

Towards top-technology clusters: From regional to cross-border cooperation

Ralf P. Meyer

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**TECHNOLOGIE
REGION AACHEN**
www.technologieregion-aachen.de

AGIT
Gründen. Ansiedeln. Fördern.

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Aachen region: Regional clusters across the borders

Aachen technology region

RWTHAACHEN
UNIVERSITY



One of the leading technical universities in Europe

450 professors,
260 instituts,
> 30,000 students

EXZELLENZ
RWTHAACHEN



Forschungszentrum Jülich
in der Helmholtz-Gemeinschaft

Largest interdisciplinary research center in Germany

4,300 employees (incl. 1,250 scientific staff)

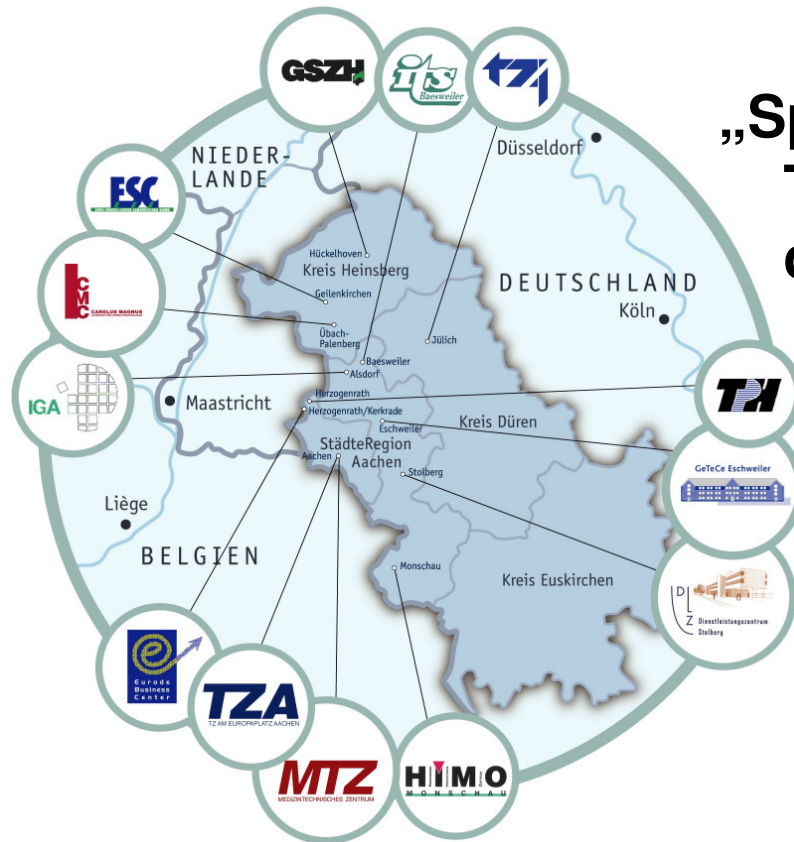


FACH
Hochschule Aachen

One of the leading universities of applied sciences in Germany

203 professors, > 8.000 students

Aachen technology region



„Spirit“ for techno-start ups:
Technology- & business-centres in Aachen region

total space (sqm): 100,000

no. of companies: > 510

no. of employees: > 5,200

(January 2009)



Aachen technology region

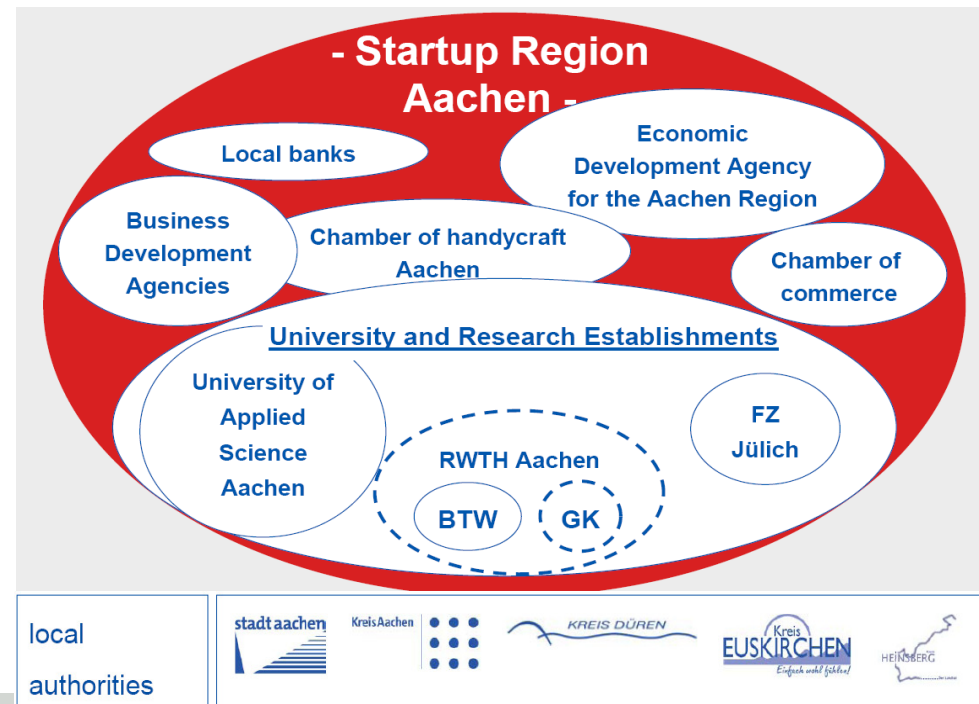
AGIT-services for technology-based enterprises

- Provision of individual specialist consulting services to support technology-based enterprises, esp. spin-offs
- Innovation consulting & patenting support
- Raising (venture) capital for spin-offs & growing enterprises



**Results since late 70s:
> 1,000 techno-start-ups
covering 30,000 jobs!**

www.agit.de



Regional clusters

Many cluster-oriented networks...

Life sciences:



New materials:



ICT:



Innovative production technologies:



Automotive & rail:



Energy:



... but different approaches, activities & results!

Regional clusters

ICT

Basics

- branch: IT/informatics
- members: 108 companies & R&D-institutions
- founded: 1991

Main objectives/interests

- information exchange/social networking
- recruitment (e.g. „Night of the enterprises“)
- coaching activities
- business cooperation



Regional clusters

Advanced materials



Basics

- branch: plastic technologies
- members: 20 companies (RWTH-IKV spin-offs)
- founded: 1999

Main objectives/interests

focus on business cooperation in:

- consulting, design, production
- research & development
- measurement, material technology, quality control

Regional clusters

Energy



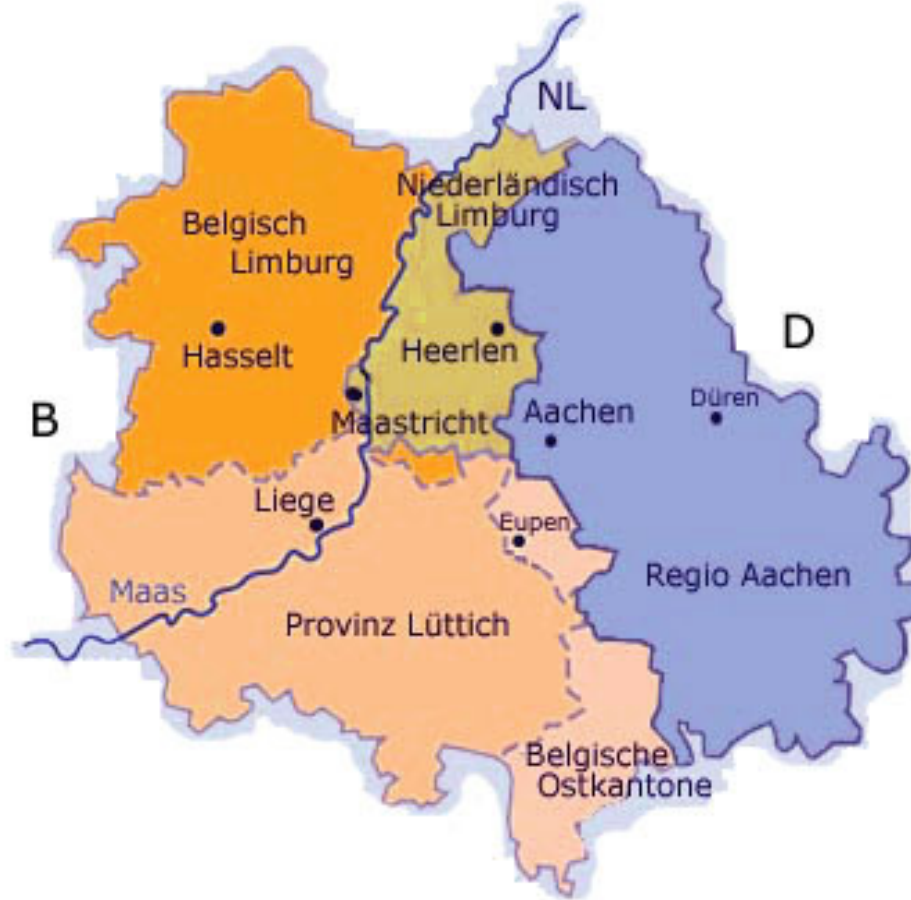
Basics

- branch: (Renewable) energy technologies
- members: ~ 60 cross-border companies, R&D, intermediates
- founded: 2007

Main objectives/interests

- cross-border cooperation/international energy competence center (branches in D, NL & B)
- acquisition of project funding
- dialogue & cooperation between business, universities, R&D
- lobbying & marketing

Regional clusters: across the borders



Facts & figures

- inhabitants: 3.9 million (3 languages & 5 cultures)
- area: 10,793 km²
- GDP: 86.5 billion €
- workforce: 1.7 million
- universities: 5 (68,000 students, 1,200 professors)

... first steps in INTERREG I - IIIA within Meuse-Rhine-Triangle

Regional clusters: across the borders

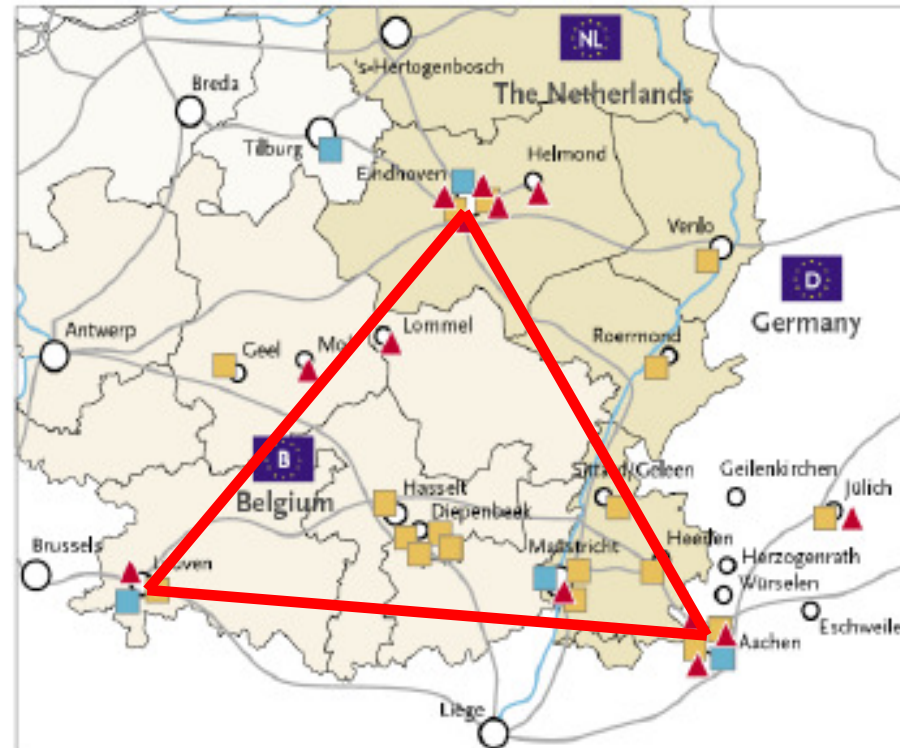
Eindhoven-Leuven-Aachen triangle

objectives:

foster cooperation between
knowledge city-regions
Aachen (D), Eindhoven (NL)
& Leuven (B)

focus on:

- knowledge exchange
- benchmarking & international marketing
- start-up & financial support
- cluster development



E|L|A|t
EINDHOVEN LEUVEN AACHEN TRIANGLE

Regional clusters: across the borders

activities:

- benchmarking, mapping & marketing instruments
- support for business start-ups (ELAt-master-classes)
- provision of venture capital (European venture market)
- Cluster-development (esp. life sciences, ICT)
- Joint innovation strategy

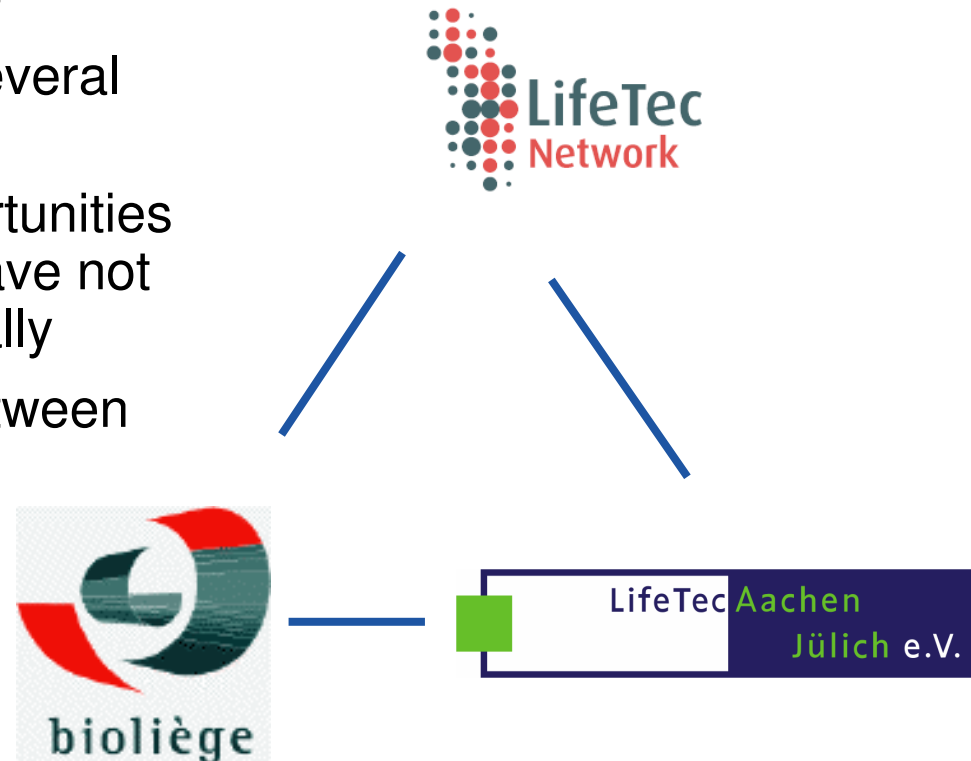
www.elat.org



Regional clusters: across the borders

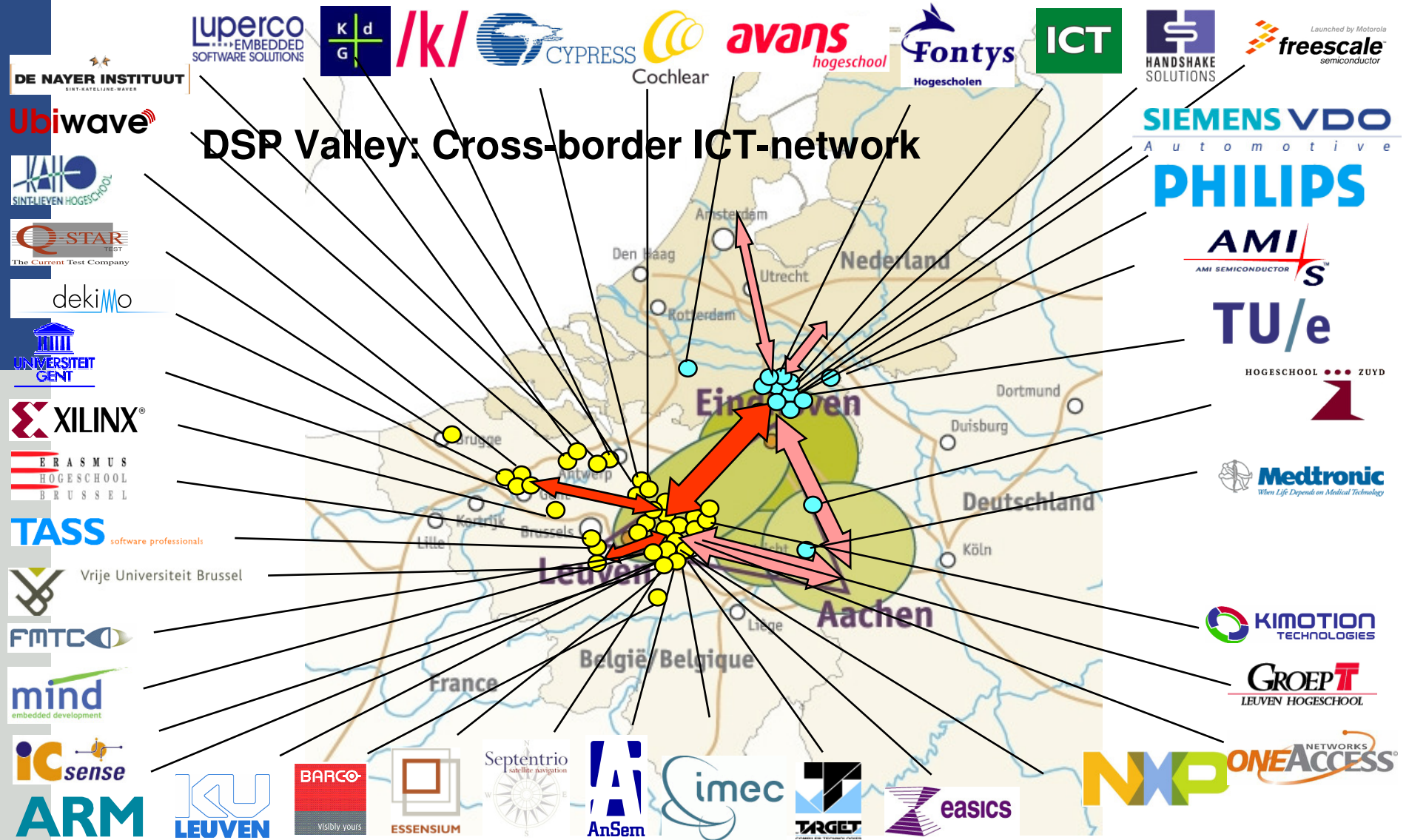
Life sciences: A first “network of networks”

- Leading edge technology in several areas
- Economic strengths, but opportunities for commercial cooperation have not been investigated systematically
- Start intensive cooperation between networks
- “BioMedica”: Joint cross-border forum & fair



Regional clusters: across the borders

DSP Valley: Cross-border ICT-network



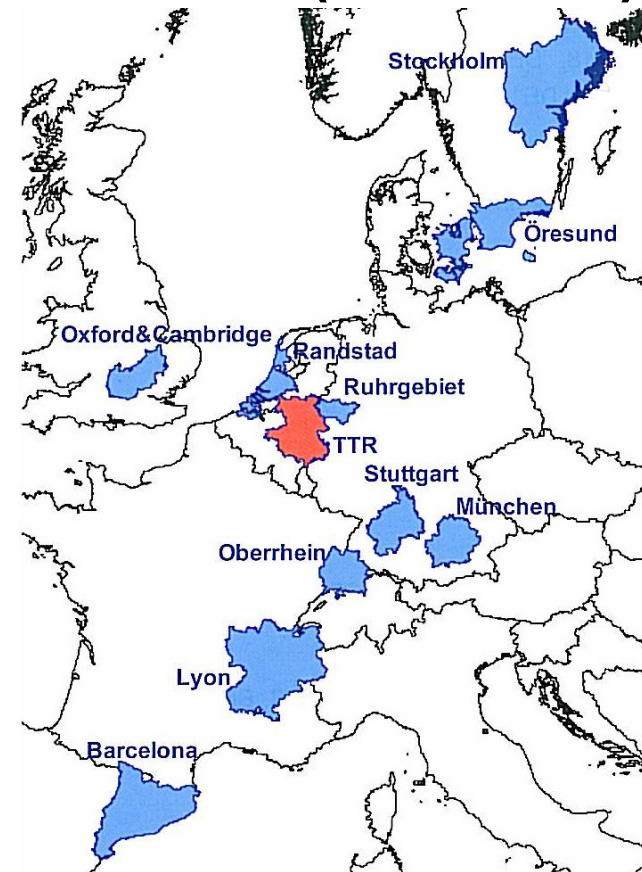
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**On our way to a network of networks:
*„towards TTC“***

TTR ELAt-initiative

Target: Develop a larger cross-border Technological Top Region Eindhoven-Leuven-Aachen (TTR ELAt)

- Noord-Brabant (NL)
- Limburg (NL)
- Vlaams-Brabant (B)
- Limburg (B)
- Lüttich (incl. DG, B)
- Westliches NRW (D)



INTERREG IVA-project towards „Top Technology Cluster“ (TTC)

***Cross-border Business Development
South-Netherlands – Eastern-Belgium – West-NRW***

“towards TTC”

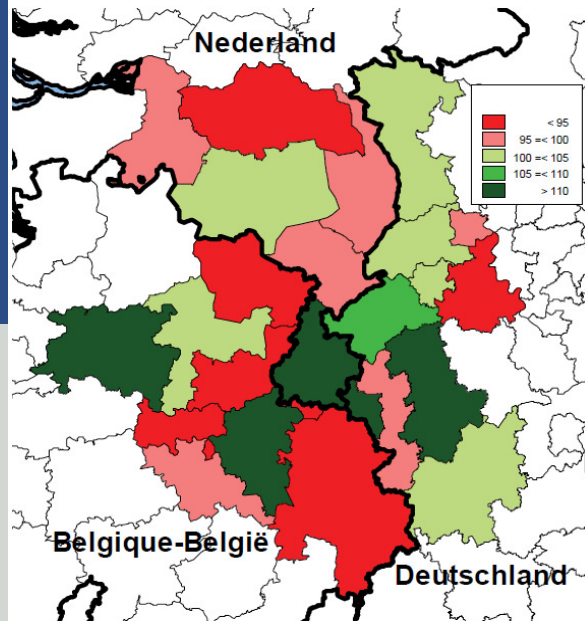
Problems

- Technology-oriented SMEs (incl. R&D-institutions /universtity institutes) maintain only very few business across the borders
- Existing business associations, business networks & business development support mechanisms in participating regions are unequally developed & function differently!
- National funding instruments to support innovation & business are not or just poorly coordinated - INTERREG funding does not meet the needs of SMEs so far!

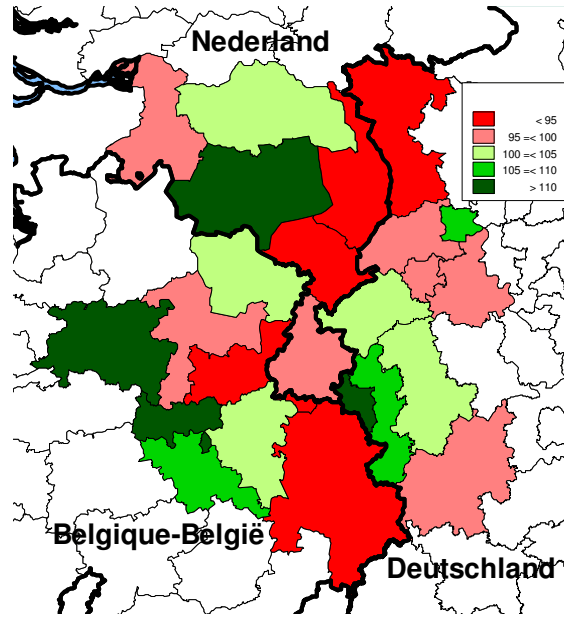
“towards TTC”

Targets

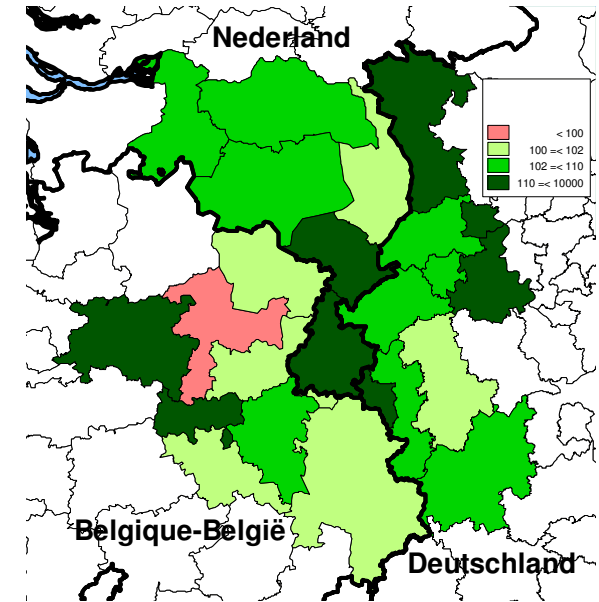
Foster cross-border business development in three promising fields:



Health/Life-Sciences



High-tech-systems

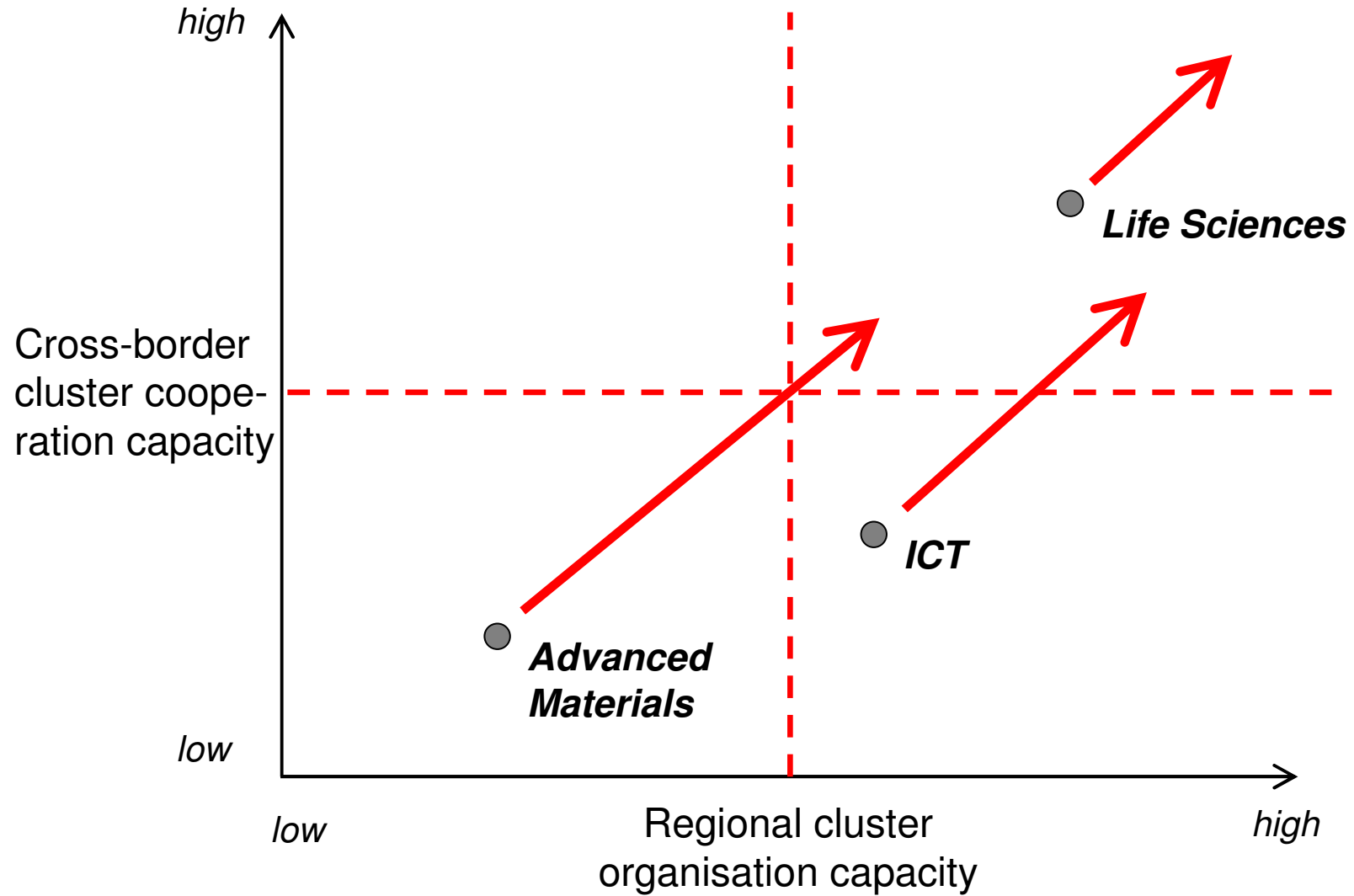


**Advanced materials/
chemicals**

Enable & stimulate technology-oriented enterprises to cooperate directly across the borders

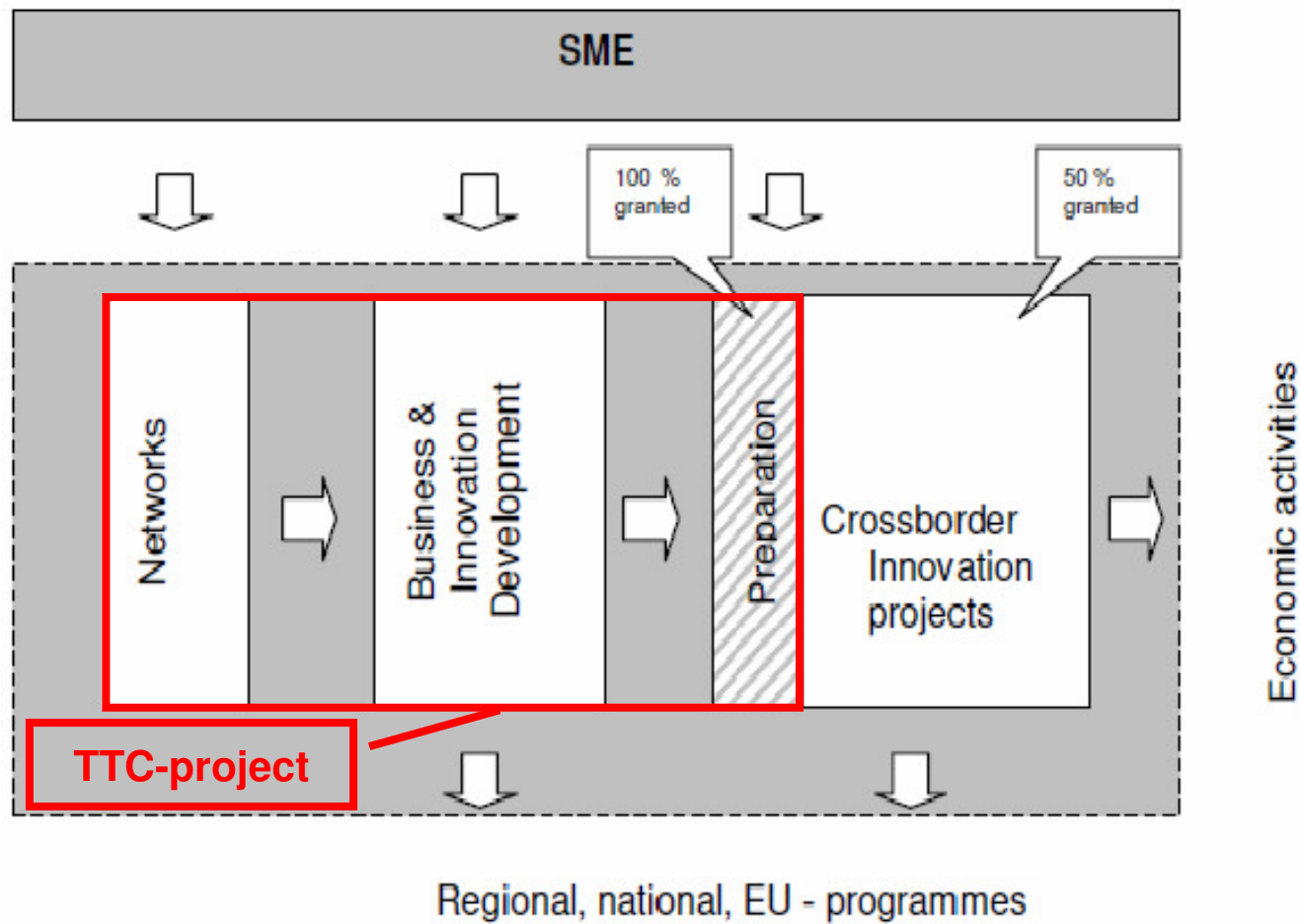
“towards TTC”

Cluster performance



“towards TTC”

Basic idea



“towards TTC”

Work package “Networking & intercluster activities”

Target:

Stimulate cross-border innovation-oriented cooperation

- Get to know each other, esp. each competencies & technologies
- Detect complementarities (How can we help/strengthen each other?)
- Reveal project ideas
- Find opportunities for cooperation (commercial business opportunities as well as public funded research)

Work package “Networking & intercluster activities”

1. Socializing events:

Get to know each other in an informal way: For all clusters from all technology domains (also in combination with triple-helix-events)

2. B2B matchmakings:

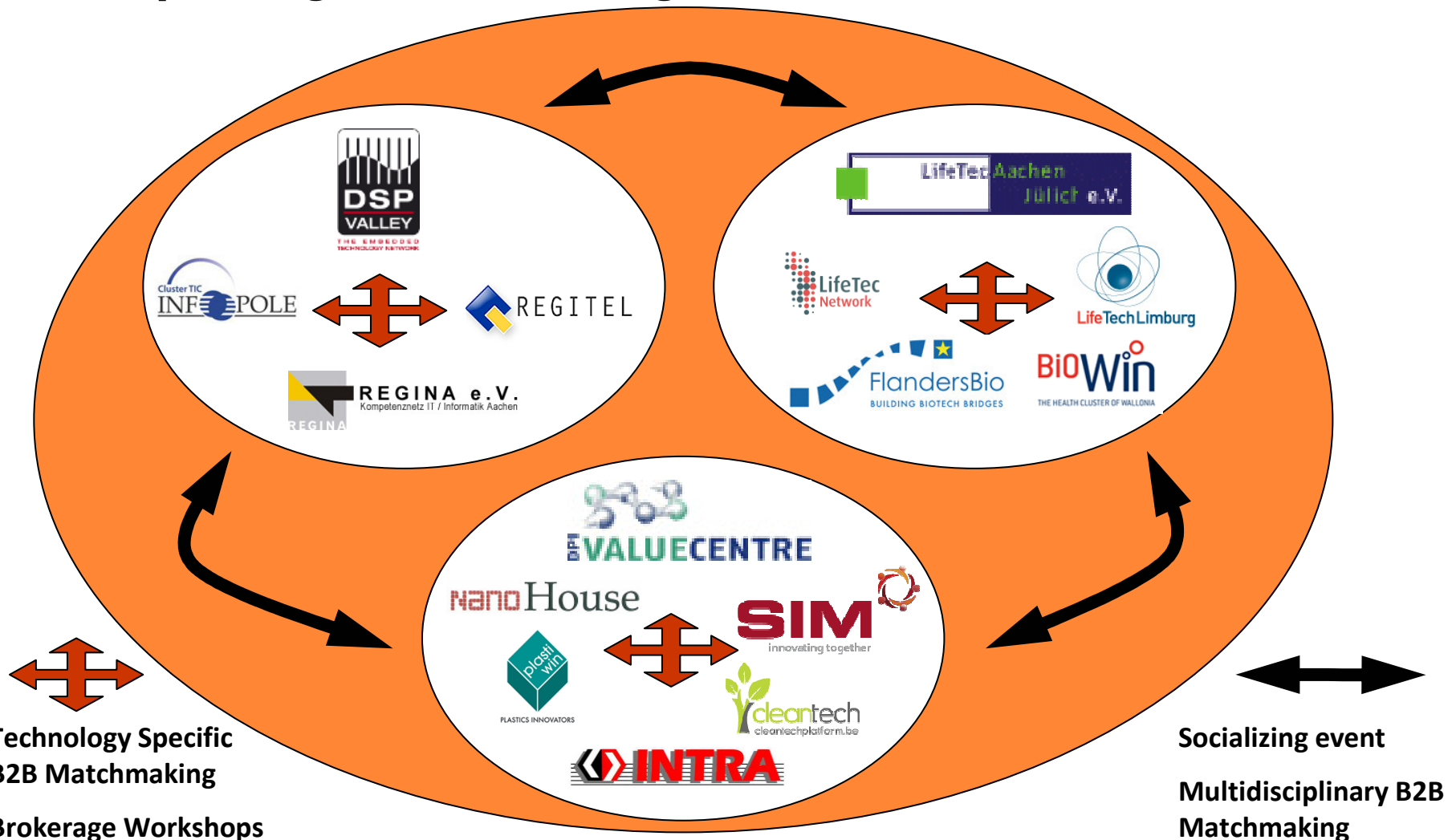
Formal one-to-one introductory meetings between potential partners: personalized agenda's for all participants after screening & preselection of partners to be met (techn.-specific B2B per technol. domain, interdisciplinary B2B with all clusters/technol. domains together)

3. Brokerage workshops:

Compose project teams for research funding programs based on created project ideas (workshops for each technology domain)

“towards TTC”

Work package “Networking & intercluster activities”



“towards TTC”

Work package “Business- & Innovation Development”

Target

Stimulating demand- & market-driven innovation & development leading to concrete sales, added value & employment at (esp. SME-)companies

Given the fact that business across the borders in spite of various cross-border activities is still on a low level, "towards TTC" aims at a kind of „pincer movement“:

On the one hand to **promote & establish "open" contacts** between companies on various levels, on the other hand to provide even a **more "guided" support, tackling problems by incentive measures** (called: Business development support)

Work package “Business- & Innovation Development”

1. Demand-antenna's

Organisation of regional „antenna's“ identifying or encouraging concrete demands of businesses (based on the various regional starting points)

2. (In-depth-)Interviews

(Pro)active maintenance & check with selected, representative companies to gain insight on innovation in products, services & processes, leading to direct inputs (project leads & project proposals)

3. Structured generation of ideas

Creativity sessions, roadmaps (e.g. on plastic recycling) workshops on promising applications of trends, dedicated workshops (esp. on development of project leads)

Work package “Business- & Innovation Development”

4. Toolbox

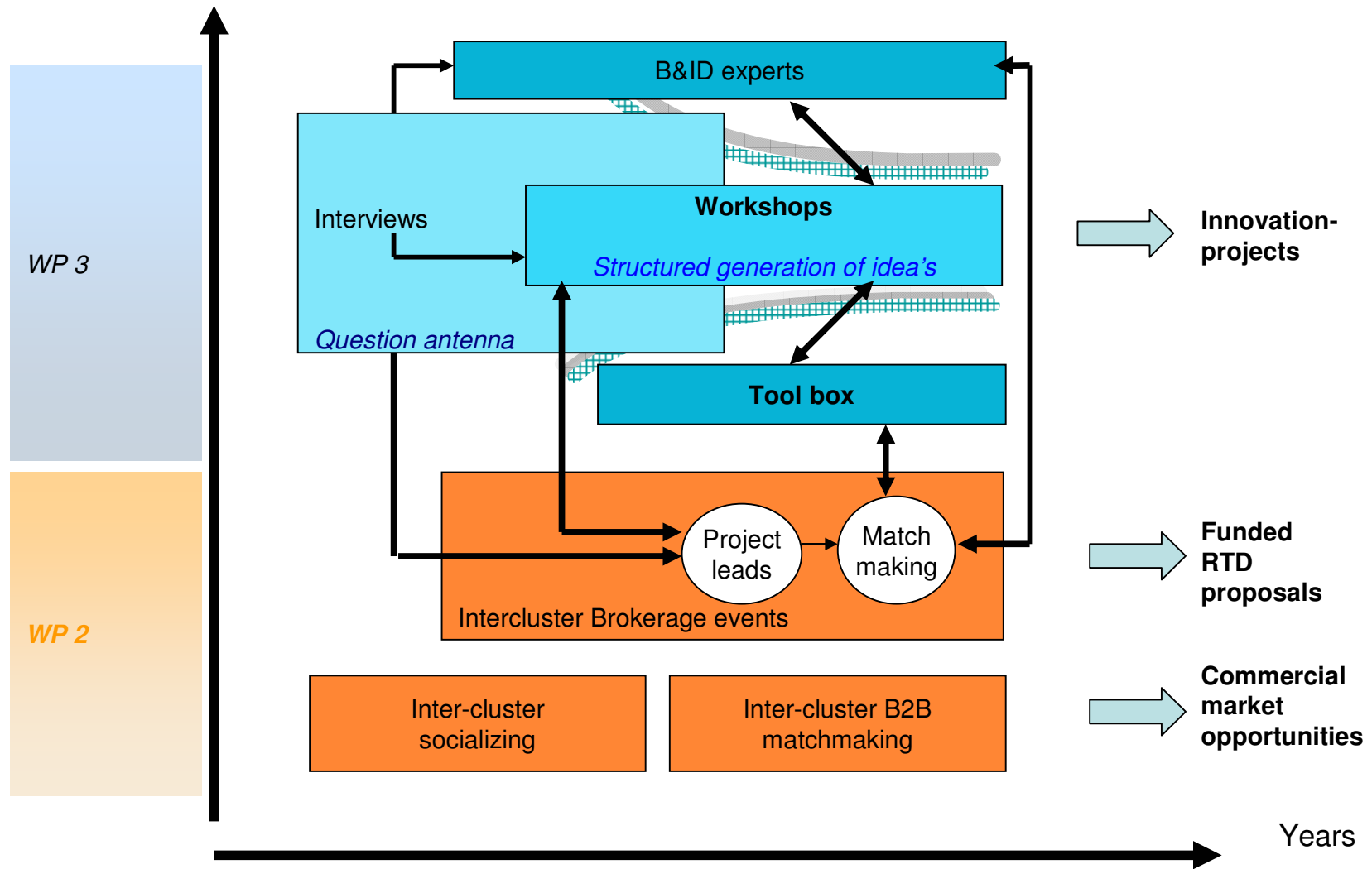
Allows direct address of small problems (like IP protection, legal support) by providing some limited, but very low-threshold, incentive instruments (e.g. feasibility studies, vouchers) to companies

5. Pool of B&ID-experts

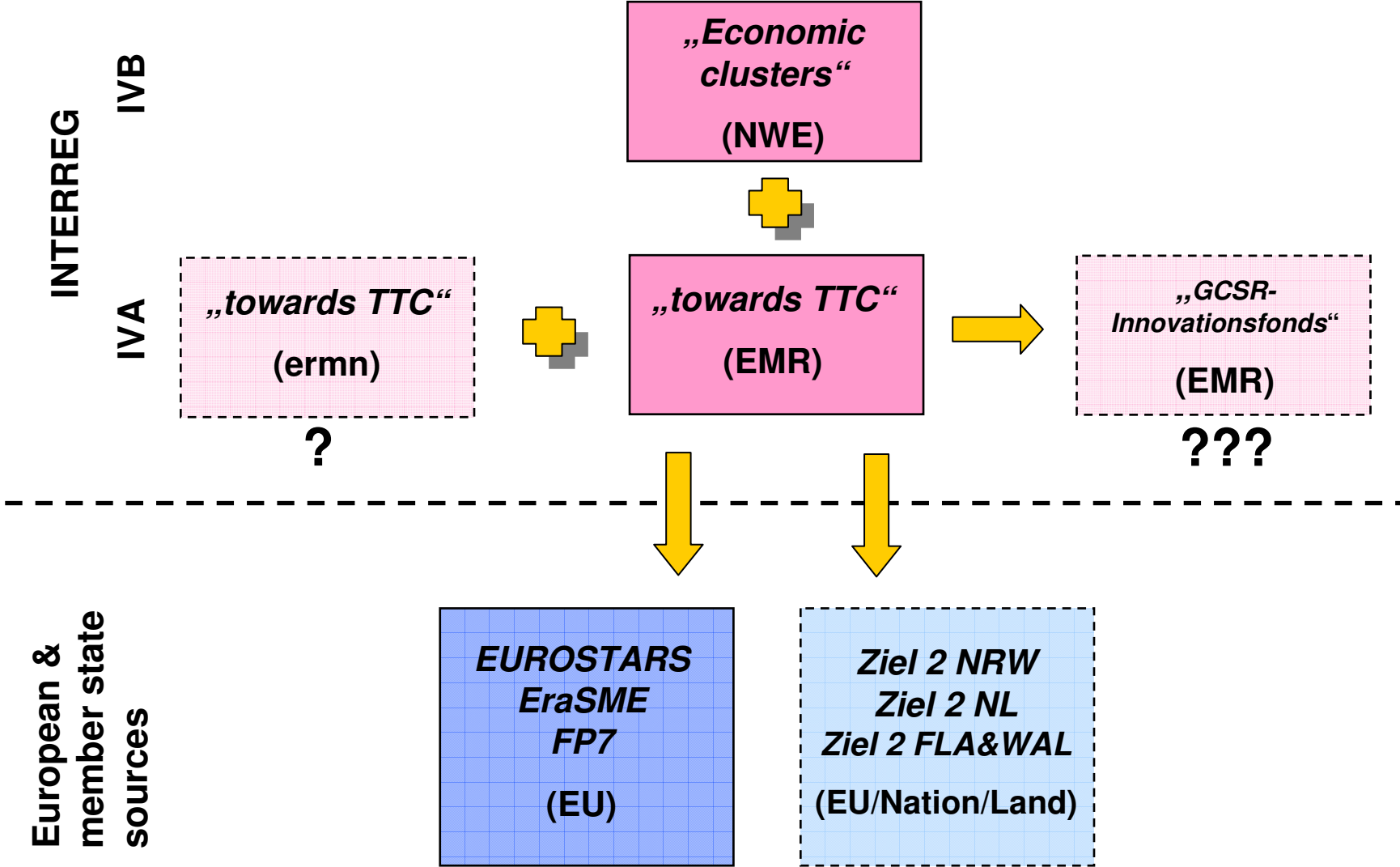
To secure successful project developments specialist knowledge of market / technology, an open mind & excellent qualities in the field of counseling / coaching is required: Therefore a pool of external experts with additional budget to boost implementation more in detail will be implemented

“towards TTC”

Interrelation of Networking- & B&ID-activities



Outlook: A series of strategic activities



Your contact & further information:

r.meyer@agit.de

www.technology-region-aachen.com

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