

# CRCs in perspective: future trends of CRC-related programmes

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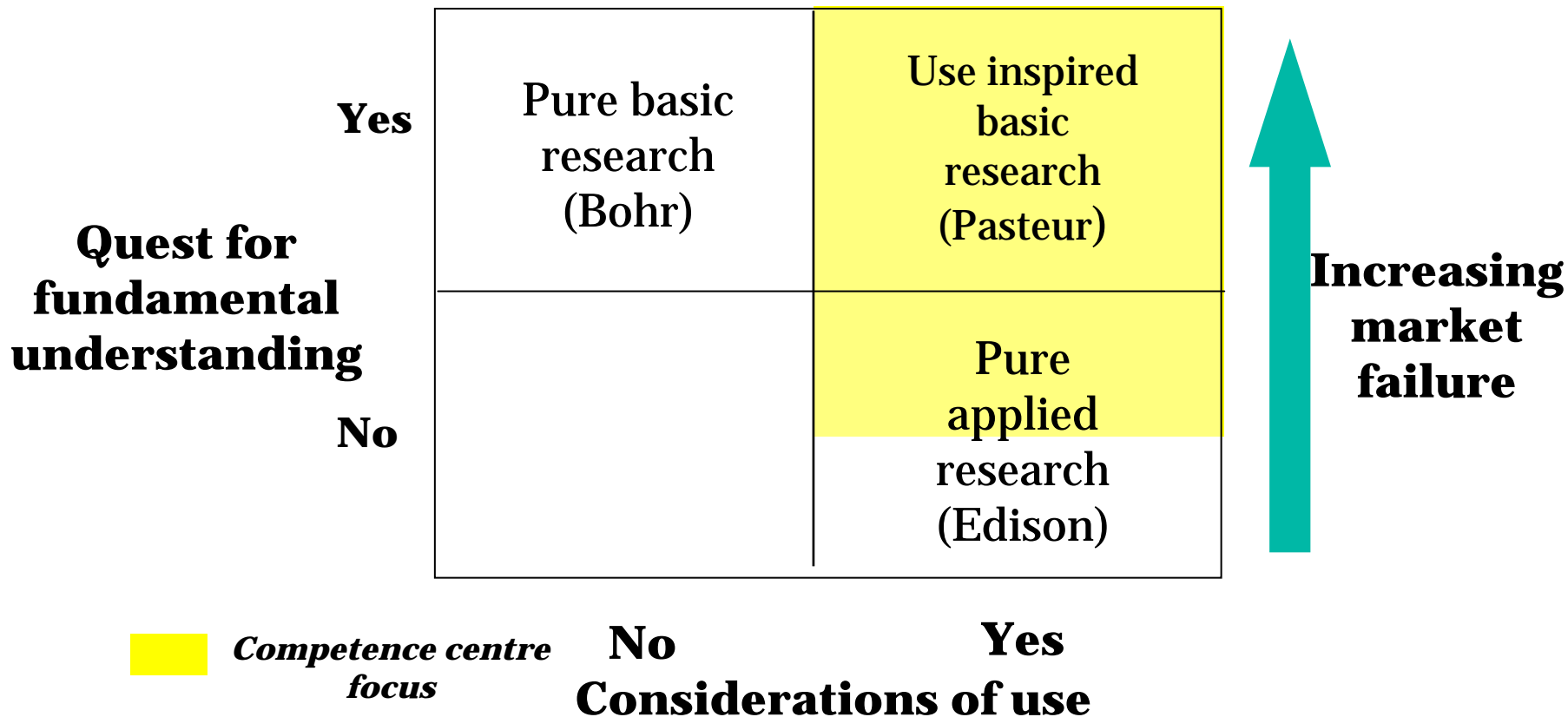
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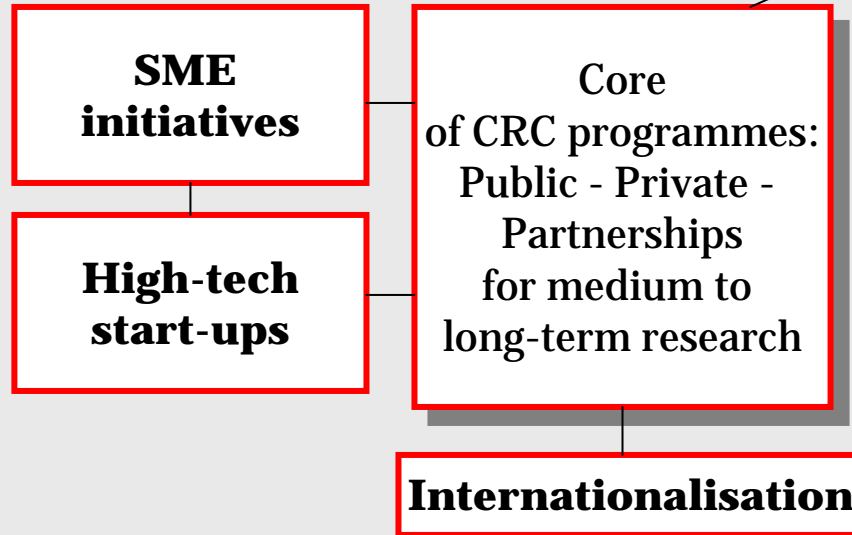
## **This presentation**

- Elements of design of a CRC programmes
- Stand-alone programme or embedded in a wider 'policy mix'
- The internationalisation dimension
- Some reflections on the future

## Positioning of competence centres is crucial



## Design of CRC programmes



Selection process & ambition  
Funding models  
Governance  
Strategic Research Agenda  
Legal status  
Virtual vs Physical  
IPR

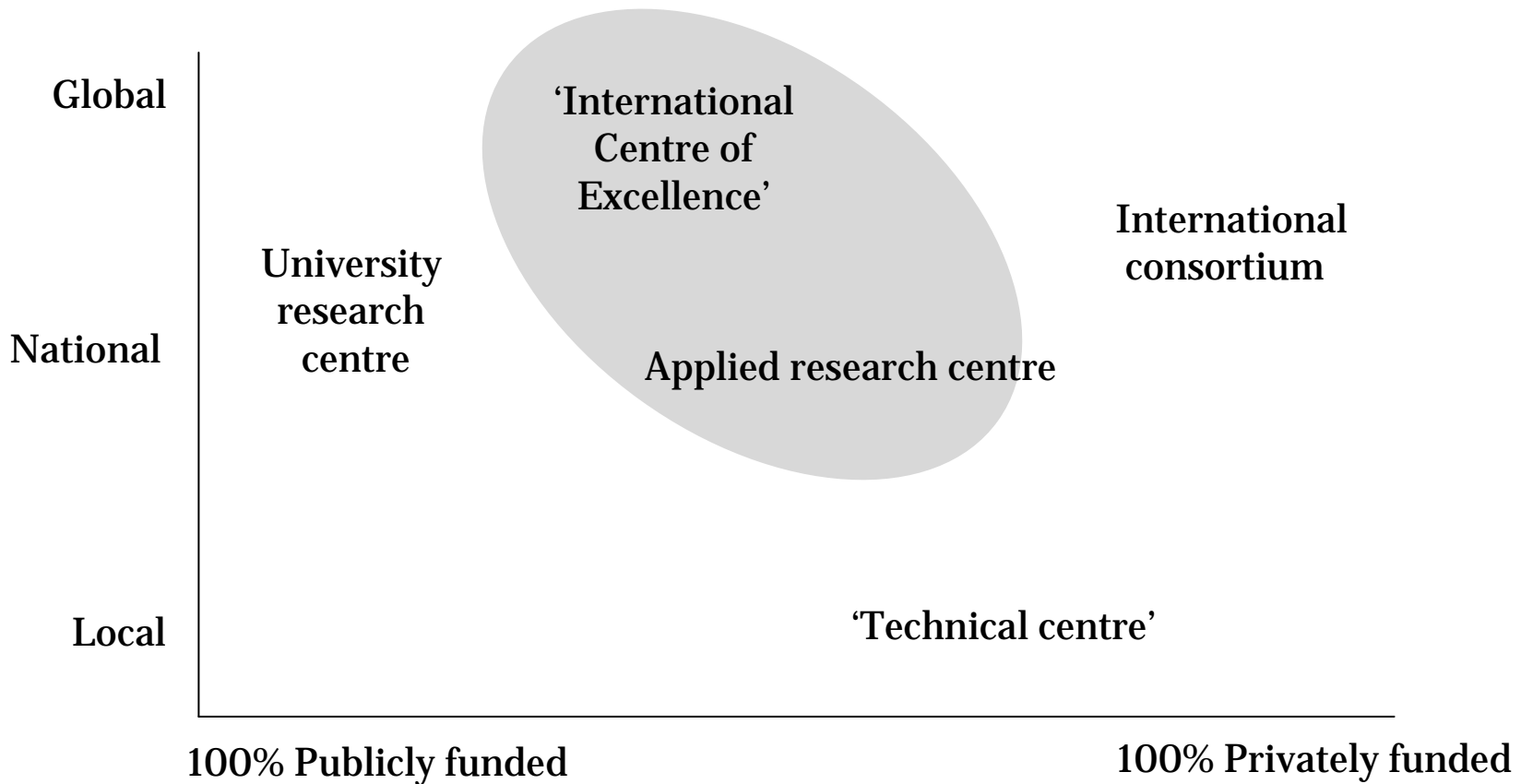
## Virtual or Physical?

	<b>Virtual</b>	<b>Physical</b>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>- Getting the best teams for each programme /activity</li> <li>- Cross university networking</li> <li>- Possibility of multi-disciplinary teams</li> <li>- Leaner organisation</li> <li>- In early life cycle: more possibilities to explore technology trajectories</li> </ul>	<ul style="list-style-type: none"> <li>- Interaction between researchers more intensive</li> <li>- <b>Better visibility to outside world</b></li> <li>- Clearer strategic leadership</li> <li>- Strong common identity /culture</li> <li>- Better possibilities for industrial internship</li> <li>- Professional industry interface</li> </ul>
<b>Disadvantages</b>	<ul style="list-style-type: none"> <li>- More transaction costs</li> <li>- Less identity with CC</li> <li>- More involvement of 'university politics'</li> <li>- Collaboration more loose</li> <li>- <b>Less easy to link with regional cluster policies</b></li> </ul>	<ul style="list-style-type: none"> <li>- More overhead costs</li> <li>- Less influence on existing university culture</li> <li>- Recruitment more fixed</li> <li>- Loss of flexibility in changing research paths</li> <li>- Adding to institutional complexity</li> </ul>

## Adding SMEs, tech-transfer and start-ups in the picture

- Could distract from strategic- long term character of mission
- There will always be a (IPR) tension between the core R&D partners and potential new entrants
- Start-ups need exclusive IP to be able to be economically viable
- Financial barriers for entry could be considerable for SMEs and core-partners will not like firms 'on the bandwagon'
- Absorptive capacity: even an issue with large R&D firms who have in recent years decreased their more fundamental/strategic research activities
- Industrial collaboration: in-kind versus financial commitment
  - *Evaluations suggest that the in-kind - staff actually performing joint research at the CC - ensures better technology transfer*

## The international positioning of 'CRCs' differs

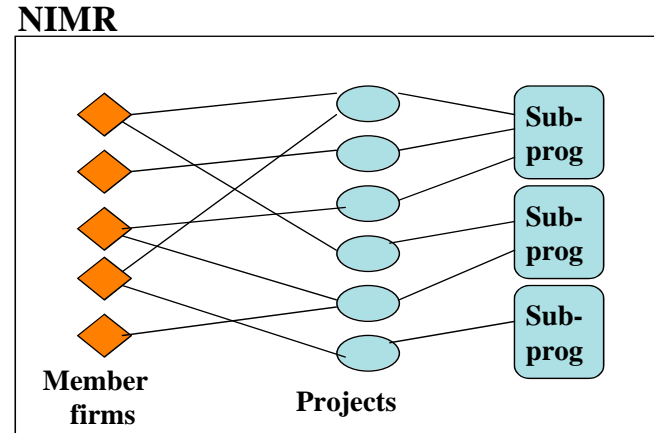
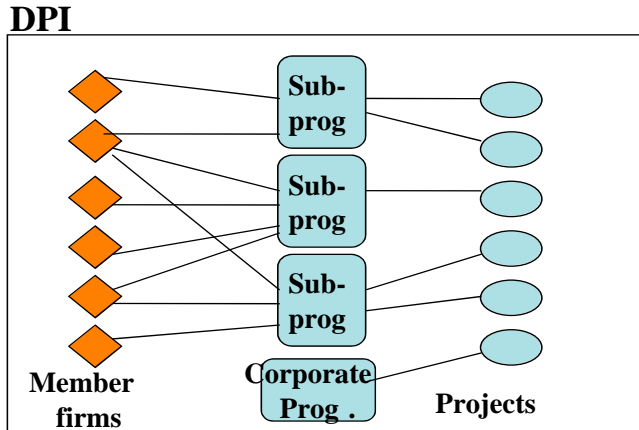


## Internationalisation: sensitive issue for politics & partners

- Individual partners want to keep their international networks and projects
- Despite international ambitions still politically difficult to 'sell' national funding to foreign beneficiaries
- The 'readiness' for internationalisation is highly sector dependent
- Direct 'project funding' more easily acceptable for foreign public research organisations than for foreign companies
- Strategic research agenda's are often linked to an 'inner-core' of companies directly involved in defining the programme
- Contribution of foreign firms in a 'common programmatic pot': depends on readiness national competitors to accept competitors
- Rarely are CRC programmes used explicitly in FDI promotion

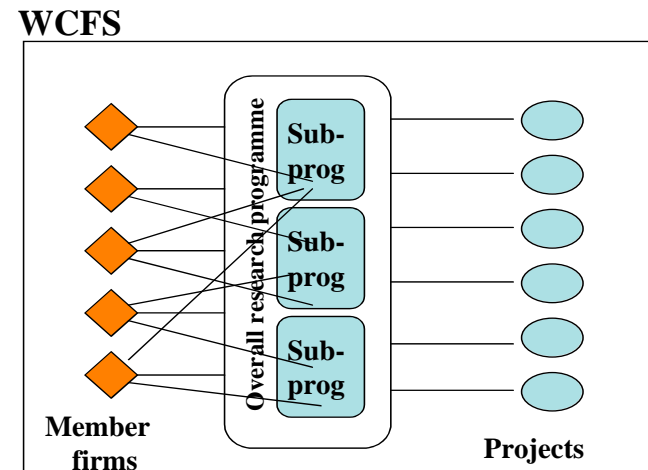
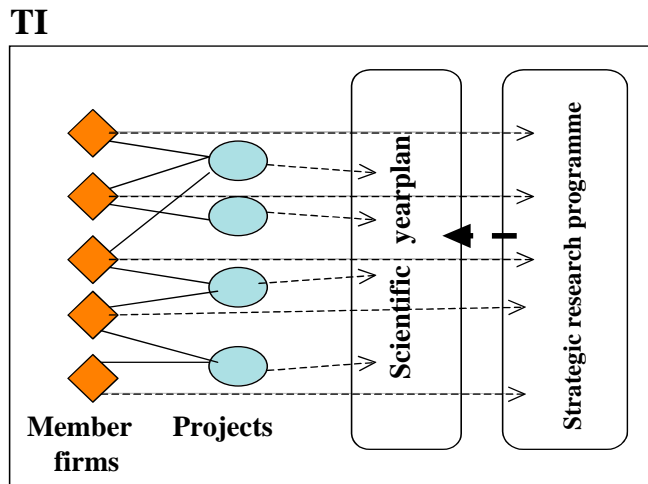
# Research programming modes in LTI

Polymers  
research



Metals  
Research  
Institute

Telematics  
Institute



Food  
Research  
Centre

## So what does this mean for COMPERA?

- Focus on the intermediary level: the programme managers
- Thematic working groups, e.g. automotive centres linking network managers first
- CRCs: strategic R&D collaboration needs a long period of trust building: don't push for internationalisation too quickly
- Be realistic about the sensitivities at political and industry level in terms of 'opening-up'
- One-to-one matchmaking between partners as first entry
- Avoid the national competitiveness agenda's by linking with more EU activities in this field; JTIs, 'Article 169' type initiatives
- Bi-lateral collaboration between clusters that complement each other

## CRCs incorporated in a broader 'Policy Mix'

- Element in national/regional cluster policies:
  - *French Pôle de Compétitivité*
  - *Germany: Spitzenclusterwettbewerb (TopCluster Competition)*
- Element in national policy for 'key areas'
  - *Dutch Technology Top Institutes incorporated in broader policy of 'Key Areas'*
- Linked to European developments:
  - *Technology Platforms, JTIs, ..... EIT, European Cluster Alliance?*
- Hardly any examples of cross-border collaboration policies based on CRC concept

## Example: Wageningen Centre for Food Studies (WCFS)

- Formerly (2000-2007): one of 4 Technological Top Institutes: a ‘proper’ CRC
- Second generation from 2007: Part of ‘Food and Nutrition Delta’ programme one of the ‘Key Areas’ of Dutch innovation policy
- CRC is now called Top Institute Food and Nutrition: TIFN
  - *More focus on internationalisation*
- In addition to the typical collaborative research also:
  - *Food and Nutrition Delta Foundation: focused on SMEs*
    - Innovation projects
    - Brokerage
    - Technology transfer (applying ‘untapped’ IPR from WCFS)
  - *Loosely connected with Wageningen Food Valley*

## To sum up some trends

- Internationalisation has started with ‘opening-up’ on a small scale
- Still meets with resistance
- As ‘readiness’ is very sector/ technology domain dependent an generic CRC collaboration strategy will not work
- A ‘European’ route:
  - *could avoid the immediate national political sensitivities*
  - *would likely be more virtual than physical*
  - *industry will probably be more difficult to convince*
- Nationally/regionally CRCs become more incorporated in broader ‘cluster programmes’
- International excellence should remain the ambition

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**Thank you**

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