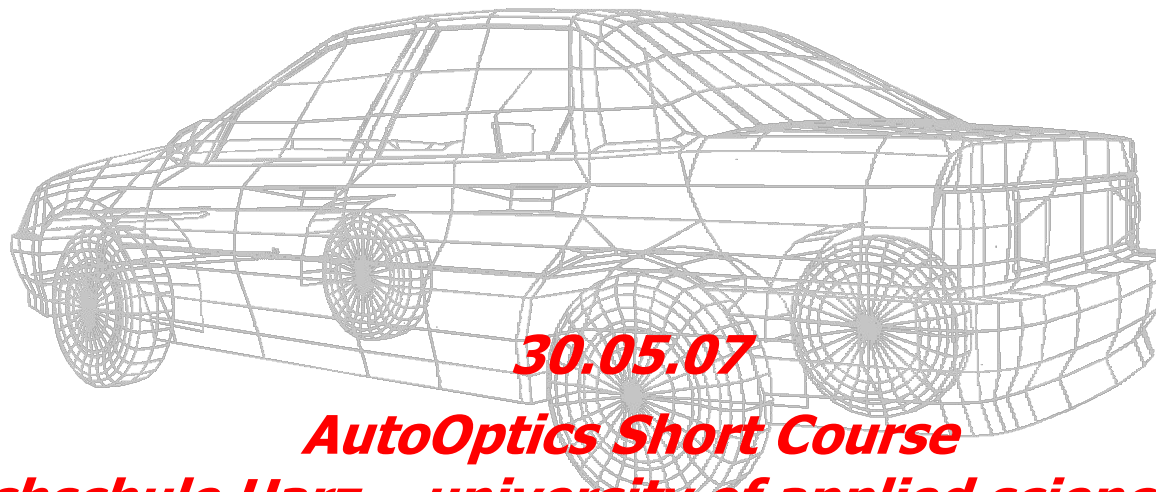




***innovation by co-operation***

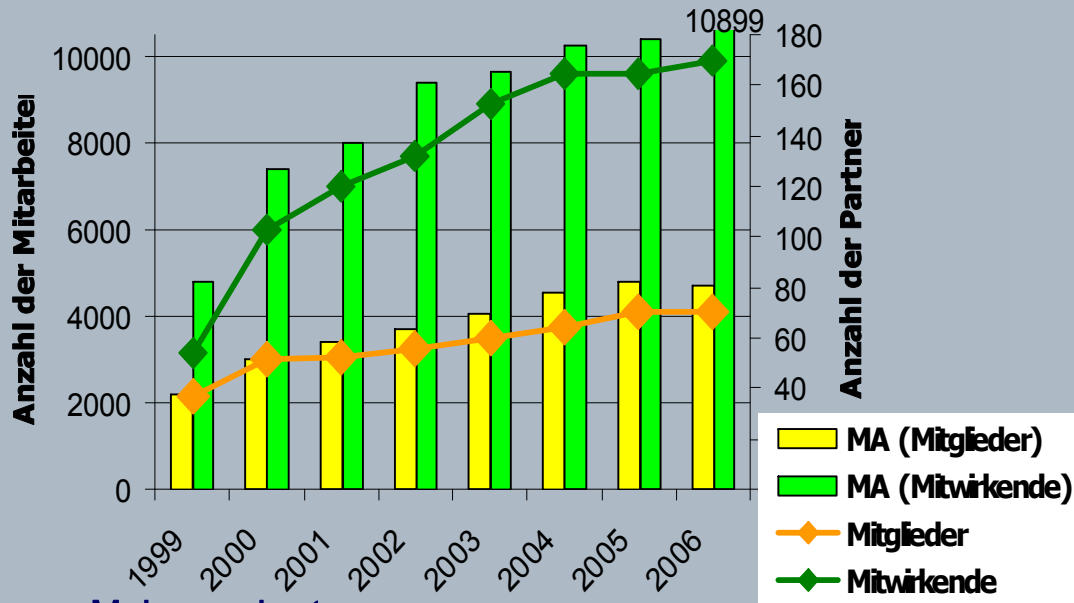


***30.05.07***

***AutoOptics Short Course***

***Hochschule Harz – university of applied sciences Harz***

# About MAHREG



## Main products:

**Casted products made of light metal for motor, drive train and undercarriage – light weight construction**

**Plastics** - components for Car body and interior

Complete assemblies such as gears, axles, cardan shafts, camshafts

Special mechanical engineering mold construction, model and tool making

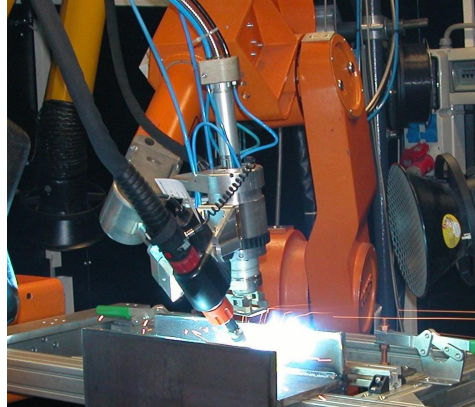


MAHREG is strongly co-operating with scientists, service providers and manufacturers.

The Objective is - with applied research and development - to lead the highly specialized delivery and performance activities of companies and partners to a development partnership with the OEMs.

# Results

- ⊕ The network evolves high attractiveness.
  - ⊕ The summation of jobs within MAHREG reaches currently nearly 10.000.
  - ⊕ MAHREG is acknowledged partner for supra-regional and international co-operations.
- ⊕ New business segments are being developed and high-quality jobs are being created.



# OEM Locations



## Volkswagen

**Wolfsburg:** VW-head quarters, Bora, Golf, Lupo, Touran; components

**Hanover:** LT, Multivan, Transporter, capacity: 1.000 units/day, components, foundry

**Brunswick:** components, undercarriages

**Salzgitter:** engines for all models, components

**Kassel:** components, transmissions: 2,7 Mio units/year

**Dresden:** SUV-Touareg, Phaethon: 150 units/day

**Chemnitz:** engines, engine assembly, components

**Zwickau/Mosel:** Passat, Golf: 290,000 units/year



## Opel

**Eisenach:** Corsa, Astra; capacity: 175,000 units/year



## Mobis Parts Europe (KIA)

**Brehna:** logistics and distributions for spare parts and accessories



## DaimlerChrysler

**Ludwigsfelde:** Vaneo (20,000 units/year, Transporter Sprinter NCV3: 60,000 units/year

**Berlin:** engines, approx. 210,000 units/year



## BMW

**Leipzig:** 3 Series: 650 units/day

**Berlin:** assembly of motorbikes, approx. 70,000 units/year, parts



## Porsche

**Leipzig:** Cayenne: limited edition Carrera GT, Panamera Coupé



## Mitsubishi

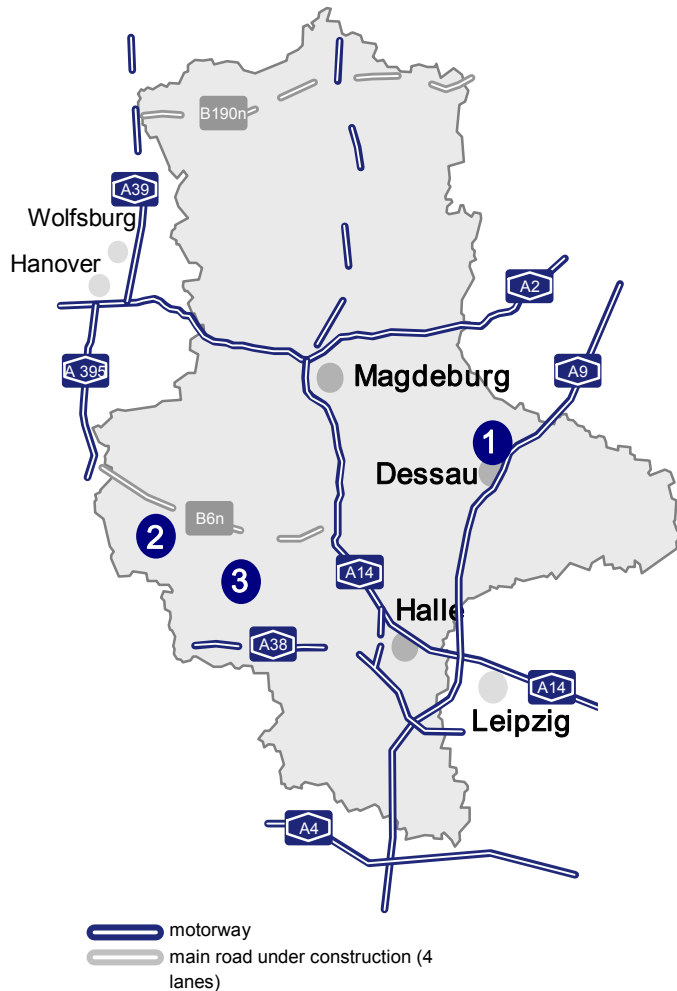
**Kölleda:** JV MDC Power GmbH in cooperation with DaimlerChrysler



## Neoplan

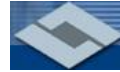
**Plauen:** final assembly of busses; 270 units/year.

# locations – light metal casting



## company

1 Laukötter Dessau GmbH



## profile

Light metal pressure casting and tool mold making

## references



2 Rautenbach AG a company of NEMAK



Light metal casting for motors, undercarriages and cylinder heads



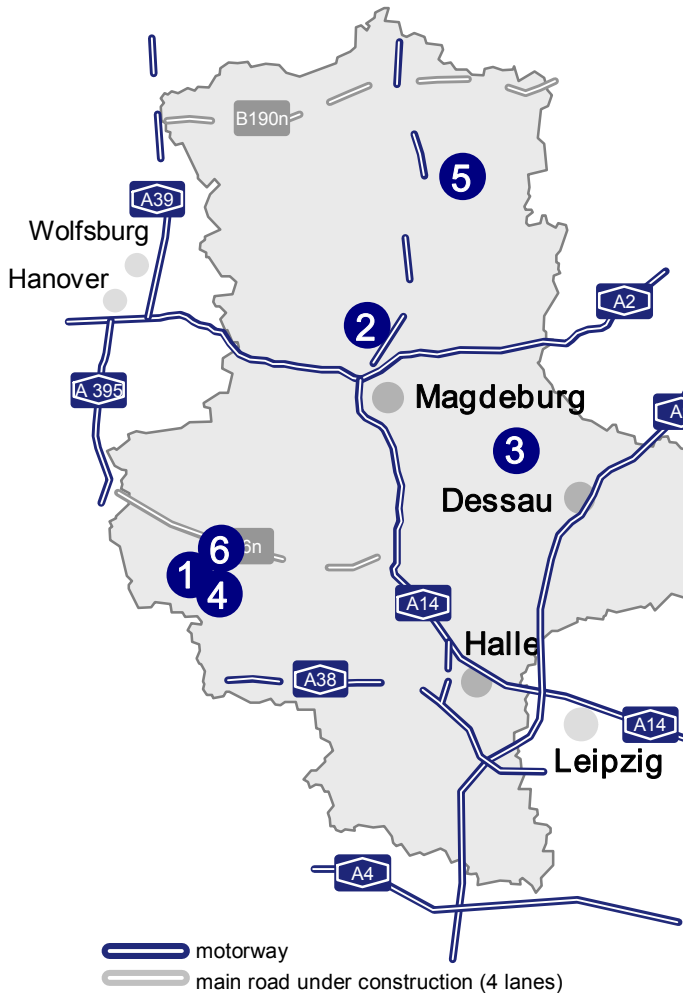
3 TRIMET Aluminium AG NL Harzgerode



Aluminum-pressure casting parts and components, tools

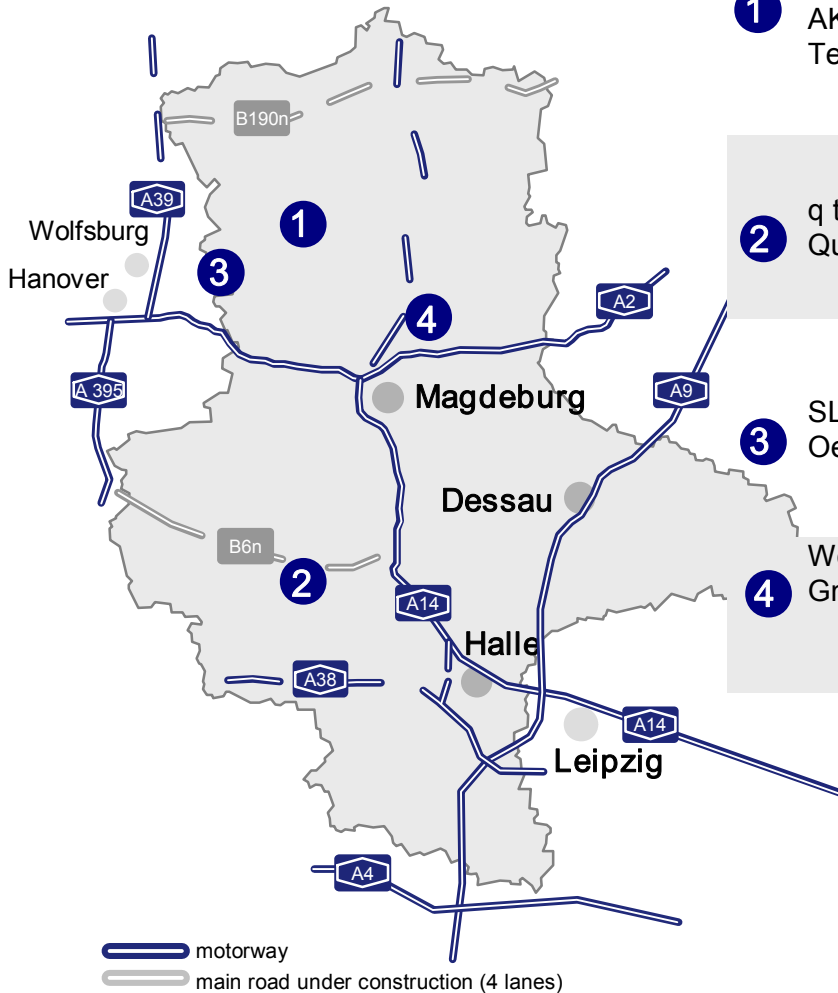


# locations – metal processing



company	profile	references
<b>1</b> GAW Getriebe- und Antriebstechnik Wernigerode GmbH	chipping processing of complicated components incl. component assembly amongst others for the automotive industry and electro mechanical engineering	
<b>2</b> IFA Maschinenbau GmbH, Haldensleben	Drive shafts	
<b>3</b> KmB Technologie Gesellschaft für rationelle Fertigung mbH, Zerbst	Production of parts, components, assemblies and systems for the automotive industry and mechanical engineering	
<b>4</b> PSFU ProfilSchleif-, Fertigungs- & Umwelttechnik GmbH, Wernigerode	High precision and profile grinding technology	
<b>5</b> Umformtechnik Stendal UTS GmbH & Co. KG	Manufacturing of pressed, punched and drawn parts of steel and aluminum	
<b>6</b> MWG Metallveredlung Wernigerode GmbH / electropoli	Surface refinement of metal materials	

# locations – Plastic components



## company

1 AKT altmärker Kunststoff-Technik GmbH, Gardelegen



2 q tec Kunststofftechnik GmbH Quedlinburg



3 SLM Kunststofftechnik GmbH, Oebisfelde



4 Wolmirstedter Flocktechnik GmbH



## profile

Injection molding, surface refinement, foaming

development, production and distribution of technical plastic parts by applying several special technologies

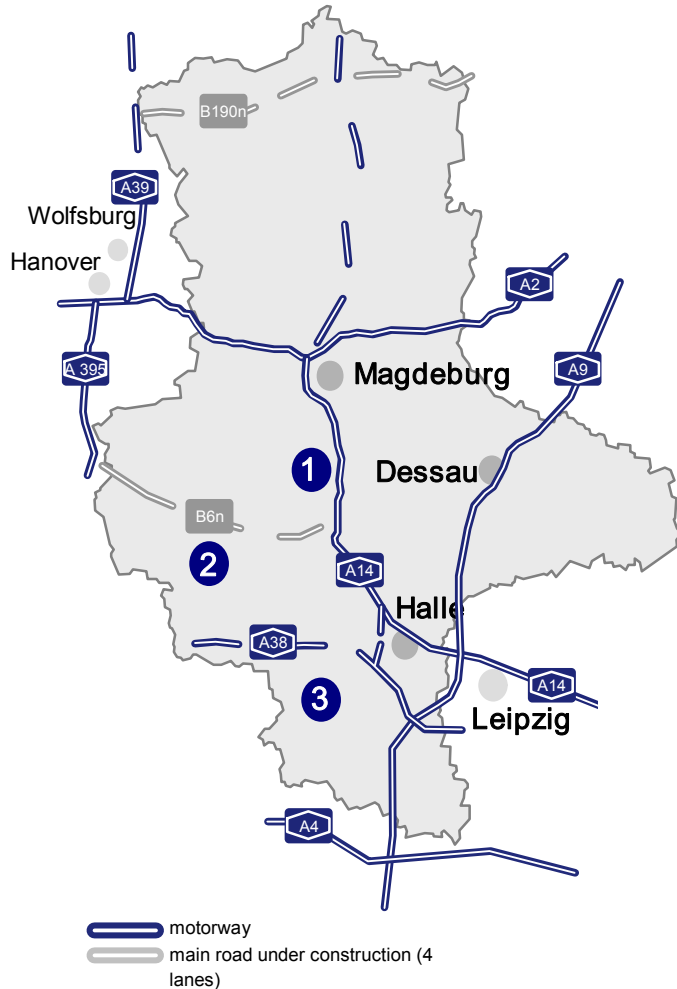
Production and distribution of technical plastic parts. Bumper attached parts, cable routing, seat attached parts and technical holders

Flocking of 2D and 3D-molded parts

## references



# Locations – car electric



## company

- 1 Krüger & Gothe GmbH, Staßfurt



## profile

development, production and distribution of electrical goods and services

Knock-in-key

- 2 Rundfunk GmbH & Co.KG Gernode



Navigation installations  
car navigation systems

Mobile -communication

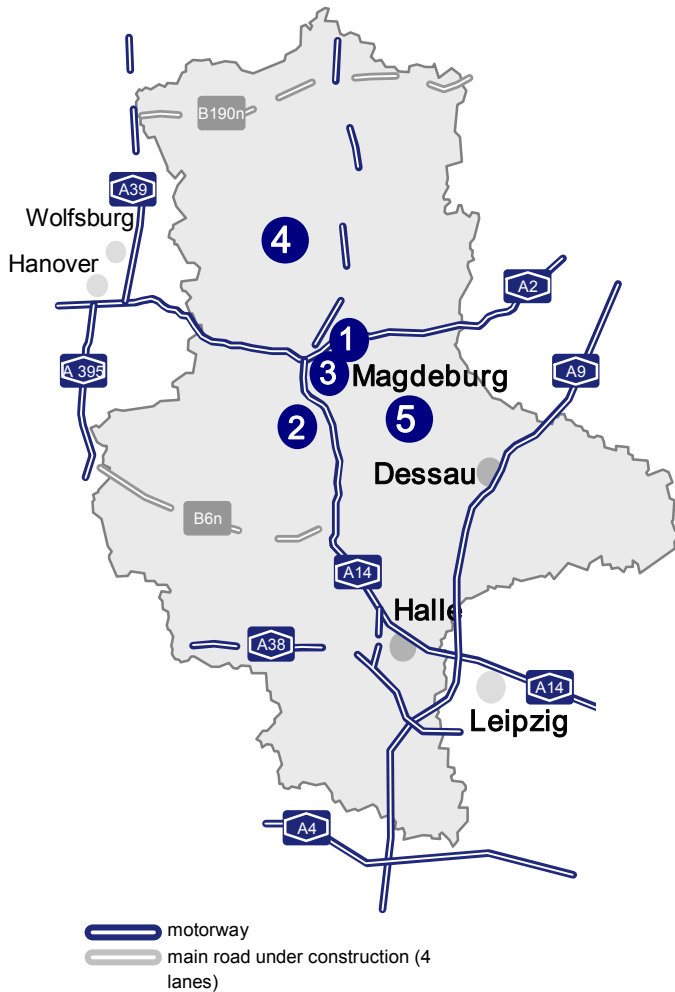
- 3 VTQ Videotronik GmbH, Querfurt



Many years of experiences in development and production in the HF-Sector and developing and producing high quality video funk technology as well as antennas



# Locations - Engineering



## company

- 1 SYMACON, Barleben



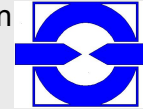
## profile

Turnkey projects from one source; complete solutions for production and system automation as well as for quality

## references



- 2 H&B Omega Europa GmbH, Osterweddingen



Projection, construction and manufacturing of special purpose machines, conveyor technology and devices focussing on automotive applications  
- rotation friction welding



- 3 Magdeburg  
Werkzeugmaschinen AG /  
Zusammenarbeit Verbund  
EMCO Gruppe

Production of components for turning lathes, Model MVT



- 4 Sondermaschinenbau  
Calvörde GmbH



Special purpose machines and installations  
Construction services  
Steel construction  
Industrial service



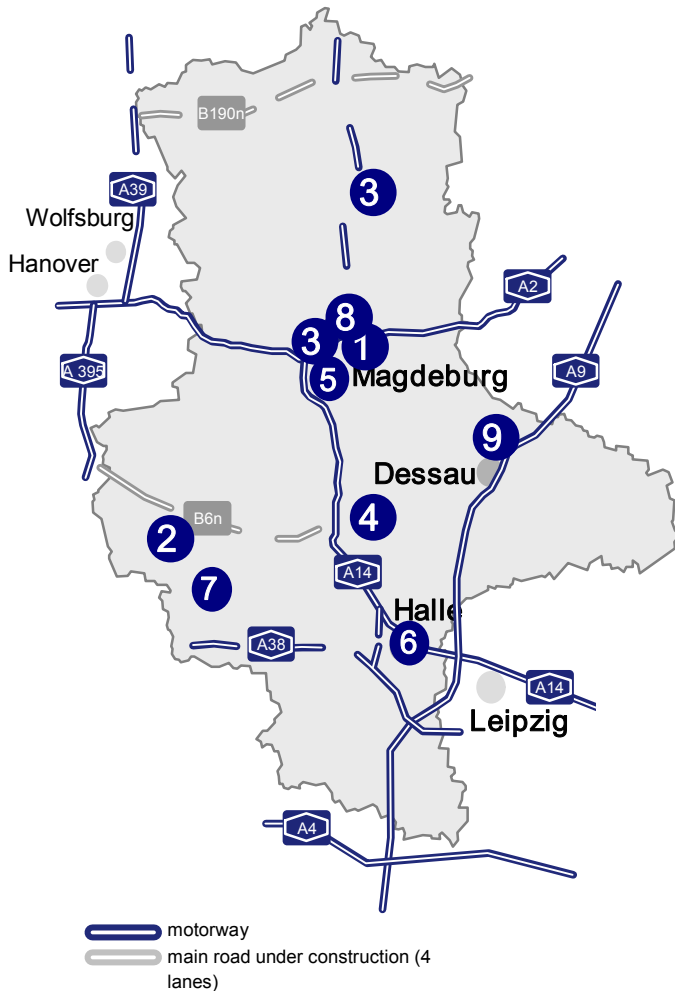
- 5 O.K. Bley Engineering  
GmbH, Schönebeck



Special purpose machines, test beds, devices, assemblies



# locations - science



## Institutions

- 1 Otto-von-Guericke Universität Magdeburg
- 2 Hochschule Harz, WR
- 3 Hochschule MD-SDL
- 4 Hochschule Anhalt, Köthen
- 5 FhG Fraunhofer-Institut für Fabrikbetrieb u. – automatisierung (IFF), Magdeburg
- 6 FhG Fraunhofer-Institut für Werkstoffmechanik (IWM), Halle
- 7 CCC Creativitäts- und Kompetenz Centrum Harzgerode  
INFERTA Institut für
- 8 Fertigungstechnik im Automobilbau
- 9 WTZ Wissenschaftlich Technisches Zentrum Roßlaue GmbH

## profile

The OvG-University can be seen as profile university with various faculties/ institutions in engineering and natural science

Key aspects of activity of each university automation technology

Amongst others mechanical engineering

Electrical and mechanical engineering

Working in the fields of production systems, products and services.  
Extension of the institute by the Virtual Development and Training Centre VDTCC

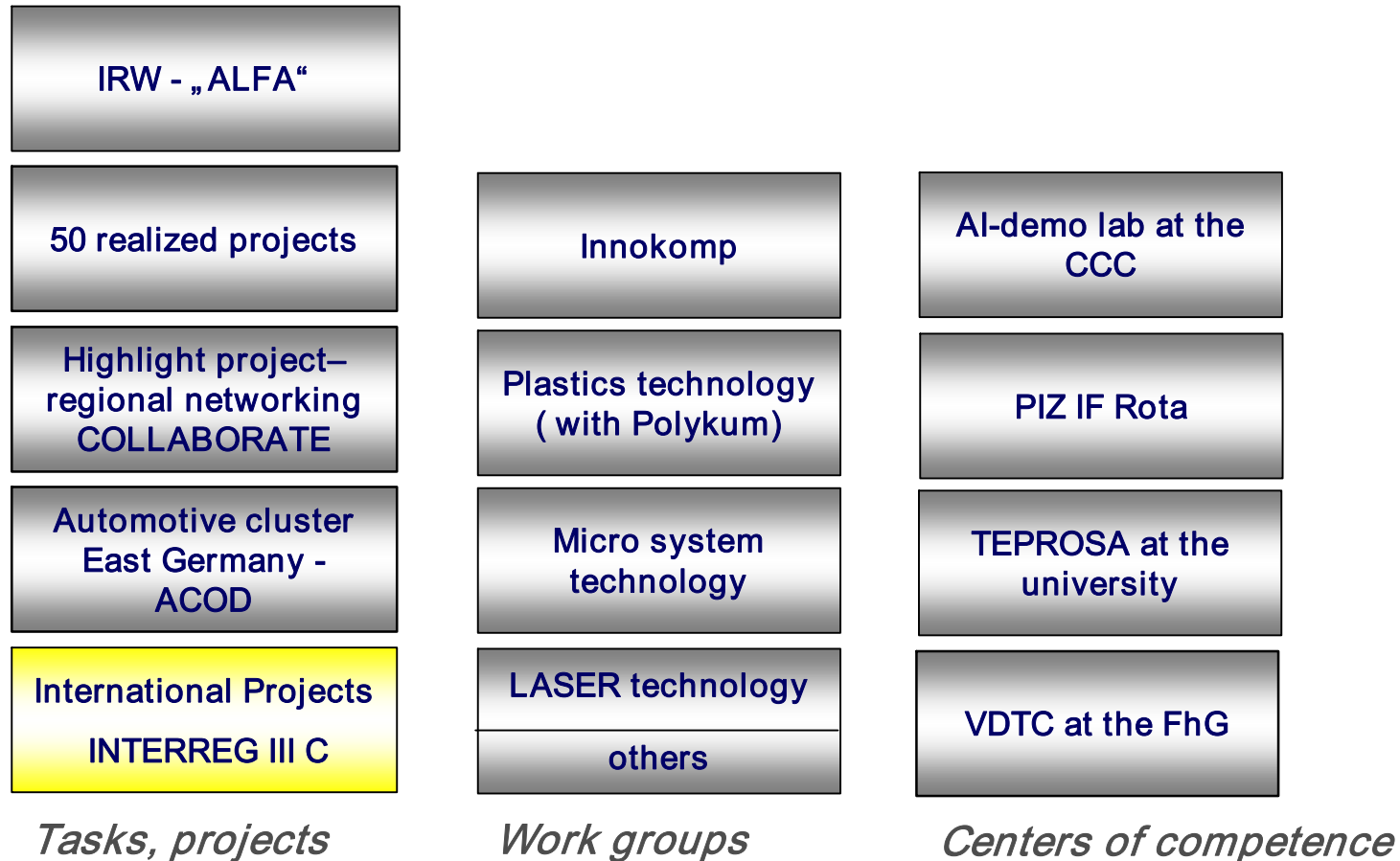
Main task is the impact analysis of usage conditions and mechanical stress on the one hand and of production and processing procedures on the other hand in order to figure out how they effect the properties of materials and components.

Modern research infrastructure Scanning electron microscope , die casting machine, metallography, mechanical material testing

Industrial research, material and process optimization, IT-Technology and logistic

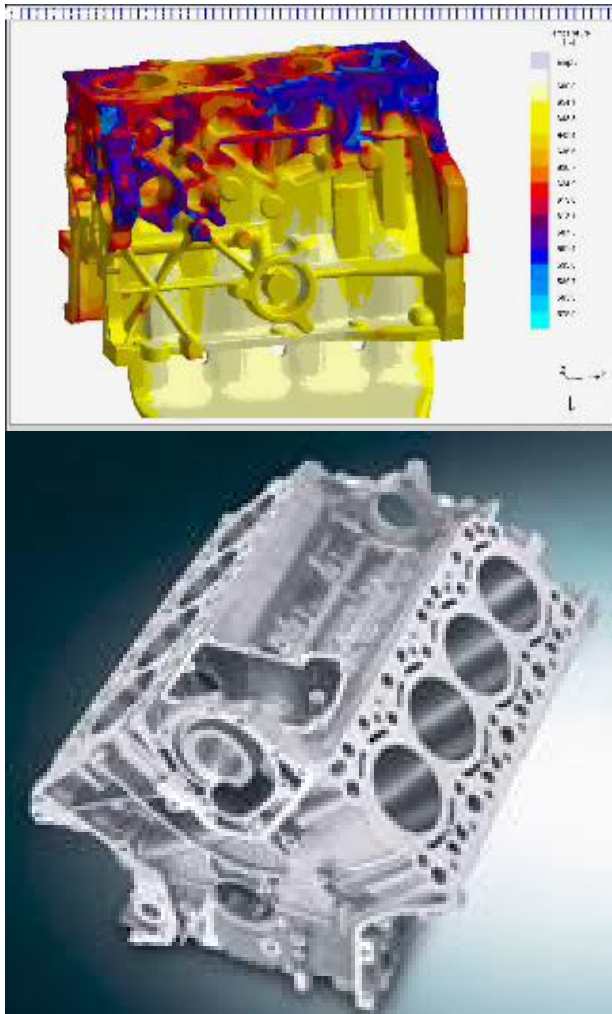
Research on motors and machines

# Strengthening regional competencies



# R&D Projects

## Material and process optimization within aluminum casting



topics

Partners

Weldable die casting

TRIMET Aluminium AG  
UNI Magdeburg  
SLV Halle

Gradient casting  
Computer tomography

Rautenbach AG a company  
of NEMAK  
UNI Magdeburg

Development of ultra  
light magnesium-lithium-  
alloys

Laukötter Dessau GmbH  
UNI Magdeburg  
INFERTA

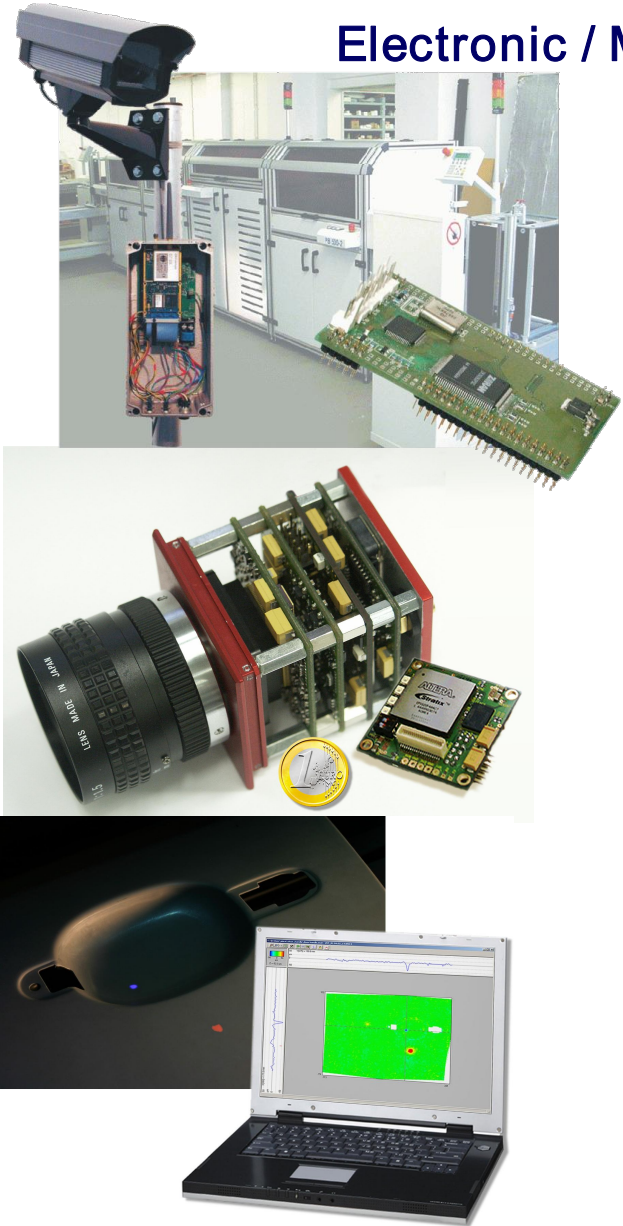
Simulation of material  
and process variables

TRIMET Aluminium AG  
Rautenbach AG a company  
of NEMAK  
UNI Magdeburg

Kompetenznetz

# R&D Projects

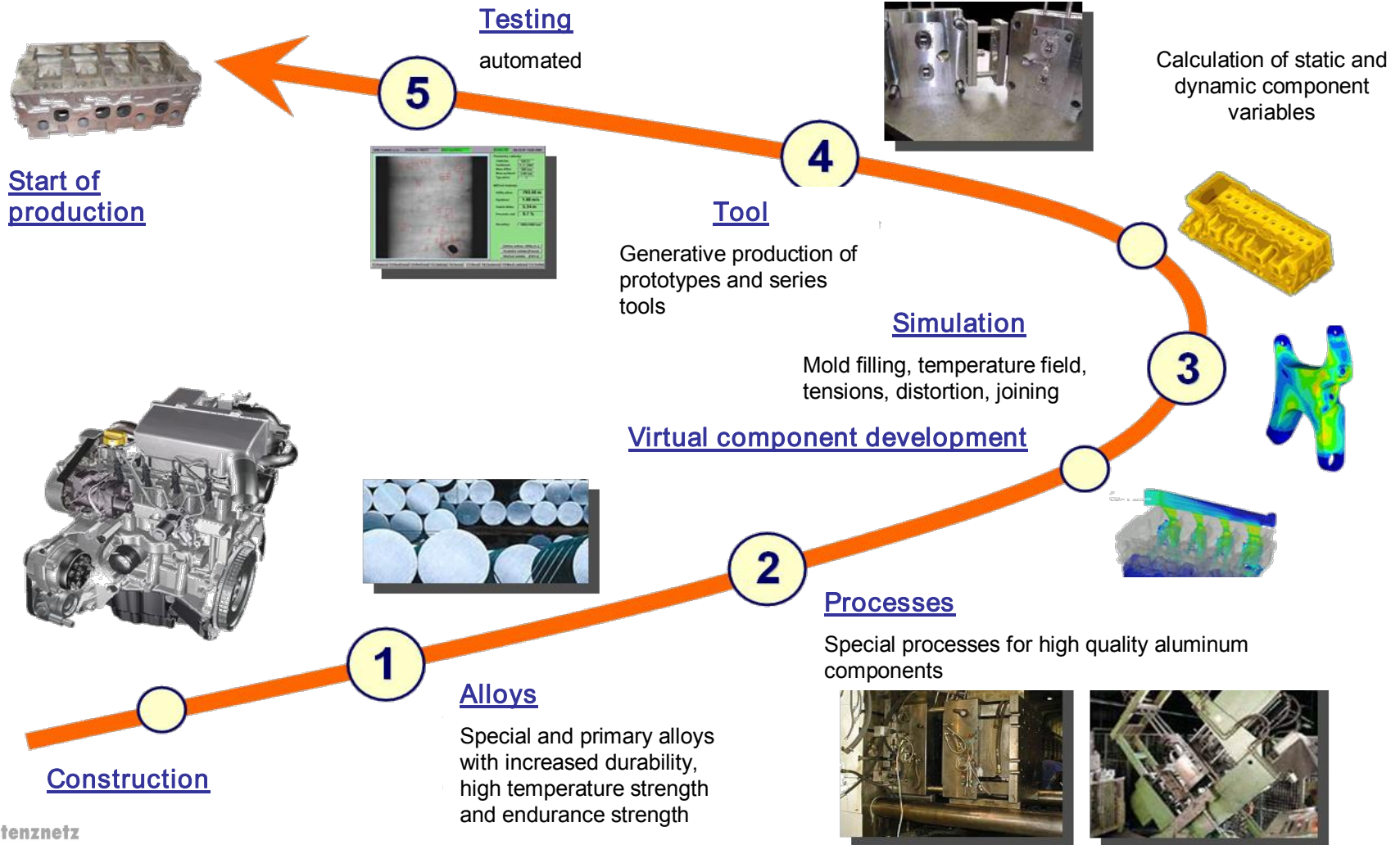
## Electronic / Multimedia



topic	partners
Traffic imaging	IFAK Rundfunk Gernrode
Intelligent distance sensor / electrical image correction	Krüger & Gothe UNI Magdeburg INB Vision AG
Optical 2D- and 3D-quality assurance systems	FhG IFF Symacon INB Vision AG H& B Omega Europa

# R&D Projects „AL-CAST“

## Material and process optimization within aluminum casting



# Human resource - and competence development

## InnoKomp

- Development of an innovation oriented competence development strategy within the automotive supplier network of the federal state Saxony-Anhalt

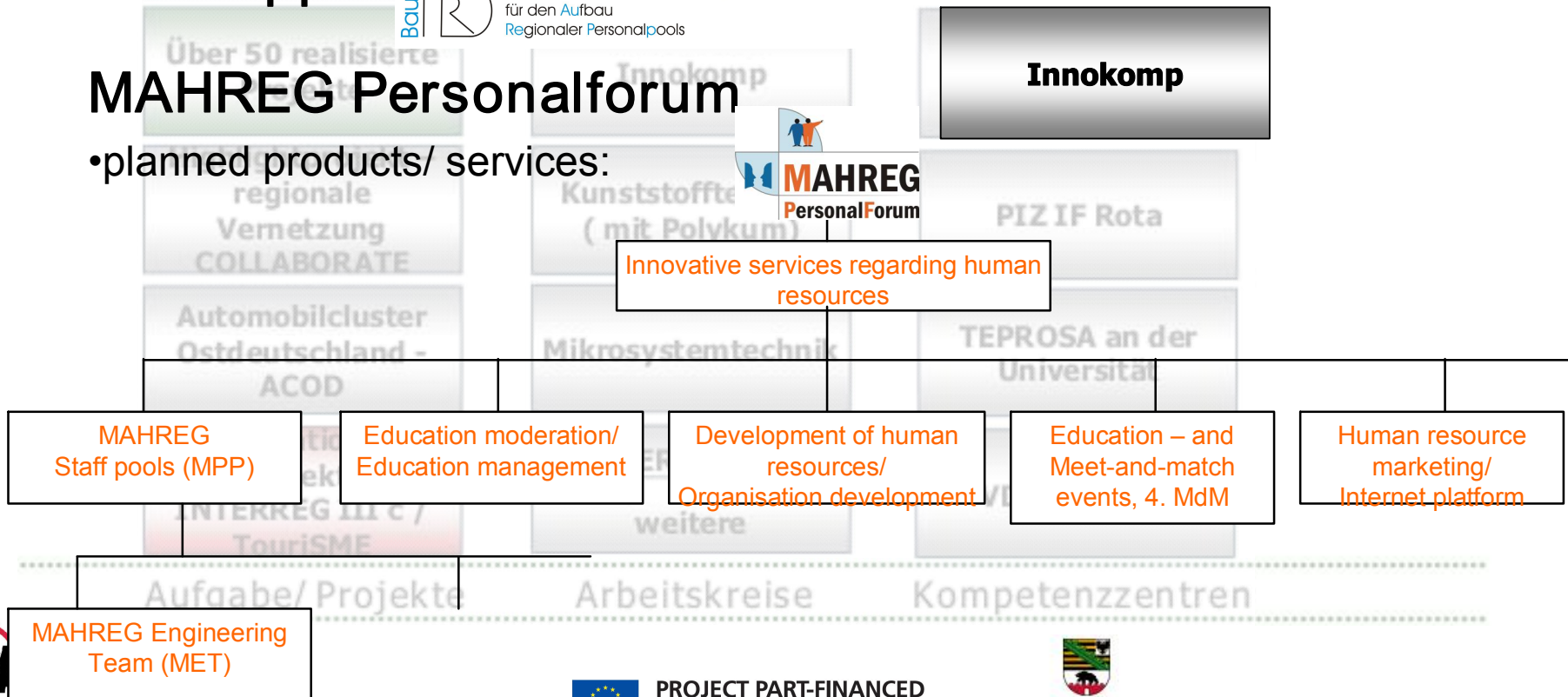
## BauRepp



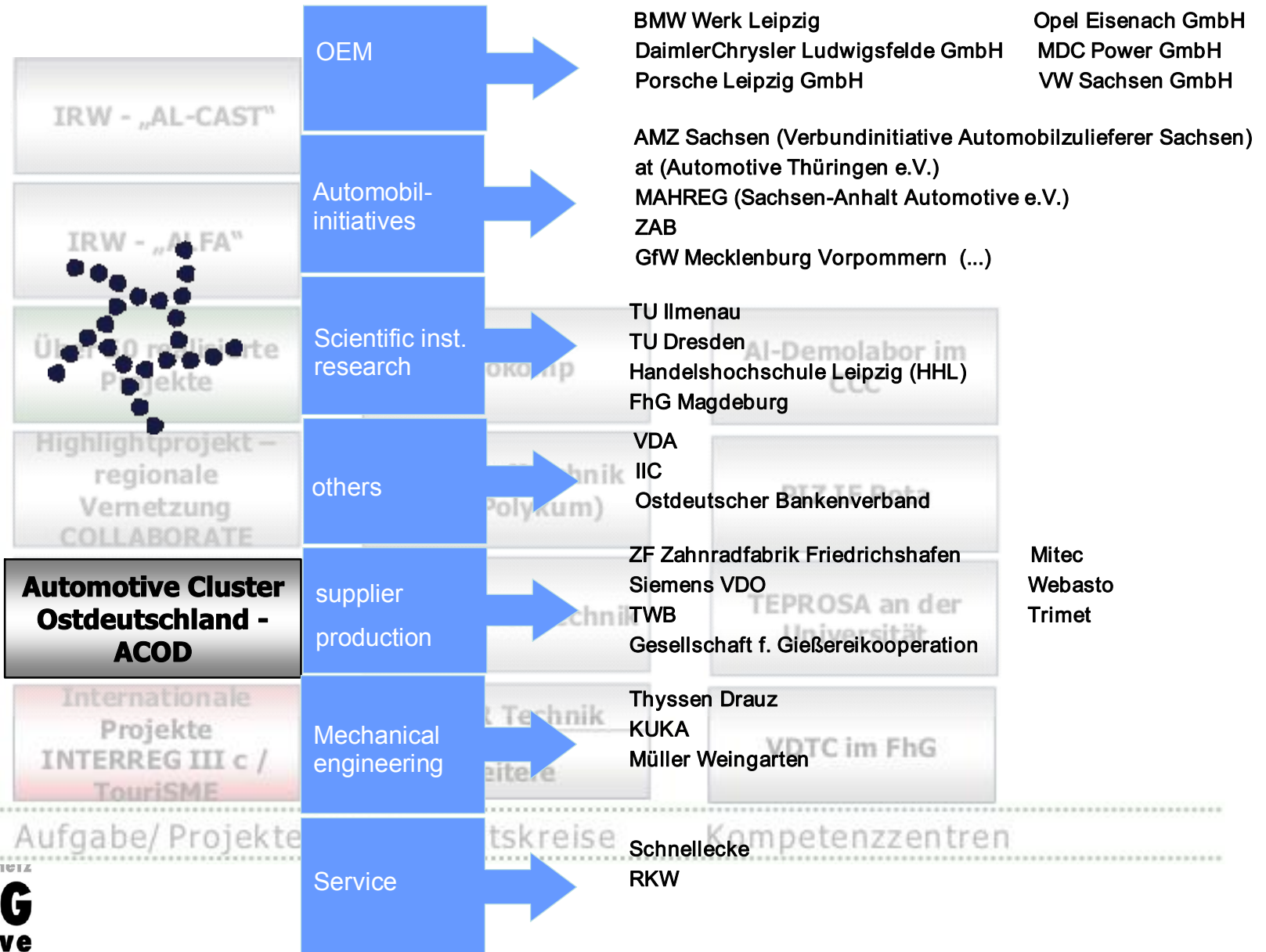
Bedarfsorientierte Qualifizierung  
für den Aufbau  
Regionaler Personalpools

## MAHREG Personalforum

- planned products/ services:



# Supra-regional Collaboration





# Collaboration within Europe

## COMIN-CLUST

### (Interreg III C – TouriSME)

Strengthen the **competitiveness** of SME by **internationalisation** of **Businesses on cluster level**

Stärkung der Wettbewerbsfähigkeit von KMU durch Internationalisierung der Geschäftstätigkeit auf Clusterlevel

**Regions:** Germany Saxony-Anhalt  
Netherlands Limburg  
UK North-East England  
Spain Valencia

**Duration:** 26 Months IV/04 - IV/06

## NEAC

**Network of European Automotive Competence**  
Netzwerk Europäischer Fahrzeug-Kompetenz

**Regions:** Germany Saxony, Saxony-Anhalt, NRW  
France Lorraine  
UK Wales, West Midlands  
Poland Wroclaw  
Russia Samara  
Slovenia  
Spain Valencia

**Duration:** 26 Months IV/04 - IV/07

## TIE

### (Interreg III C – Perspective)

**Transfer of Information and Experience**

**Transfer von Informationen und Erfahrungen**

**Regions:** Germany Saxony-Anhalt  
France Centre  
Spain Valencia

**Duration:** 14 Months I/07 - I/08

# NEAC

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- project meetings / experience exchange / thematical workshops
- Benchmark comparison
- Creation of trust
- Best practices/ getting to know cultures & different structures and methods

For details regarding the five components within NEAC please check  
**[www.neac.eu.com](http://www.neac.eu.com)**

# Perspective - TIE

## PERSPECTIVE

Project duration: 07/2005-06/2008

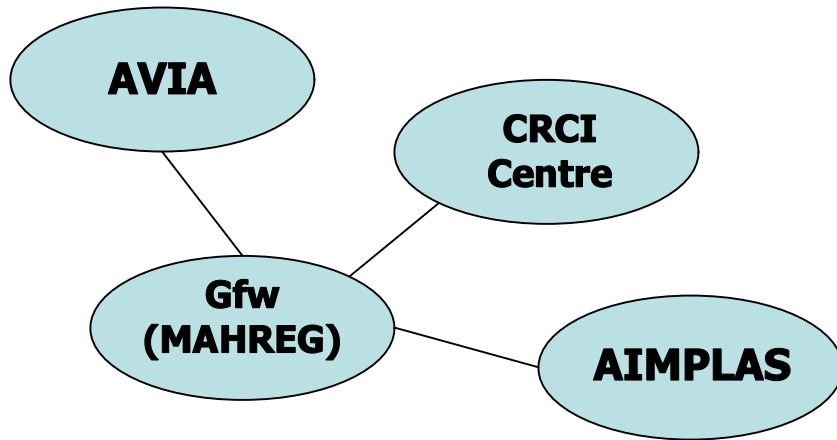
### Regional partners:

Eszak-Alföld, Hungary

Comunidad Valenciana, Spain (LP)

Sachsen-Anhalt, Germany

Région Centre, France



## TIE – TRANSFER OF INFORMATION AND EXPERIENCE

Project duration: 01/2007-02/2008

### Subproject partners:

GfW, Sachsen-Anhalt (SL)

AVIA + AIMPLAS, Comunidad Valenciana

CRCI Centre, Région Centre

# 13th June 2007 Roadshow in Valencia

## Stationen der Valencianischen-Roadshow



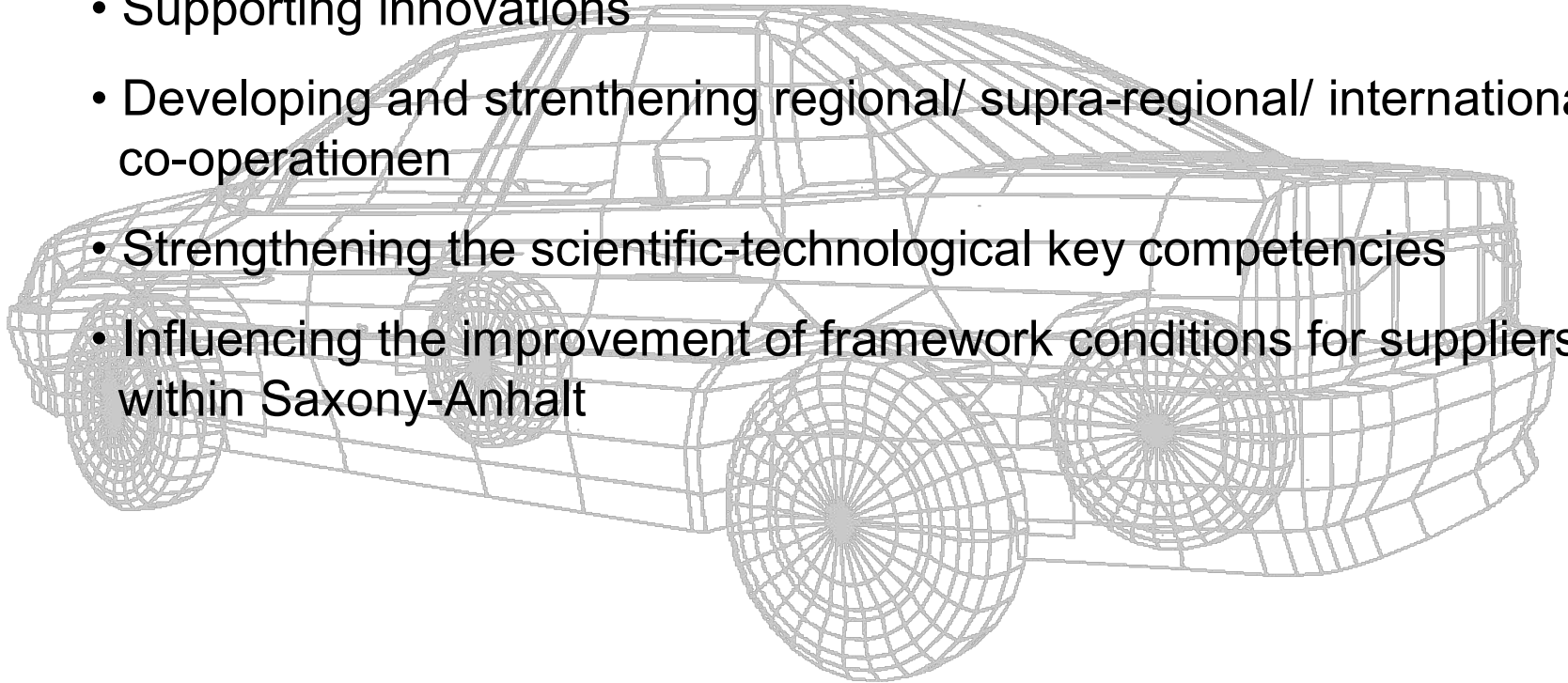
# MAHREG Automotive quo vadis?

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Increasing network quality -

## Future strategy of MAHREG Automotive

- Supporting innovations
- Developing and strengthening regional/ supra-regional/ international co-operationen
- Strengthening the scientific-technological key competencies
- Influencing the improvement of framework conditions for suppliers within Saxony-Anhalt



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**Thank you for your attention!**



**MAHREG Automotive/ Sachsen-Anhalt Automotive e.V.**

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