



Trends and experiences of EU-China ICT RTD co-operation

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Brussels, 9.7.2008

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About the Interviews

Objective

- Collect experiences, best-practice and recommendations
- Policy recommendations for the EC
- Advice for other industry actors

Target group

- CEOs and CTOs of EU industry and research labs
- Time: late 2007 – early 2008

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Interviews

- 25 persons took part in the interviews
 - 12 by phone (a few cases in person), 13 email questionnaires
- AT, BE, FR, EL, DE, NL, ES, SE, UK
- Questions
 - Areas and co-operation type
 - areas of co-operation, duration, ICT areas, type of partner, business model, IPR issues, funding
 - Objectives
 - initial, assumed Chinese objectives, changes
 - Strengths/ Opportunities /Weaknesses/ Threats
 - Outlook
 - requirements, expectations, suggestions

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ICT Areas

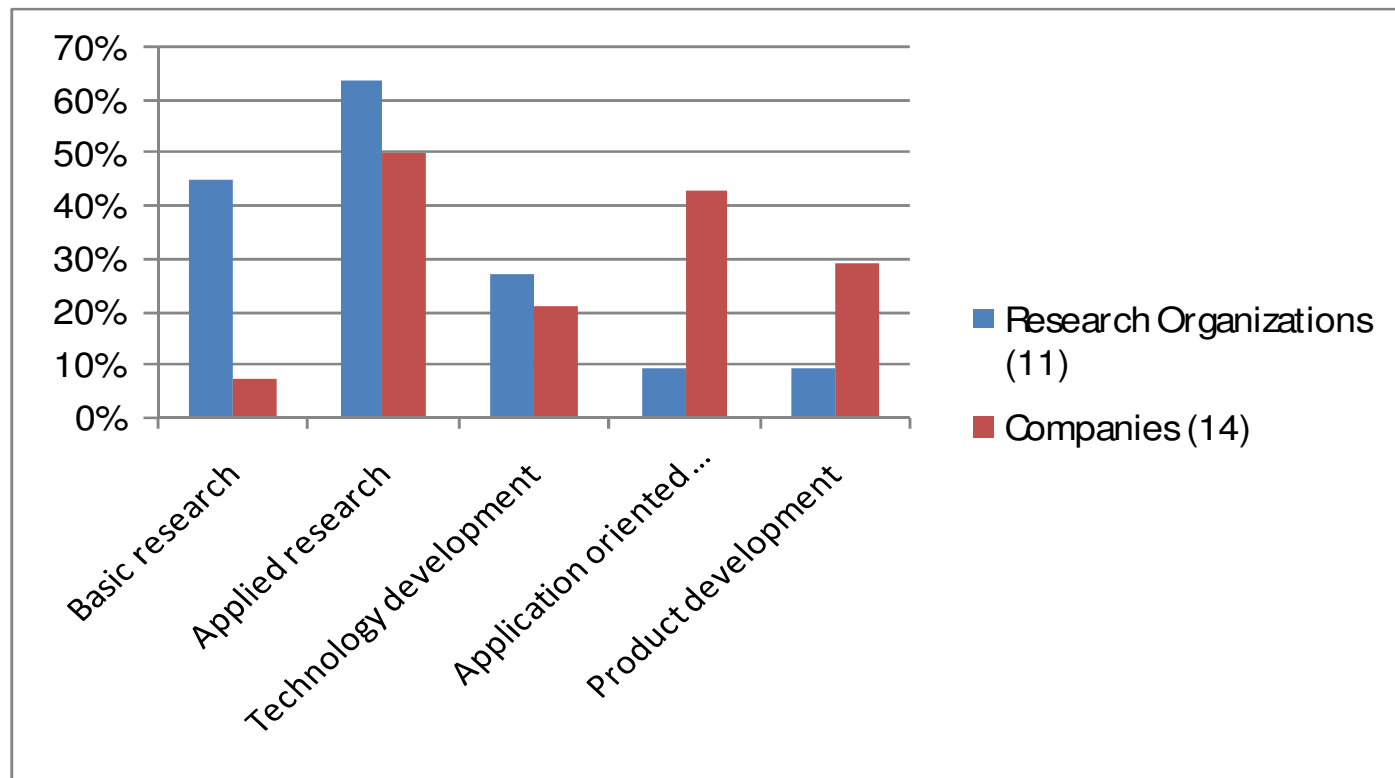
- Ad-hoc networks, databases, image processing
- Microelectronics, hardware reference design, electronics, electrical engineering, integrated circuit design, semiconductors and semiconductor process technologies, nanotechnology
- Embedded systems and embedded systems integration, ICT for energy efficiency
- Software, middleware and open source, self-service core technologies of cash handling technologies, secure Computing Architecture (SCA) for PCs and telecommunication

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Type of Research



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Co-operation model

- Most started R & D cooperation with China after 2000, only a few in the 90ies or earlier, some not yet started
- Most projects are assigned research by European organizations, some EU funding involved
 - Usually contract-based or setting up specific consortia
- Value chain: EU partners regard themselves as knowledge providers/tech experts (in the past), but mutual exchange also emphasized by many
 - RTD as a tactical advantage and building long-term strategic partnerships
 - Getting to know local markets and potential customers
 - Access to top level researchers at reasonable costs

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Objectives of Co-operation

European side

- Basis for a possible market entry
 - Market and customer access
 - Insights into Chinese markets and technologies
 - Local competence
 - Introduction of EU standards to Chinese market
- Collaboration with experienced Chinese researchers
 - Customization and localization
 - Move from tutor-student to equal partnership
- Positioning as a global research organization

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Objectives of Co-operation

Chinese side (alleged)

- Exchange of expertise and contacts
- Access to European ideas, best-practices
- Insights into European technologies, more success in Chinese markets
- Financial issues/ funding was assumed to be a major driver of Chinese co-operation

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Changes of Objectives

Objectives changed based on experience:

- on the existing process model
- on restrictions
- on keeping track of “where the money goes”
- on who is the right partner for different task
- on what to expect from partners
- on which connections/network you need

In some cases the cooperation process was accordingly adapted.

EU companies involved for a long time significantly changed objectives and motivation and some handed over more competencies to the Chinese partners.



Goal Achievement

Most respondents still involved in cooperation and cannot fully evaluate yet whether objectives were met. Majority was satisfied with the results.

- One interviewee mentioned that a long term approach is probably a good decision
- Only one company is a little disappointed with the current project progress
- Only one company said that their objections have not been met and that a rethinking of the previous approach and of the business model is necessary.

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Intellectual Property Rights

- Solid awareness of IPR issues, considered very important
- But no major problems for vast majority
 - IPR should be shared, not locked-up through strict agreements
 - Organizations developed standard agreements
 - Few cases of disappointment (HK)
- Some take special protective measures
 - Special contracts
 - Division of IPR in different packages for different teams
 - Leave core competencies in Europe or elsewhere

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Chinese Funding

- Most European organizations have not participated in any government supported project.
- Three organizations mentioned that they had participated in some form in funding programs
- The majority expressed interest in future participation or is already planning their upcoming participation
- IPR issues said to be critical in Chinese funded projects

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Weaknesses/ Threats

- Intercultural and language barriers
 - To reach a common base for understanding differences
 - Regular exchanges a must: different approach to management needed
 - Different structures, networks, and connections
- IPR topics (different attitude to IP and copyrights, system of legislation and administration)
- Different stages of R&D development in China and Europe
- Physical distance, travel restrictions, red tape (visa)
- High employee turnover

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Weaknesses/ Threats II

- Financing/funding
 - Money dependant:
"Many Chinese researchers take the view that funding comes as a right on the basis of prestige, rather than as a consequence of research contracts"
 - "The Chinese are very pragmatic, there is a strong profit pressure. These days they have to transform into profit and leverage what was given to them. Thus they are not really investing in the future but monetizing public heritage."

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Strengths & Opportunities

Biggest drivers of R & D cooperation for most European companies

- Access to Chinese market and customer base
- Access to Chinese experts and their know-how
- Access to new technology

Only a few mentioned

- Cost saving

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Success/Opportunities

Companies that completed at least one R&D project with China mostly mentioned positive results apart from technology:

- successful exchange of human resources and expert know-how
- successful transfer and promotion of concepts.
- Future-oriented benefit of setting up a good basis within the local R&D network and further potential opportunities.
- Projects results had been achieved much faster than it would have been possible in the home country.
- One less satisfied player said that the R&D cooperation with China triggered to rethink the cooperation model
- All but one company will continue and probably expand

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Future Requirements

- Standard regulations
 - IPR
 - Co-operation agreements, contracts etc.
- Partnership
 - Equal partners: eliminate asymmetries on both sides
 - Mid- to medium-term approach rather than short-term profit
 - Develop trust
- Objectives
 - Chinese market, universities, researchers remain important

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EC Policy Issues

- Red tape: travelling, formal procedures, visa etc.
 - Elimination of export restrictions (EU/US)
- Major request: funding of Sino-European RTD projects
 - Exchange of researchers
 - Joint events with other Chinese-cooperation projects
 - Search tool for partners, networks etc.
- EU co-operation can be a strategic advantage in China
 - Independence from USA
 - Should be emphasized and further developed / mutual EU-China interest
- RTD in China not to be considered a one-way road



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