











# Project Presentation: Transformation Hub for the value chain of the automotive wiring harness system

7. Fachtagung, Signal- und Leistungsvernetzung, July, 05th, 2023 Dr Andreas Boehm, Bayern Innovativ GmbH











## Funding program of the federal ministry of economics (Bundesministerium für Wirtschaft und Klimaschutz, BMWK): Establishment of Transformation Hubs

#### **Characteristics of Transformation Hubs:**

- nationwide
- thematically oriented
- are set up along relevant value chains in the automotive and supplier industry
- support the necessary transformation process throughout Germany, quickly and effectively

#### Objectives of the funding



Knowledge transfer on transformationrelevant topics



Knowledge transfer on resource and energy efficiency



Scaling of application-related R&D solutions



Networking of relevant actors and initiation of implementation steps







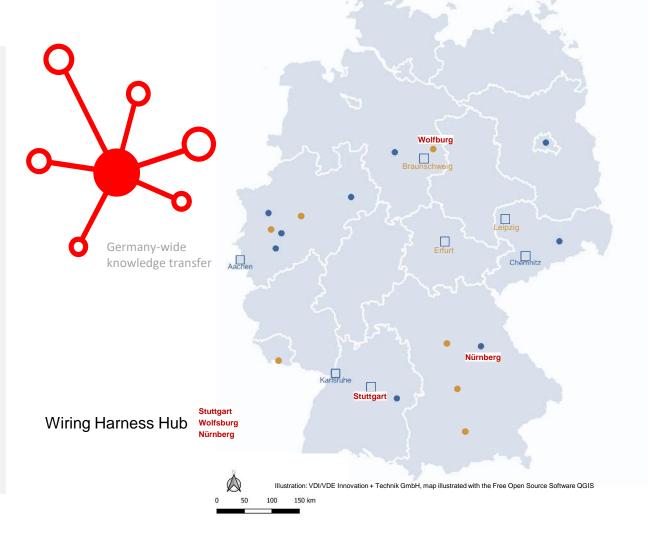


Funding program of the BMWK: The Transformation Hubs in numbers

#### **Overview of the Transformation Hubs**

11 thematically diverse hubs are being funded for the Germany-wide knowledge transfer. The BMWK grants amount to €47,9 Mio.

| TraWeBe  Battery   | cH2ance H <sub>2</sub> Hydrogen | ScaleUp<br>eDrive | Transfer-X  O  Digi. Ecosyst. | DiSerHub  Buisness mod    |
|--|---------------------------------|-------------------|-------------------------------|---------------------------|
| MIAMy  ((Control of the state o | TuWaS Forming                   | InSuM             | Taste    Software Eng.        | CyberJoin  Joining techn. |
| Transformation Hub Wiring Harness Wiring harness   |                                 |                   |                               |                           |









Innovation leben.

#### **Consortium partner of Transformation Hub Wiring Harness**

bayern () innovativ



#### Bayern Innovativ is the "Society for Innovation and Knowledge Transfer"

- > 300 employees in cross-industry and crosstechnology expert teams
- Network covers more than 32,000 customers
- 1(n):n services business area "Networks and Thinknet.Bayern": digitization, mobility, energy, health, materials & production
- 1:1 Services Business Area "Consulting" and Funding": Funding Pilot & Project Sponsor, Patents & Standards, Technology and Innovation Management, Cultural and Creative Industries





#### AREANA2036 is a research-campus of BMBF at the University of Stuttgart

- >30 academic partners of the university, Fraunhofer, DLR, etc.
- "Industry on Campus": >40 companies
- Real Use Cases, prototypes, products ...
- Cooperation with Startup Autobahn (Plug&Play)
- Co-innovation platform for future technologies
- Legal form association (membership)
- New building 2016: 10,000 m<sup>2</sup>, thereof 6,000 m<sup>2</sup> shop floor





#### **Reasearch-campus for Circular Economy** and sustainable lightweight construction

- > 40 partners from industry and science work on solutions for the mobility of tomorrow
- Main areas of activity:
  - Design for Circular Economy
  - Circular material concepts
  - Processes for Reverse Production
  - Overall system analysis and design
- Opening of the Open Hybrid LabFactory in 2016 in Wolfsburg site









#### The biggest challenges facing the industry





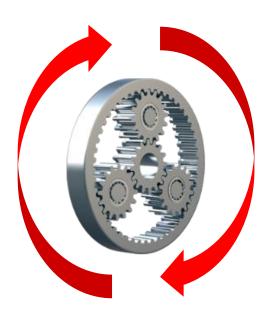




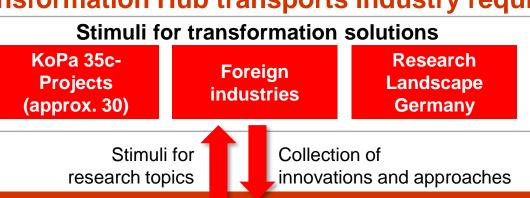


#### **Hub function: The Transformation Hub transports industry requirements**

**Pre-competitive** research & development



**Utilization through new** products and processes



**Transformation Hub Wiring Harness** 

Information, translation, hub, networking, scaling



ARENA2036

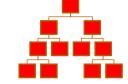
bayern () innovativ OHLF OPEN HYBRID

Active return channel of challenges

Information about new innovations and approaches

**Transformation Wiring harness industry along the** value chain





10 other Transformation Hubs

(currently 11 hubs in total)

**Regional transformation networks** (currently 27 Trafo Networks).

Regional innovation cluster (currently 4 innovation clusters)







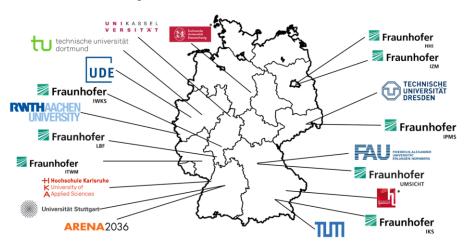
#### Task of the Transformation Hub Wiring Harness (1/4): Scouting

## bayern innovativ

The Wiring Harness Hub scouts interesting Trends and Technologies

From other industries and academia as well.

#### Research map:



Example: Trendradar Energie



Example: Project map "KoPa35c"

Federal Government's economic stimulus package of 2021, Paragraph 35c "Investments in the future for vehicle manufacturers and supplier industry".

#### **Contribution of Transformation Hub Wiring Harness**

- Identification of projects related to the Wiring harness
- Initial assessment of relevance and potential for WH-Industry
- Target group (industry or value chain level)
- Implementation potentials of the topic in the WH industry
- Technology Readiness Level (TRL)









#### Task of the Transformation Hub Wiring Harness (2/4): Sharing Knowledge

## The Wiring Harness Hub informs about news:

"Find good and talk about it"

With our events and publications, we set impulses and create perspectives for the implementation of innovations.

#### **Events of the Wiring Harness Hub**

- annual main event with an "innovation show"
- Semi-annual virtual information events
- Technical presence events



#### Webseite www.leitungssatz-hub.de

- Public knowledge of the solution portfolio
- Presentation of the transfer module



#### Fairs and congresses (Examples)

- Conference Automotive Wiring Harness, Ludwigsburg
- FAPS Fachtagung, Nürnberg
- Automotive Wiring Harness Conference, Landshut
- Conference Automotive Wiring Harness, Bayern Innovativ
- · Hannover Fair, Productronica, ...





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#### Articles in specialized media (Examples)



elektroniknet.de













#### Task of the Transformation Hub Wiring Harness (3/4): Networking

## The Wiring Harness-Hub networks experts:

We create access to the developers and leaders behind the trends and technologies.

Take the opportunity to present your approaches to the Wiring harness community in our event series

- "Trends Outlook" and
- "Innovation Show"

Approach us with your topic!

#### Wiring Harness-Hub Trends Outlook

Presentation of technical approaches and technological trends that are related to or could potentially be applied in the field of Wiring harnesses

## Wiring Harness-Hub Innovation Show

Announcing identified highlight innovations - from the perspective and in the language of the industry.

### Wiring Harness-Hub Webseite

The website as a central contact and information point. Provision of a newsletter for regular updates.

#### In-depth discussions

In-depth events for small groups

Discussions in person at the showcase location or at the company's premises









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#### Task of the Transformation Hub Wiring Harness (4/4): Transformation projects

### The Wiring Harness-Hub supports the transformation:

We initiate exploratory processes and feasibility studies.

From the OEM to the cable and component manufacturer to the machine builder.

From corporate groups to medium-sized companies.



The Transformation Hub Wiring Harness generates **implementation impulses** in companies





**Exchange with interested companies** that want to better understand individual solution modules and apply them in perspective.





**Transformation projects** in bilateral or multilateral collaboration (outside of the Lead Set Hub).









#### The advisory board represents the requirements of the Wiring harness industry

#### Task of the advisory board:

**Industry perspective:** Defines requirements and relevance of innovation impulses for the Wiring harness industry (Agenda-Setting).

#### Members of the advisory board are company representatives:

- Company representatives in leading management positions with focus on R&D & innovation in product and production.
- The aim is to integrate representatives from many stages of the value chain into the advisory board.

Note: The working basis is strictly **pre-competitive** information, which is prepared by the hub team. The cooperation is based on cartel law compliance.

#### First members of the advisory board:



Dr. Rainer König Mercedes-Benz



Dr. Jens Haun Kostal



Dr. Götz Roderer Hochschule Landshut

Frank Gronau



Martin Döring Volkswagen





Hans-Jürgen Mantsch Siemens EDA



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#### Wiring Harness Hub: Delimitation of our activities

#### WHAT WE DO

- Scouting and evaluation of innovation potential for the industry as a whole and also for individual "industry clusters" (subsectors)
- Promotion of interesting approaches
- Connecting the corresponding experts and knowhow providers
- Networking of companies to explore these approaches
- Initiation and coaching of transformation projects
- Integration of requirements of the Wiring harness industry into the projects

#### WHAT WE DO

#### NOT:

- Offering of consulting scopes (consulting)
- Carrying out own RnD-Projects
- Organizing and leading working groups
- Leading standardization







#### **Contact of the Transformation Hub Wiring Harness**

- You want to stay up to date about all events?
- You would like to be informed about current results?
- You would like to present your technology to the Wiring harness community?
- You would like to present the results of your research project in the context of the Wiring harness?
- You have relevant solutions from another industry?

#### Contact us!

Find out more and subscribe to our newsletter on our website www.leitungssatz-hub.de



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#### Thank you for your attention!



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