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## Recent Experience with German Cluster Policies

The Leading Edge Cluster Competition and the Bavarian Cluster Campaign as Examples

Workshop „Boosting Innovation: a cluster approach“, 18 June 2010, Piacenza, Italy

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# Agenda

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1. German Cluster Policies in Context
2. Basic Assumptions of the Cluster Concept
3. Cluster Policies
4. Basic Model of Cluster Effects
5. Examples & Experience
6. Chances of Clusters
7. Conclusions based on the German Experience

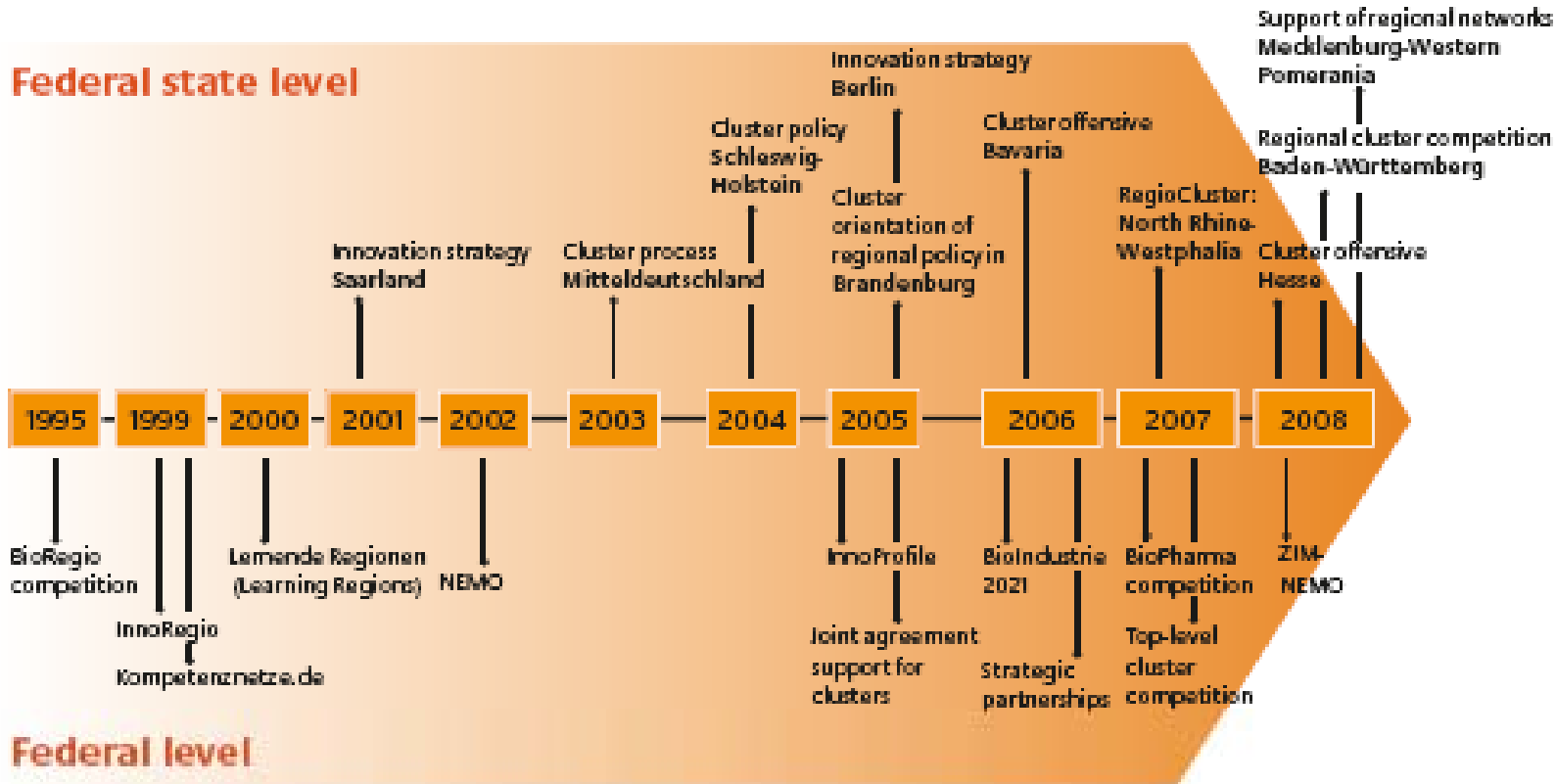
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# German cluster policies in context

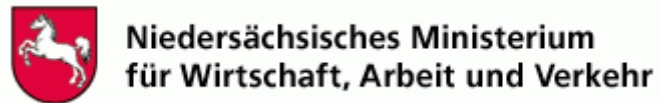
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- Quite long experience with cluster policies on the federal level (design, implementation, evaluation, exit): BioRegio in 1995, EXIST in 1998, InnoRegio in 1999, Learning Regions in 2000, InnoProfile in 2005, Leading Edge Cluster Competition in 2008; regional competitions
- Various federal states with own cluster initiatives (e.g. Bavaria, Hessen, Baden-Württemberg, Schleswig-Holstein), be it in the framework of a cluster competition or top-down
- Significant financial input in the case of the federal initiatives (~600 Mio. € leading edge cluster competition)
- Different handling of the cluster concept and de facto different objectives to be pursued: innovation vs. industry policy, balance-oriented strategies vs. growth poles, regional development

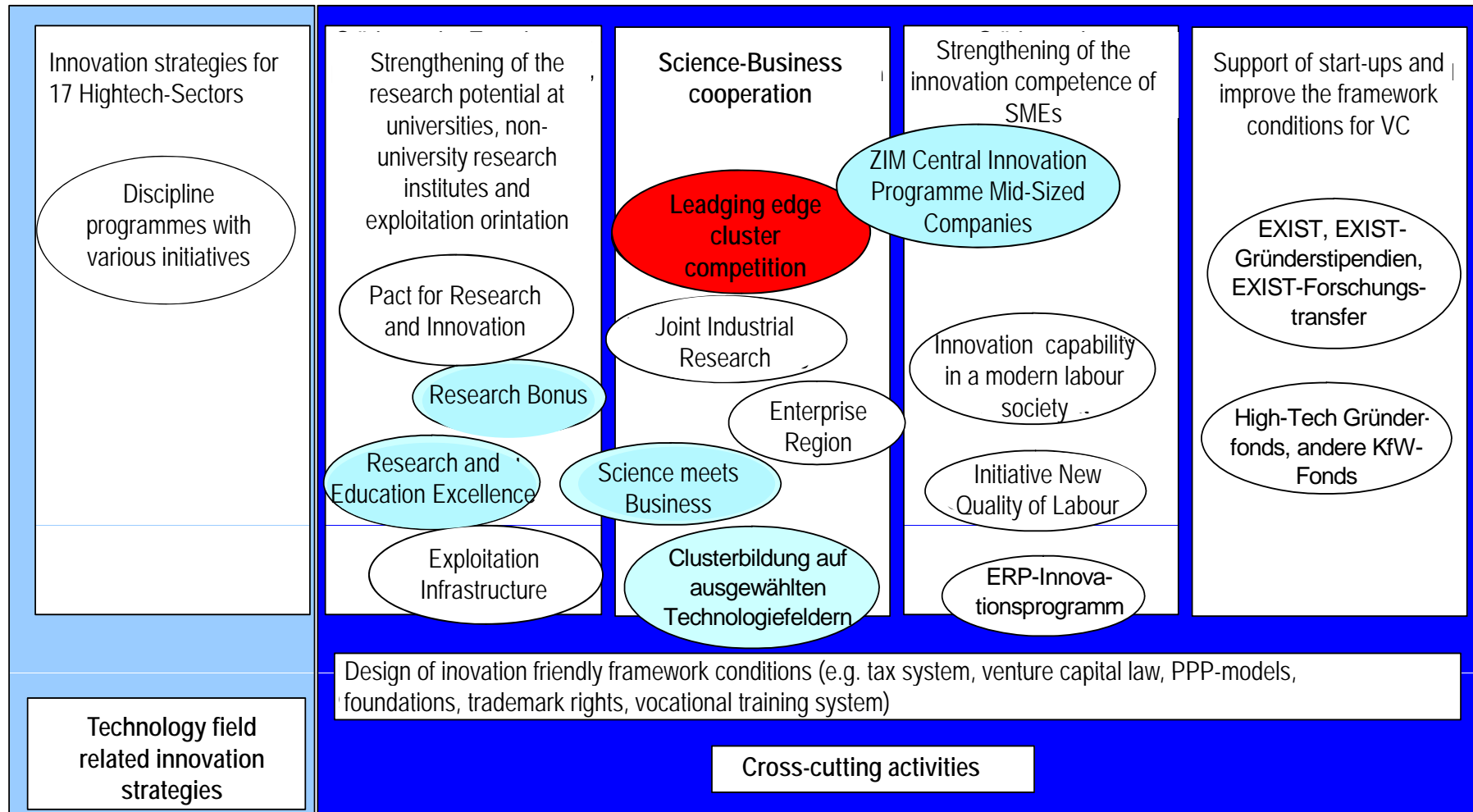
# Most relevant recent cluster initiatives



# Some examples of cluster initiatives in Germany



# Policy measures on the federal level within the context of the Hightech-Strategy



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# Basics assumptions of the cluster concept

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- Regionale agglomerations of companies and technology-/ innovation related firms as well as other organisations (in particular universities and research institutes) generate competitive advantages due to cooperation und competition in close proximity (*various definitions see Martin/Sunley 2003: 10*)
- Thereby classic localisation advantages and externalities are crucial as well as – in a postfordistic context – social aspects in terms of trustful learning- and innovation related interaction (*see et al. Breski/Malerba 2005; Malmberg/Maskell 2002; Hartmann 2006*)
- Interdependent relationship pattern between a regional-sectoral cluster and its surrounding business region (*Thomi/Sternberg 2008*)

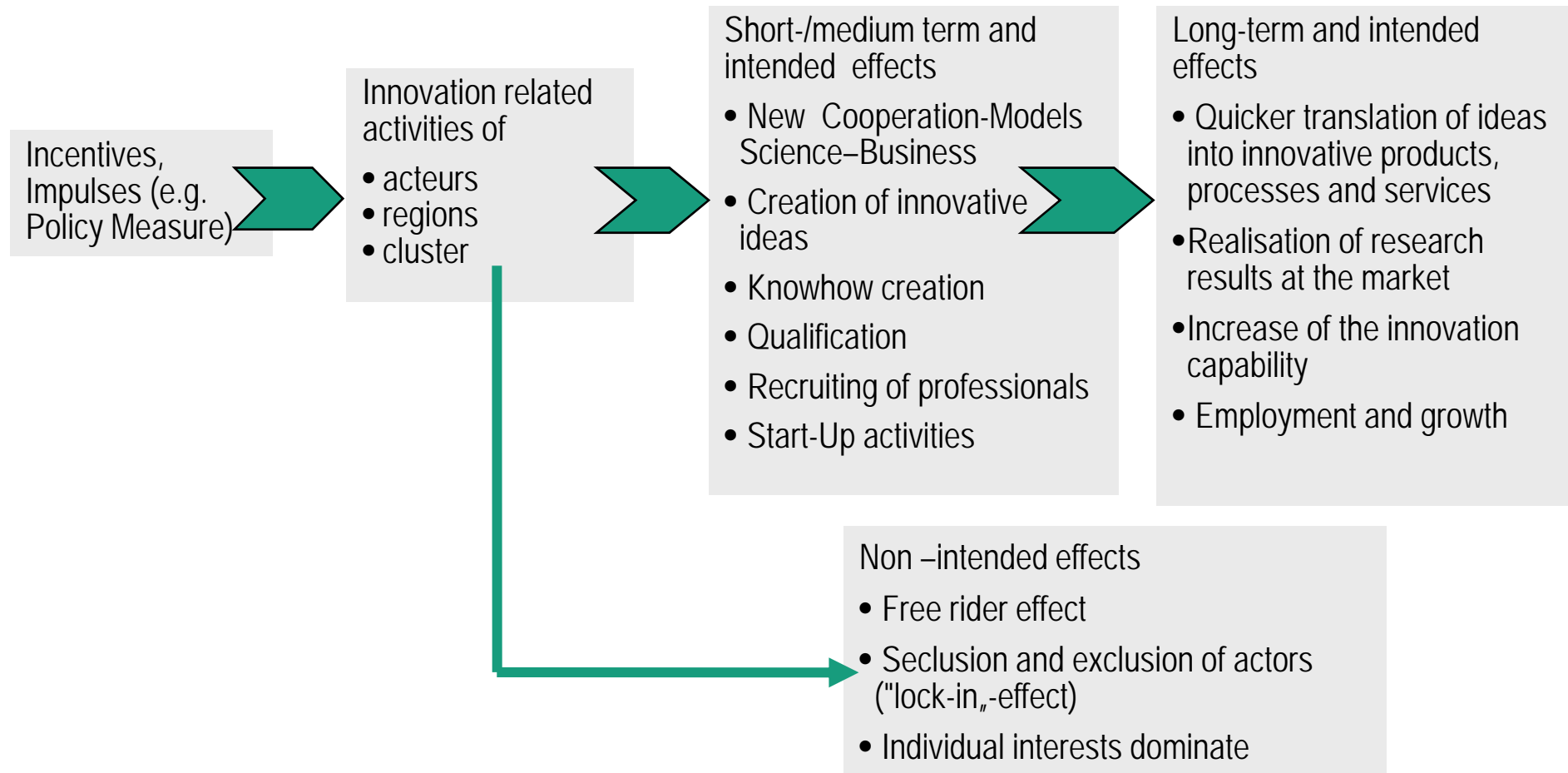
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# Cluster support – cluster policy

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- (Public) Cluster support primarily comprises „soft“ measures of moderation, network- and image-building, but also accompanying project- and thematic incentives (in contrast to the „hard“ support of investment) (*vgl. Sautter 2004; Sölvell et al. 2004; Sternberg et al. 2004*); however, leading edge cluster competition much more far-reaching
- Overall objective is the stimulation of organisations of specific technology-fields or branches towards more socially rooted vertical and horizontal interaction; main focus is on an increase of collective innovation (*Fromhold-Eisebith/Eisebith 2008*); superior objective is an increase of the regional, national and where applicable international competitiveness (*Cernavin et al. 2006; Enright 2003; Porter 1998*)

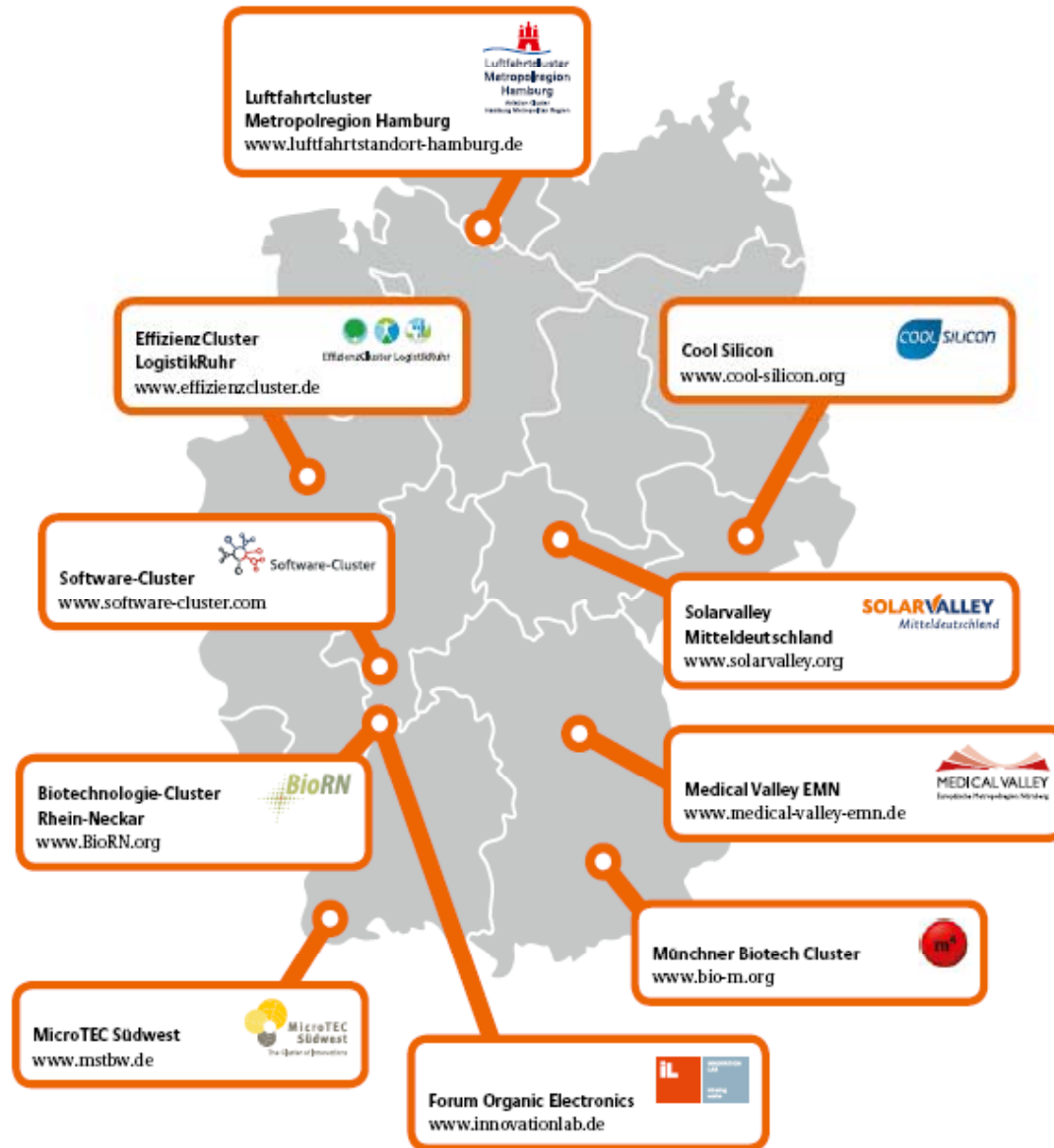
# Basic model of cluster effects



# The examples: big picture

	Period	Budget	No. of clusters	Type of cluster	Feature of the initiative	Strategic elements of governance
<b>Leading Edge Cluster Competition</b> (Federal Ministry of Education and Research)	2008-2015	~ 600 Mio. Euro	15 (to be selected in three phases)	Research-/technology - driven cluster	Competition; Selection of leading edge cluster by high ranking jury in two steps	Jury Advisory Board Accompanying Evaluation
<b>Bavarian Cluster Offensive</b> (Bavarian Ministry of Economic Affairs)	2006-2015	45 Mio. Euro (2006-2011)	19 (first period; probably to be reduced for second period)	Research-, Industry-, Service-, and cross-section cluster	Top-down selection of cluster	Taskforce Evaluation

# Leading-edge clusters in Germany

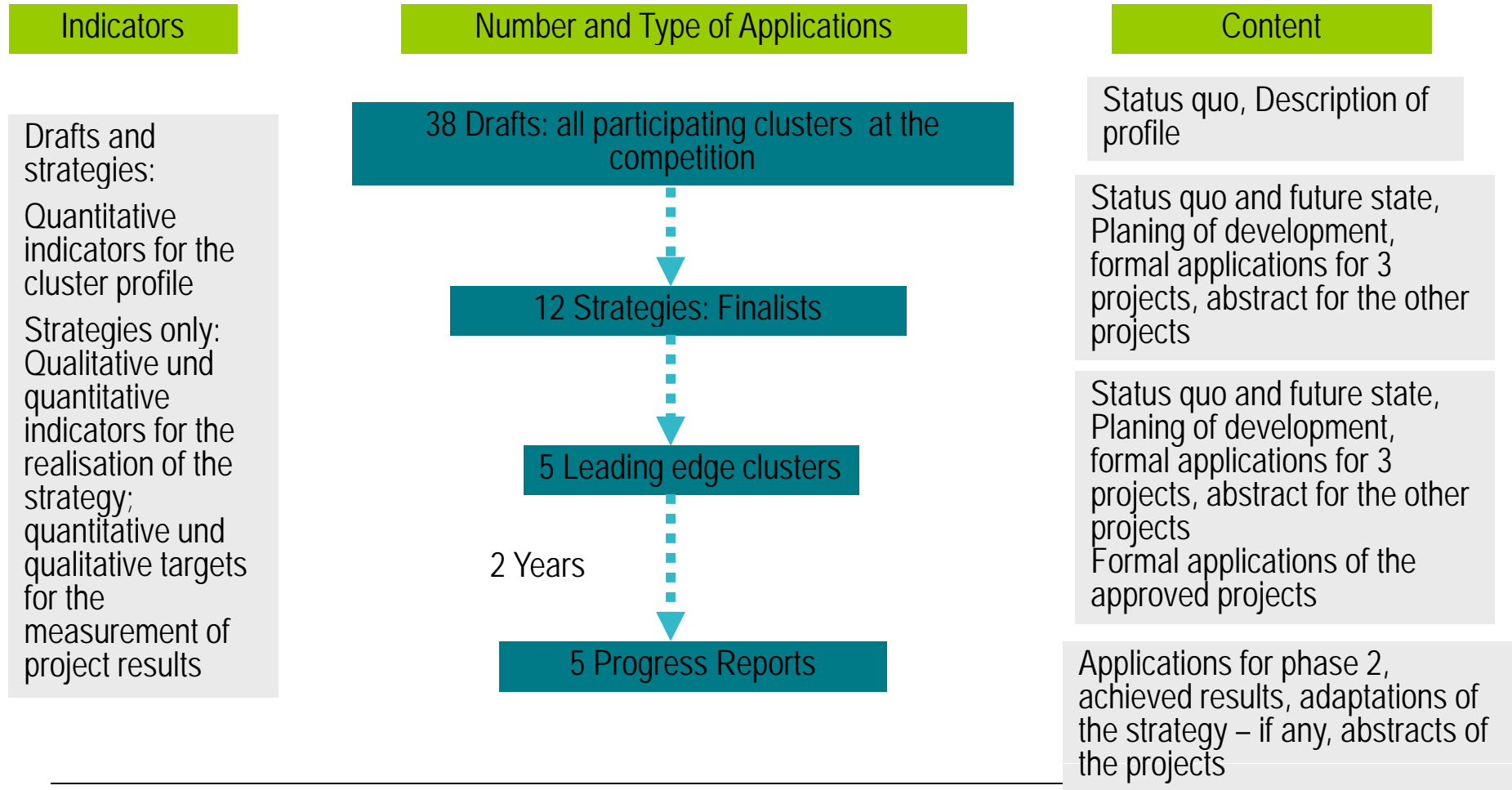


Currently 10 Clusters operating –  
after two competition rounds  
Final round: 2010

## Objectives:

- Building of bridges between science and business to safeguard growth and employment
- Research results having innovation potential must be recognised and quickly and successfully brought to market
- At the same time, research matters of relevance for the future must be formulated and solutions found

# Data and information provided in the course of the application



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# Experience So Far

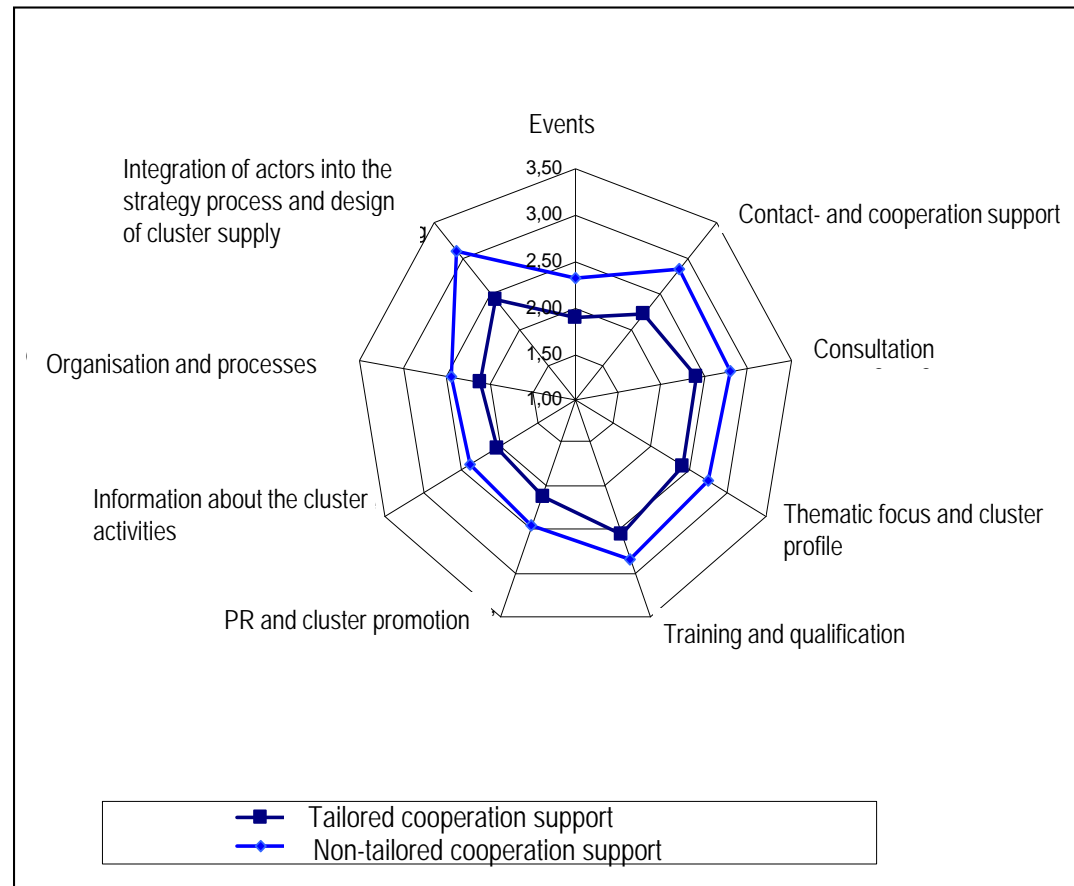
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- Significant and sustainable (regional) **effect** in the frame of the **competition itself**: individual cluster-concepts which failed carry on – if need be in a reduced scope (even though they will not be funded in the course of the LECC)
- Positive effect in terms of **strategy development** for the respective region and certain technology fields („strategic intelligence“)
- Strong **commitment** of cluster related **companies** – definition of R&D projects and financial participation
- **Policy learning** as important feature („Learning Programme“): Rationale: due to three successive competition rounds, experience from the always previous cluster can be transferred to the „new“ winners
- To be observed: **Failed concepts** to be funded by initiatives of the federal states?

# Cluster instruments: the example of CO Bavaria

Instruments of the cluster services which focus on the **stimulation of tailored cooperation** support generate a much higher satisfaction among cluster actors and better effects:

- Cluster meetings
- Task forces
- Intermediation of single contacts
- Cooperative projects
- Strategy meetings

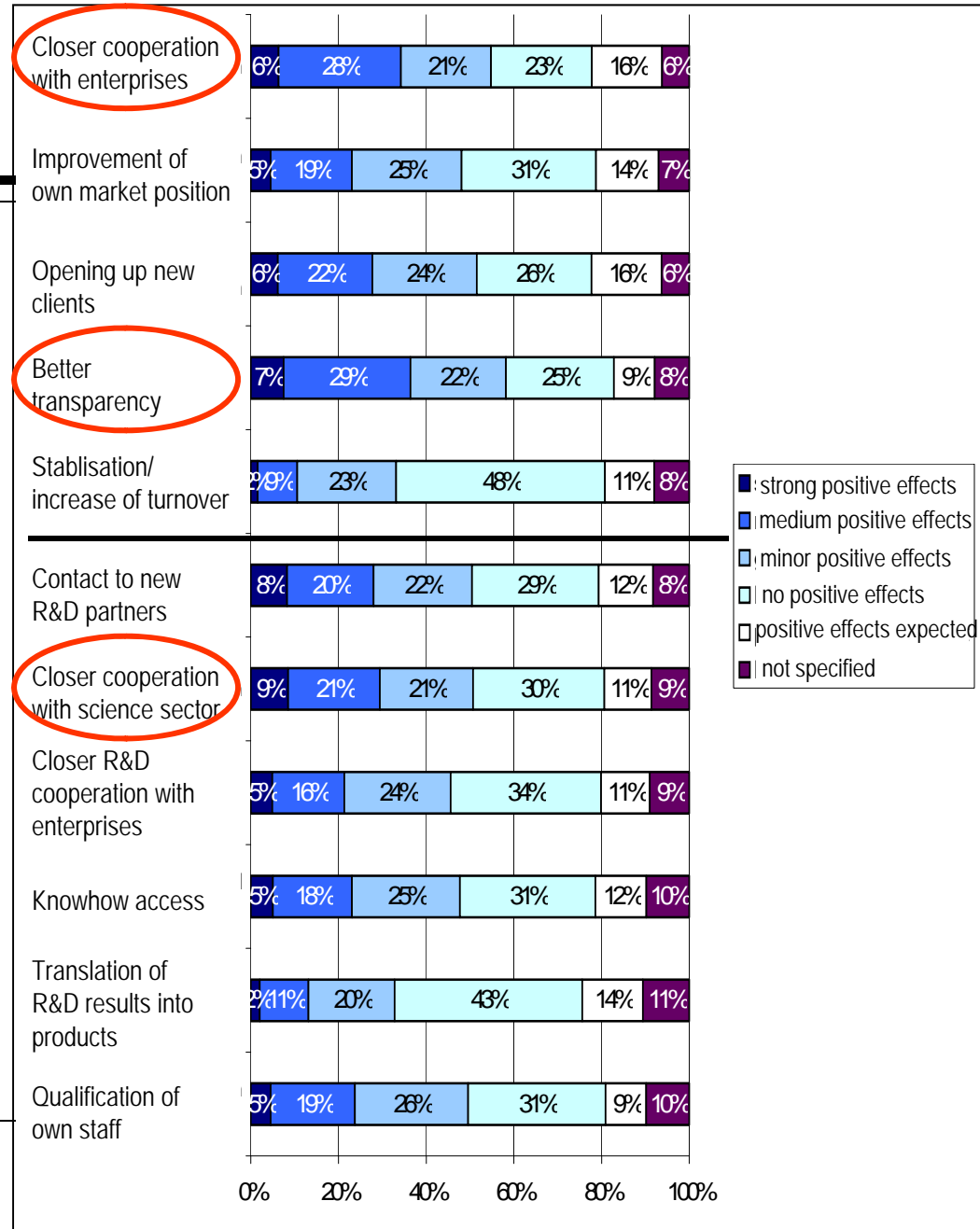


Source: Own Survey 2008

# Cluster effects: the example of CO Bavaria

Most important effects for cluster companies:

- Better transparency of actors and business fields
- Closer cooperation with other companies
- Closer cooperation with the science sector
- Contact to new R&D partners

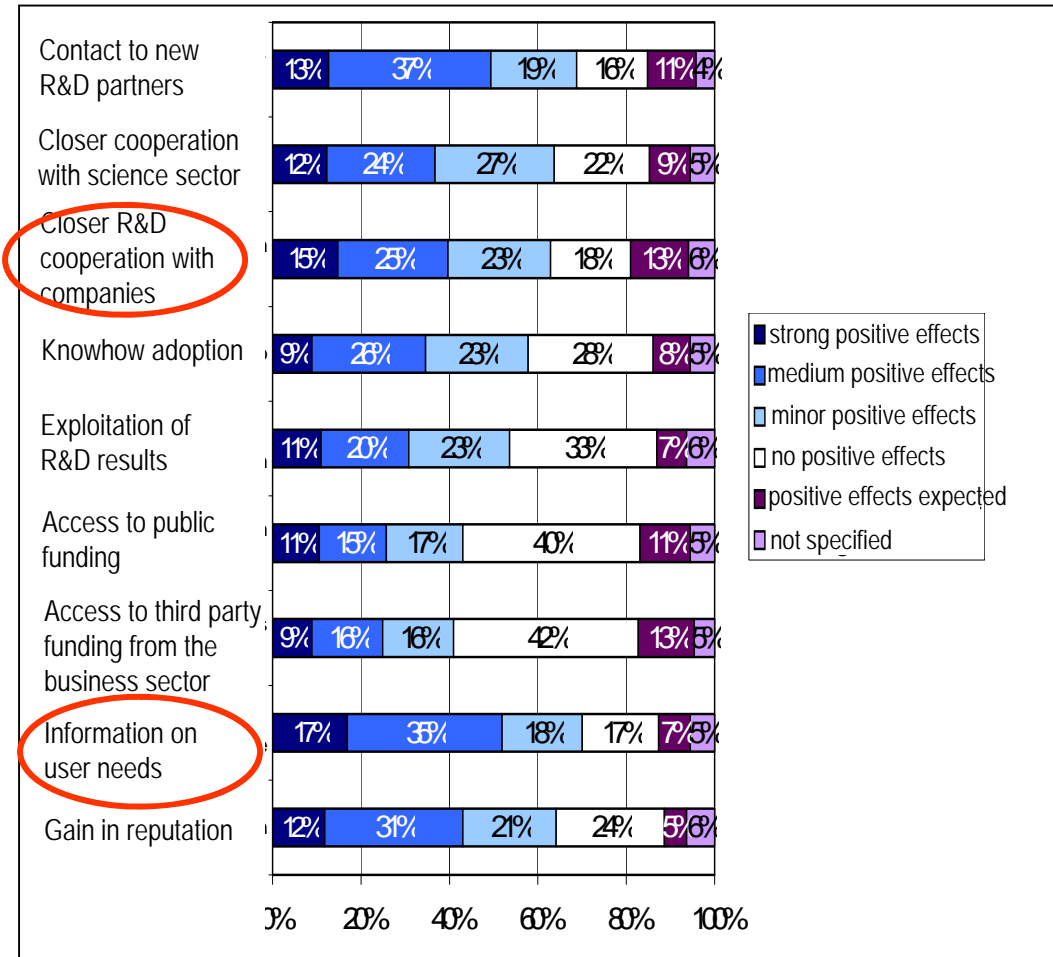


# Cluster effects: the example of CO Bavaria

Most important effects for **scientific organisations** within cluster:

- Information on user needs
- Closer R&D related cooperation with other companies
- Contact to new R&D partners
- Closer cooperation with scientific sector/gain in reputation

Source: Own Survey 2008



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# Chances of Clusters

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1. A clear **structure of network and platform** (cluster management organisation) ensures the necessary transparency and facilitates the „attachement“ of the actors
  - **Small networks** advantageous because they can ensure transparency and attachment of actors very early on
  - Necessity of large clusters to either define adequate **thematic priorities** or thematic subdivisions and/or define a core group of active actors willing to actively participate in the cluster
2. Cluster that show an **adequate mix** of large companies, SMEs and actors from the scientific community and intermediaries are – as a general rule – more capable to generate positive cluster effects than single-sided networks

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# Chances of Clusters

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3. A group of **active actors** that support the cluster is indispensable. The level of activity can be increased by:
  - An appropriate **offer** as regards the transfer of problem related cooperations
  - The integration of actors into the **strategic process**
  - The identification of **relevant topics**
  - The creation of a **direct benefit**, e.g. the access to public R&D funding
  - A **transparent organisation** of the cluster, for instance in the form of a registered association or similar structures
  
4. Instruments of the cluster service that are targeted towards the **stimulation of tailored cooperations** generate a much higher satisfaction and better effects at the target group; however, they require considerable resources

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# Conclusions based on the German Experience

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- Leading Edge Cluster Competition of the federation substantially comprehensive and **far-reaching** than similar measures of the federal states
- In general, competitions as a **motivation and selection instrument** have proved to be successful
- Basically, a mixture of creating lighthouse-projects, „area-funding“ and cluster support appears to be adequate; the question is not „Either-Or“ rather than the **coordination and governance** of measures and instruments
- Nevertheless in question is, whether the R&D- and Innovation support in the German business sector **lacks a broadly effective instrument** that supports R&D technology-unspecific and unbureaucratic (e.g. tax incentives for R&D)?

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# Thank you!

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