



...the German Region for Smart Solutions





Hightech Strategy Germany



- The intention of the German Hightech Strategy is to create leading markets, to intensify the cooperation between science and economy and to improve the environment for innovations even further
- The „Spitzencluster“ competition is the flagship of the German Hightech Strategy with the slogan

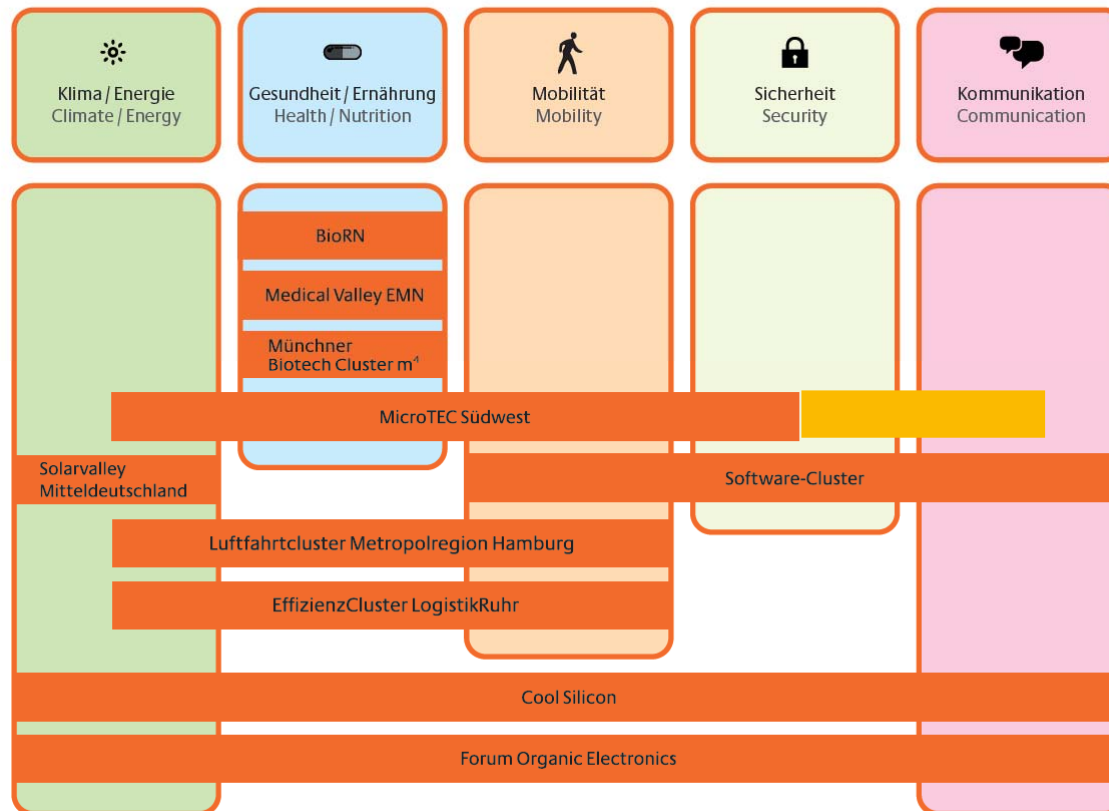
„Germany’s Spitzencluster – More Innovation. More Growth. More Employment.“



Areas of Activity of the Hightech Strategy

Gewinner des Spitzencluster-Wettbewerbs

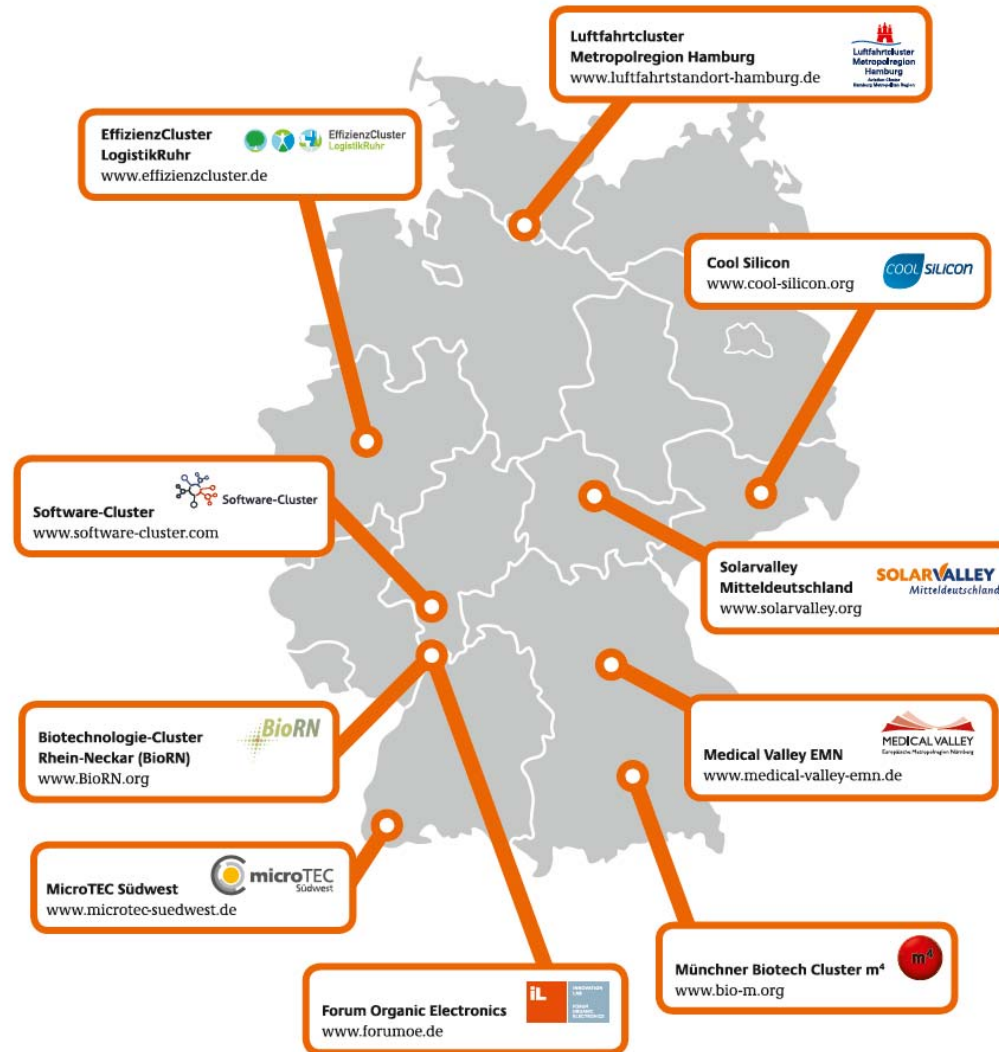
Zuordnung der Spitzencluster zu den Bedarfsefeldern der Hightech-Strategie



Quelle: Bundesministerium für Bildung und Forschung (BMBF), 2010

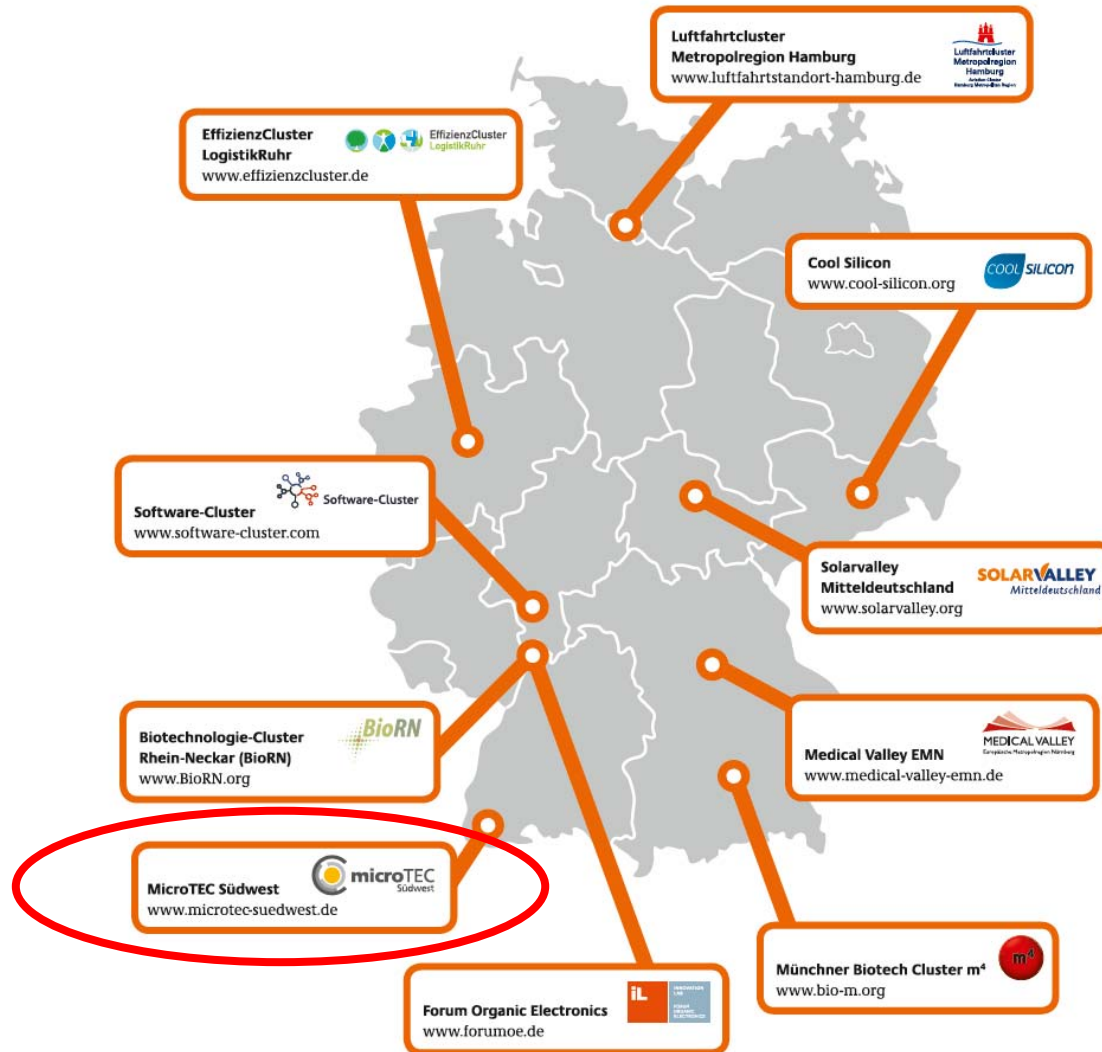
Deutschlands Spitzencluster

Gewinner des Spitzencluster-Wettbewerbs des BMBF



Deutschlands Spitzencluster

Gewinner des Spitzencluster-Wettbewerbs des BMBF



Cluster Strategy: The Cluster

- Organically grown cluster including 350 actors working interdisciplinarily
 - Highest concentration of competences in Europe along the innovation and value chain
 - > Excellence universities
 - > Research organisations
 - > Small and medium-sized enterprises (SME) are technologically strong
 - > World market leaders
 - Strong technology platform
-
- = Basis for break-through innovations





Cluster Strategy: The Vision 2020



**Number 1 worldwide
in smart microsystems
technology (MST) solutions
for global markets.**

thus

**Long-lasting securing and strengthening
of the technology and production site Germany.**





Global Challenges = Global MST Markets



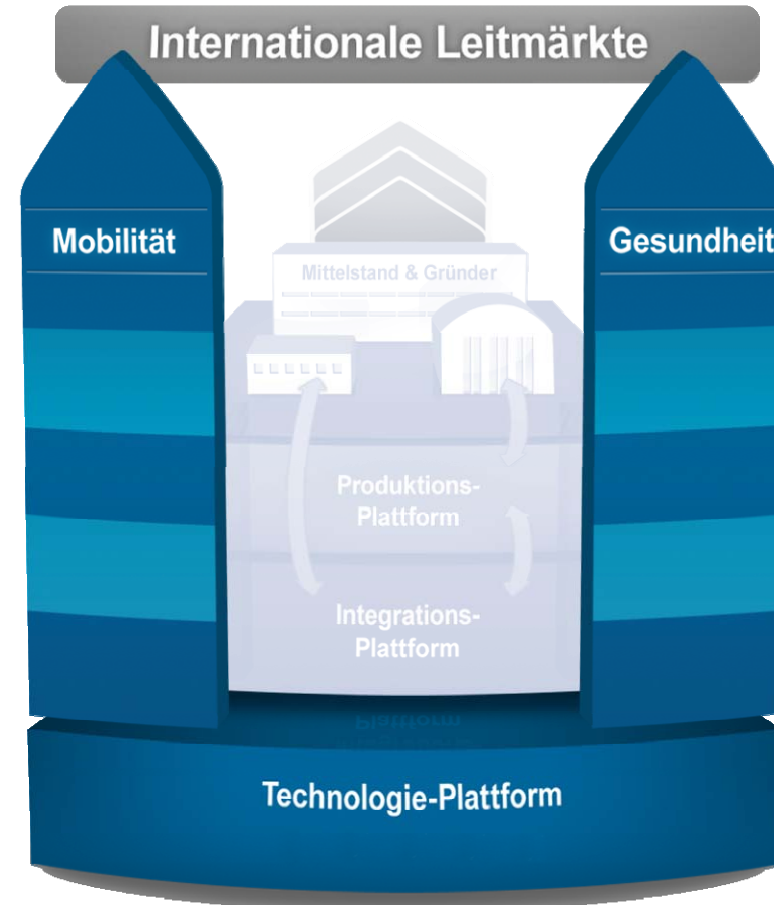
Cluster Strategy: The Beacons

The Goal

- To achieve a leading international market position
- Fast and successful penetration through world market leaders

Challenges

- Close coordination of the strategy concerning internationalisation
- Involvement of SME concerning project results
- Supporting SME to enter international markets



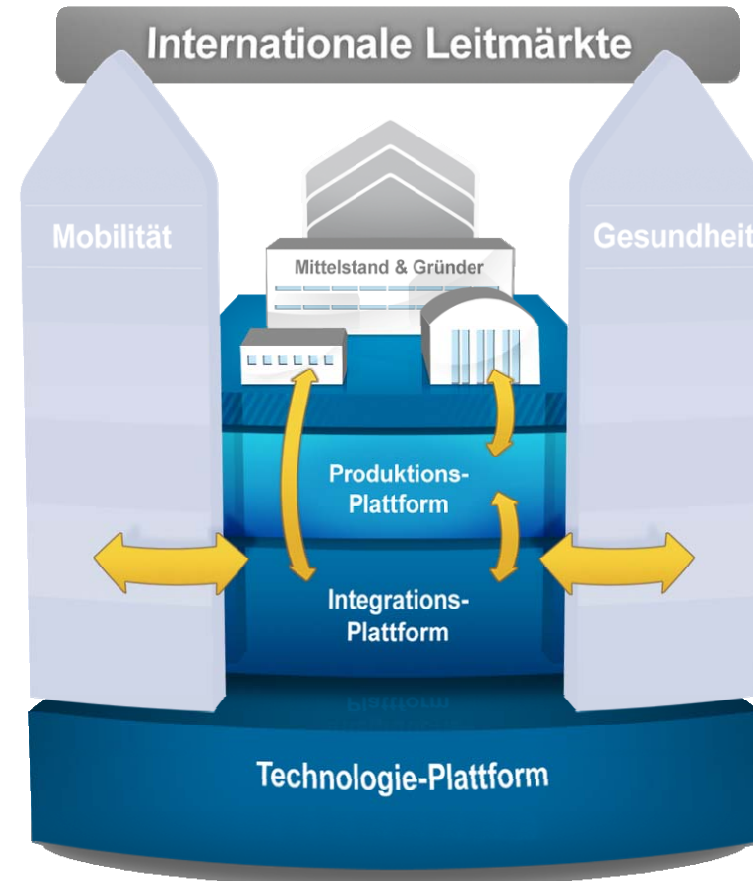
Cluster Strategy: The Platforms

The Goal

- Expansion and strengthening of the innovation and value chain – with focus on founders and SME
- Improvement of the links between basic research and technology development

Challenges

- Generation of dynamic platforms: from R&D to economic production of small and medium volume series



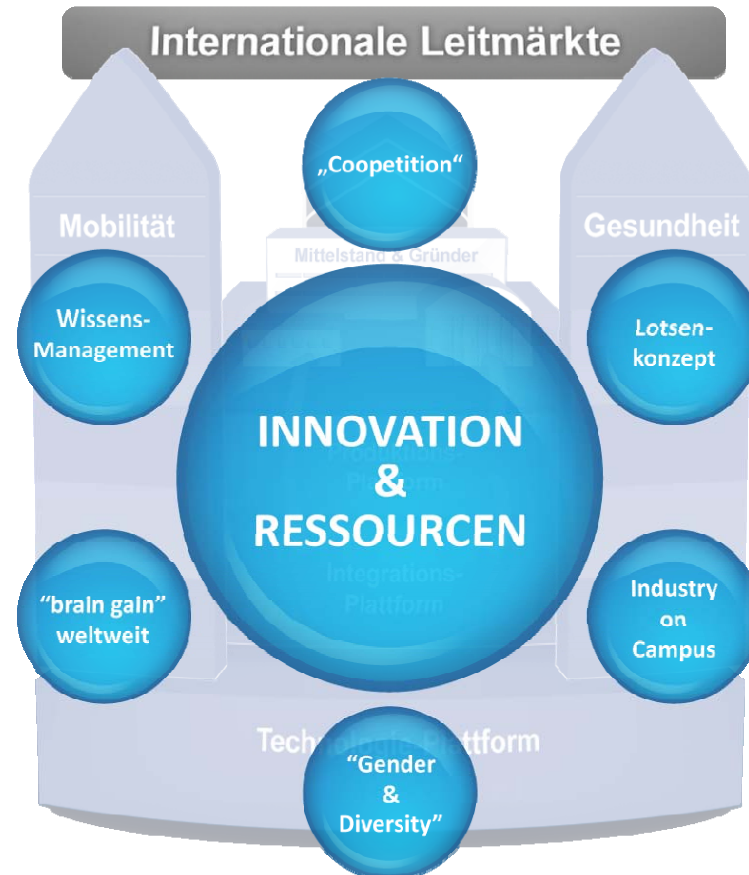
Cluster Strategy: The Structure

The Goal – our central matter!

- Promotion and acceleration of innovation and cooperation processes
- Improvement of qualification and international recruitment

Challenges

- Establishment of a regional support structure
- Creation of a center for innovation and start-ups
- Increasing the attractiveness of the region for skilled workforce from abroad
- Programmes for young people, technicians and female junior staff



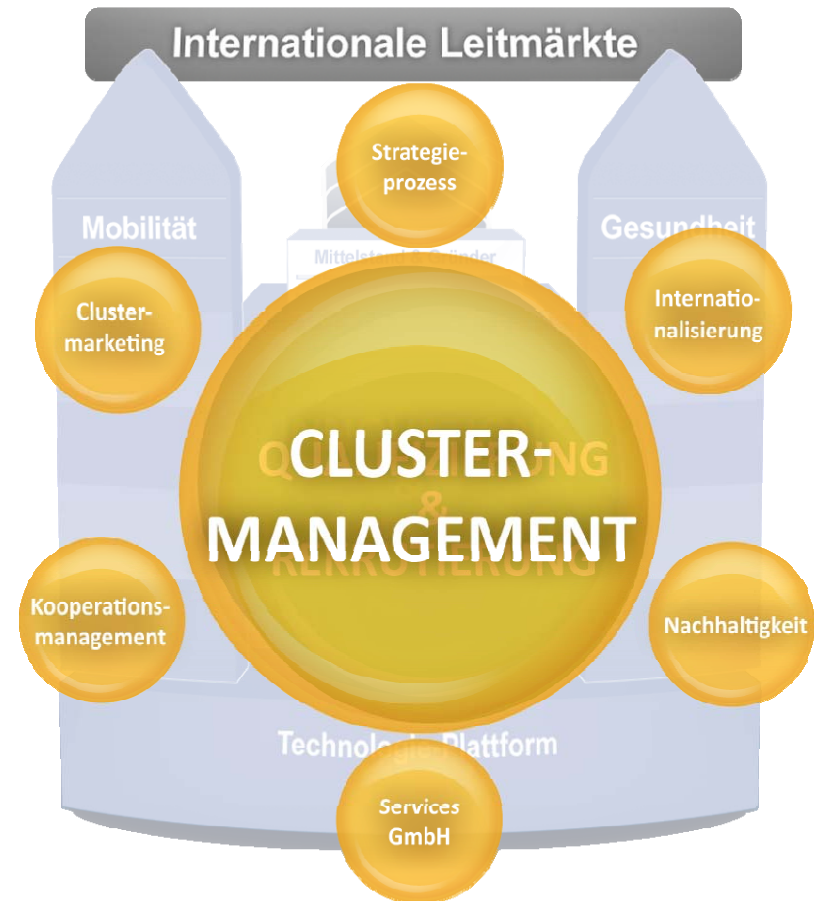
Cluster Strategy: The Cluster Management

The Goal – our challenge

- Balancing the interests between industry, academia and politics
- Continuous development of the technology roadmap
- Coordination of all cluster actors and project partners

The Unique Features

- We tie competences
- We realise ideas quickly
- Our cluster is well-known
- We are organised in a lasting way





Selection of Projects: Beacons

Beacon „Health“: in vitro diagnostics (IVD)

- Production-integrated creation of functionalised components
- Pipetting technology for the next generation of diagnostics products

Coordinator: Roche Diagnostics

Beacon „Mobility“: Robust and efficient sensors (RES)

- SiC technology for robust sensor under harsh environments
- Room temperature thin FIR image sensors with nano absorption layers

Coordinator: Robert Bosch



Selection of Projects: Platforms

Platform for Production Technologies: PRONTO

- New products for reel to reel production of MID based microsystems
- Ultra thin chips

Coordinator: IMS CHIPS

Platform for Integration: SSI

- Energy self sufficient synchronised high-speed wireless sensor network
- Radar based torque measurement with SAW sensor

Coordinator: IMTEK



Selection of Projects: Platforms

Platform for Process and Methodological Competence: OPTIMUS

- Integrated concepts and methods for effective and efficient innovation oriented cooperation

Coordinator: ITA



Selection of Projects: Management

Innovation and Start-ups: PROMITIS

- Pilot and web platform to coordinate the knowledge and cooperation management
- Start-up support and innovation center

Coordinator: ISW

Qualification and Recruitment: MicroTEC Academy MAC

- Qualification of engineers
- microTEC online academy and services

Coordinator: Hochschule Furtwangen



Selection of Projects: Management



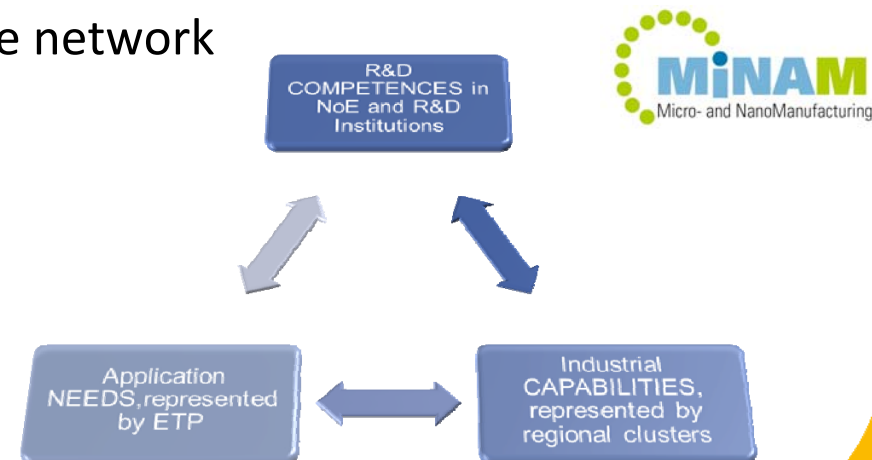
Internationalisation and Cluster Marketing: MicroTEC Worldwide MWW

- International marketing
- Networking

Coordinator: bw-i

Additional international activities:

- MINAM 2.0: Build up a best practise network facilitating effective information exchange between players in the Micro-Manufacturing Area
- Futures International





Benefits for Members

- **Knowledge and technology transfer**
- **Marketing services**
- **Internationalisation**
- **Acceleration of innovation processes**
- **Start-up support**
- **Access to education and training programmes**
- **Networking, e.g.**

Clusterkonferenz, July 5-6, 2011 in Karlsruhe

Further information:

www.microtec-suedwest.de/Clusterkonferenz



MST BW e.V. – Backbone of the Cluster

- **2005:** foundation as technology network initiated by the Ministry of Economic Affairs Baden-Württemberg
- **2006:** start of operations and charged with the cluster management
- **2007:** participation in the first round of the Leading-Edge Cluster Competition
- **2008:** Winner of the regional cluster competition Baden-Württemberg
- **2010:** Winner of the Leading-Edge Cluster Competition (2nd round)
- more than 70 members
- core of the innovation and value chain
- strong service organisation for the members:
6 staff members as of today



Contact



Dr. Christine Neuy
Spitzenclustermanagement / Cluster Management MicroTEC Südwest

MST BW - Mikrosystemtechnik Baden-Württemberg e.V.

Emmy-Noether-Str. 2

D-79110 Freiburg

Fon: +49 761 386909-12

Fax: -10

E-Mail: christine.neuy@mstbw.de

Web: www.mstbw.de

