermore, Haselmayer is the responsible coordinator for Interlace-Invent of the global research project 'Hubs&Regions', in collaboration with the Copenhagen Business School. This project encompasses a network of 35 Universities across 5 continents investigating the globalisation of innovation and knowledge intensive economies and their impact on cities, regions, companies and institutions.

Before co-founding interlace-invent, Haselmayer developed innovation driven strategic solution for several well-recognized projects as part of Carillion Professional Services (UK), the UK's leading construction group and practiced as an architect on international projects.

Haselmayer is conducting research on innovation environments and their urban impacts and is a Senior Lecturer at the Copenhagen Business School (Full-Time MBA and MA programmes), Theseus MBA Programme (France), Pompeu Fabra University (Spain) and the Architectural Association Housing & Urbanism Graduate Programme (London). Previously he held positions as Architecture and MA Urban Design Unit Master at Greenwich University.

Tatu Laurila

Tatu Laurila is the CEO of Greater Helsinki Promotion Ltd. Jointly owned by the cities of Espoo, Helsinki, Kauniainen, Vantaa and the Uusimaa Regional Council, Greater Helsinki

Promotion will join forces with the region's leading organizations, both public and private, to build the Helsinki Alliance. The Alliance will develop Helsinki's international offerings in order to attract more international people, companies and investments into the area. Tatu joined GHP just a few months ago and he has gained most of his experience in different kinds of regional innovation and economic development related projects e.g. he was in charge of Helsinki's first regional Innovation Strategy published in 2005. He has also been actively involved in the Baltic Metropolises Innovation Strategy (BaltMet Inno) project, funded by the Commission's Interreg IIIB programme.

Helen Lawton Smith

Dr Helen Lawton Smith is Reader in Management, School of Management and Organisational Psychology, Birkbeck, University of London. She is a Distinguished Research Associate at the Department of Geography, Oxford University, a Research Associate at the Centre for Business Research, Cambridge University and an Academician of the Learned Societies for the Social Sciences. She is the founder, Managing Director and Director of Research of the Oxfordshire Economic Observatory (OEO), Oxford University, <http://oeo.geog.ox.ac.uk>. She has extensive experience in the field of entrepreneurship, innovation and regional development. She has undertaken a number of studies of entrepreneurship in high-tech economies, inter-firm collaboration for innovation, university and industry linkages. She is the author over 70 journal articles and book chapters and seven books. Her most recent books are *Universities, Innovation and the Economy* (Routledge 2006) and *Economic Geography: Past, Present and Future* (Co-edited with Sharmistha Bagchi Sen (Routledge 2006)).

Jen Nelles

Jen Nelles is a Ph.D candidate in the Department of Political Science at the University of Toronto and editor of the Ontario Regional Economic Development and Innovation (OREDI) Newsletter. Her dissertation work examines city-region governance and economic development in Canada and Germany.

Risto Niva

Mr. Risto Niva Vice President of Wipro Technologies.

Wipro Technologies Oy Finland is a company specialising in embedded telecommunication systems. The activities of the company concentrate on the planning and testing of real-time telecommunication systems in wireless network environments and in TETRA-networks.

Risto Niva joined the company in its previous form (Saraware Oy) in 1998 and has worked as the CEO and President since. In 2000 he became one of the main owners of the company through a management buy-out.

Before joining Saraware, Risto Niva worked for 7 years in the travel sector. He was General Manager and entrepreneur in three different hotels in Finnish Lapland creating turn arounds. Risto studied economics at the University of Lapland, majoring in marketing. He also holds a Bachelor's degree in Business studies from the Commercial College.

Carlos Orozco

Carlos Orozco joined Dow in 1985 as an Epoxy Resins Technical Service & Development Engineer in Bogotá, Colombia. Early in his career he had a variety of technical and managerial assignments in Epoxy Resins, Engineering Plastics and Polystyrene in Latin America and North America. He moved to Plaquemine, Louisiana, as DEXCO (a Dow/EXXON-Mobil Partnership) Research & Development Manager in 1996, and became the Catalytically Modified Polymers (CMP) Dow Corporate Research & Development Platform Leader in 1998.

In 1999, he was named Technical Service & Development Director for the Polyolefins and Elastomers (PO&E) Business in Europe and added responsibilities as the Chairman of the PO&E Global Application Technology Team in 2001.

In 2004 he was named The Dow Chemical Co. Sr. Research & Development Director for Plastics and Synthetic Rubber in Europe, and Global Director of the Plastics Customer Technical Service Centers and in 2006 became The Dow Chemical Co. Global Business Research & Development Director for the Polyurethanes and Polyurethanes System Houses, and Global Director of Research & Development for New Business Development.

Carlos Orozco is a 1985 graduate from Universidad de los Andes in Bogota, Colombia, with a degree in mechanical engineering. Carlos is located in Horgen, Switzerland.

Mark Mawhinney

Mark joined Isis as General Manager Isis Enterprise in November 2004 and manages Isis Enterprise worldwide business activities. Mark has many years experience at operating in the interface between the research world, business and the public sector. His experience in technology transfer comes from a wide range of previous activities, from which he has built a strong understanding of the diverse drivers of innovation.

Isis Enterprise, the consulting division of Isis Innovation, was established in 2004 and provides consulting expertise and advice to clients across the broad range of the public and private sectors, in the UK and internationally. Our current clients include publicly funded organisations such as the Natural Environment Research Council and the Carbon Trust as well as a range of smaller University and business clients.

Most recently Mark was Project Director of Knowledge Starts, an ERDF Programme to support Sheffield's universities in technology transfer and building links with business. Before that he was the first Director of the Sustainable Cities Research Institute at Northumbria University, where he established strong links with public sector agencies and was involved in the formation of a start-up business. Mark has a PhD in Civil Engineering and worked in UK, South-East Asia and South America for Tarmac and Penta Ocean.

René Samek

René Samek is the Director of Investment and Applied Research Support Division of CzechInvest. He graduated with a Master's Degree in Information Science from Charles University in Prague and also studied at the Central European University in Prague and Budapest, where he obtained his Master's degree in the field of International Relations and European Studies before enrolling at the London School of Economics, where he obtained another Master's degree in Political Economy. René has been with CzechInvest since 1997 – he was Marketing Director for four years before moving to London in September 2001 to head the agency's UK & Ireland office, the job he held until 1st September 2005.

Monica Schofield

Monica Schofield is Head of the EU Office at TuTech Innovation GmbH ? a company owned jointly by Hamburg University of Technology and the Free and Hanseatic City of Hamburg

whose mission is to promote effective transfer and exploitation of scientific and technical knowledge. Monica joined TuTech in 1999 after 18 years of working as an engineer and R&D manager in the field of robotics in industry, large and small in Sweden, UK and Germany, having commenced her career with ASEA/ABB. Since 1991, Monica Schofield has been involved with the European Research Framework Programmes, and is currently serving as a member of Commissioner Poto?nik's Sounding Board for participation of smaller actors in Framework 7. She is managing several projects dealing with aspects of Regions of Knowledge and to promote Hamburg's strategy to be recognised as a "Wissensmetropole des Nordens".

John Slater

John Slater is a professor at the Institute of Educational Technology at the UK Open University (OU). He has most recently been involved in a number of projects giving information about UK universities to the public and to potential students from overseas to enable them to make more informed decisions about their studies (TQi). He is currently working on the value added to English speaking developed armed services by the availability of elective education opportunities, and on the value of e-Learning in such a setting.

He was trained as a number theorist and lectured in Mathematics at Oxford and London. He then moved into Computer Science and Computer Service provision at Salford and Bath before becoming the Head of the CS department at Kent 1990-6. He then became the Pro Vice-Chancellor (PVC) for Planning and Resources and subsequently for Teaching and Learning before moving to work for UKeU, a start up e-University founded by the UK government with added private investment. He has been on a number of UK national bodies on computing and on teaching and learning (CTI, TLTP, CB, ISC, JISC JCIEL etc.)

Robert-Jan Smits

Robert-Jan Smits is the Director of Directorate B (The European Research Area: Research Programmes and Capacity) at DG Research of the European Commission. Amongst his responsibilities are the formulation and management of EU research activities in the field of: Coordination of National Programmes, Coordination with intergovernmental research organisations (EIROforum, EUREKA, COST) Research Infrastructures, Regions of Knowledge, Research Potential and the

relations with the European Investment Bank (EIB). Robert-Jan Smits is the EC representative on: European Strategic Forum on Research Infrastructures (ESFRI), ESF Governing Council and the EUREKA High Level Group (HLG).

Previous assignments of Robert-Jan Smits in DG Research, European Commission included Director "Structuring the European Research Area", Advisor on science policy issues, Head of Unit of "Legal Affairs", "SME Unit", "Strengthening research cooperation and Europe's science base".

Robert-Jan Smits was born in 1958. He has degrees from Utrecht University in the Netherlands, Institut Universitaire d'Hautes Etudes Internationales in Switzerland and Fletcher School of Law & Diplomacy in the United States of America.

Reinhard Stuth

State Secretary Reinhard Stuth has been the Commissioner for Federal, European and Foreign Affairs of the Free and Hanseatic City of Hamburg since 2001. He is officially representing Hamburg at the Federal Government, at the European Union and for Foreign Affairs. Before joining the Hamburg government he has held posts as a consultant for European Policies at the CDU/CSU parliamentary group in Berlin and Director of the offices of the Konrad-Adenauer-Stiftung in the Czech Republic and Slovakia. Before that Reinhardt Stuth has held various posts in the Land Berlin, the Konrad-Adenauer-Stiftung, the office of the German Federal Chancellor, the European Commission and as a personal consultant to Richard von Weizsäcker, President of the Federal Republic of Germany.

Helmut Thamer

Managing Director TuTech Innovation GmbH and Hamburg Innovation GmbH

After studying physics at universities of Giessen and Kiel and completing his doctoral thesis at the TH Darmstadt on questions of chaotic physical systems, Dr. Thamer was from 1981-85 Assistant to the founding President of the new Technical University of Hamburg-Harburg. In 1985 Dr. Thamer became head of the liaison office of TUHH where he developed and realized the concept of TuTech, which in 1992 was outsourced as the first private transfer company of a German university. Dr. Thamer is heavily involved in regional innovation development both at a strategic and operational level. In 2004 in addition to retaining his position of the re-

organised TuTech Innovation, Dr Thamer also became MD of Hamburg Innovation a technology transfer company owned by and serving the majority of Hamburg's institutions of higher education.

Rob van Tulder

Rob van Tulder is Professor of International Business-Society Management, Erasmus University Rotterdam/Rotterdam School of Management. He holds a PhD degree (cum laude) in social sciences from the University of Amsterdam. Published in particular on the following topics: European Business, Multinationals, high-tech industries, Corporate Social Responsibility, the global car industry, issues of standardisation, network strategies, smaller industrial countries (welfare states) and European Community/Union policies. Acted as consultant for various international organisations, ministries and companies. Research director of the ERIM research project "International Business-Society Management" and the SCOPE databank project. Chair of the Department of Business-Society Management. Van Tulder taught executive courses on International Strategic Management with (executive) managers and academics and has been visiting professor at several international universities.

Xiaming Liu

Xiaming Liu is Professor of International Business at the School of Management and Organisational Psychology, Birkbeck, University of London. He received his BA and MPhil from Anhui and Fudan Universities respectively in China and PhD from Strathclyde University in the UK. Before joining Birkbeck College in January 2006, he had held various academic and management positions in Shanghai and Hangzhou (now Zhejiang) Universities in China, and Abertay Dundee, Aston and Surrey Universities in the UK. Prior to becoming an academic, he had many years' agricultural and industrial experience in China.

Xiaming Liu's research interests include foreign direct investment, international business strategy, technology transfer and spillover, trade and comparative advantage, and the Chinese economy. His recent research projects include multinational subsidiary typology, and knowledge creation and flows in multinational enterprises. He is the General Secretary of the Chinese Economic Association in the UK, and the Managing Editor of the *Journal of Chinese Economic and Business Studies* published by Routledge/Taylor & Francis Group.