

### ADVANCED COMMUNICATION TECHNOLOGIES AS ENABLERS FOR DISTRIBUTED DATA-CENTRIC AND AI-DRIVEN IT-ECOSYSTEMS

Prof. Dr. Frank Köster DLR-Institute for AI Safety & Security – Sankt Augustin and Ulm





## 5G Living Lab in the Mobility Region Braunschweig-Wolfsburg

Research and implementation of use cases in the areas of mobility, healthcare, construction and smart city



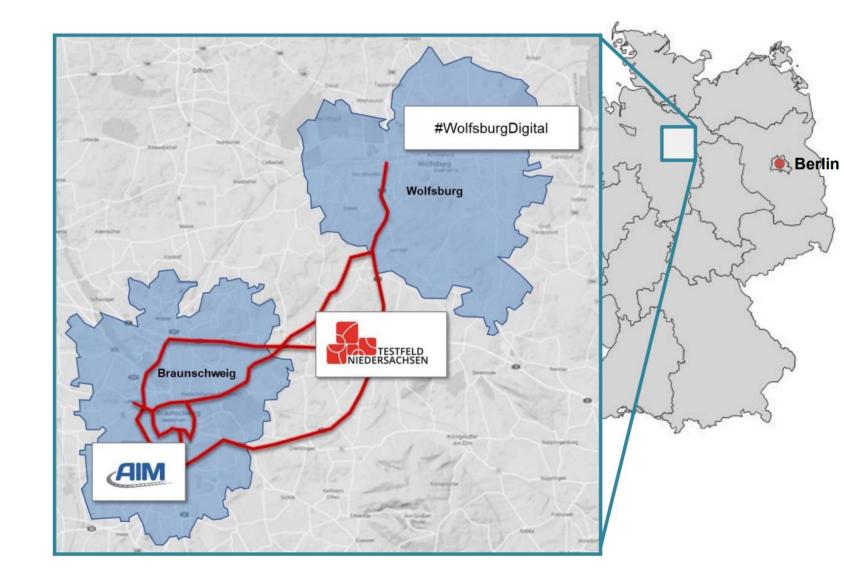




Gefördert durch

PIB

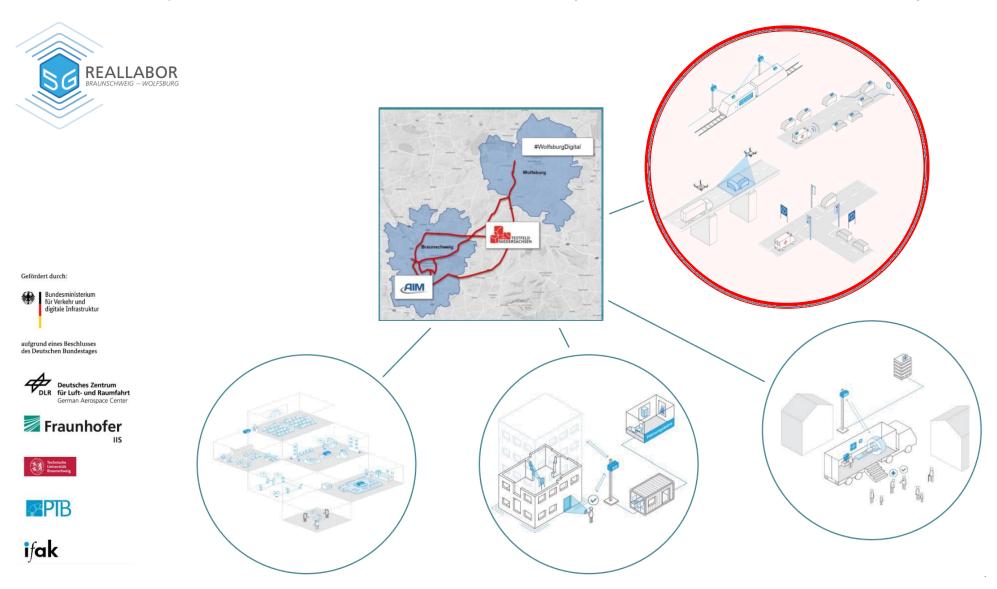






# **5G Living Lab in the Mobility Region Braunschweig-Wolfsburg** Research and Implementation of Use Cases in the Areas of Mobility, Healthcare, Construction and Smart City







Prof. Dr. Frank Köster, Institute for AI Safety and Security

European/international visibility and impact

#### authenticity and trust

openness and transparency

future mobility

Gaia-X Lighthouse Project

integrated/merged, shared and used securely and with an ultimate level of trust.

Based on European values, Gaia-X implements the following guiding principles:

sovereignty and self-determination

European data protection principles

- free market access as well as European stability and growth
- modularity and interoperability
- usability

gaia-x

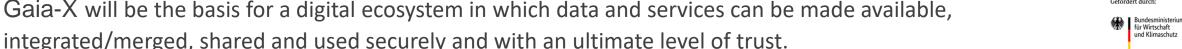
inanziert von de Europäischen Union NextGenerationEL

Portugal

China

Spain

Japan



Netherlands

USA

•••

Luxembourg

Slovakia

Slovenia

South Korea

Finland

France

Greece

Ireland

**Great Britain** 

Italy

Denmark

Austria

Sweden

Estonia

Germany

Belgium

Poland

aufgrund eines Beschlusses Deutschen Bundestage

gaia-x () futu Gaia-X	Lighthouse Project						
Use-cases on different system levels	gaia-x AMS (Node, Corridor and Vehicle)	gaia-x ROMS (Traffic system, City and Vehicle)	gaia-x AGEDA (Vehicle and Components)	gaia-x novelD (Traffic Systems Components, User)	gaia-x PLC-AAD (Manuf. of Vehicles and Components)	gaia-x () KI (Tools and Tool Chains)	Gefördert durch: Bundesministerium für Wirtschaft und Klümaschutz
Backend System	ODD = Ope			Zoning Smart Parking Traf. Infra. Mgmt. DLT-Network			aufgrund eines Beschlusses des Deutschen Bundestages
Traffic Network	ODD = Operational Design Domain Connected and Safe/Secure – Rescue Corridor	Smart Managed Smart Managed Public Transport Fleet RO of Fleets RO of Vehicles		ng Vgmt.			Finanziert von der Europäischen Union NextGenerationEU
Traffic Nodes / Edges	n Domain Ire – Rescue C	Smart d Public Trans RO o					
Vehicle System	orridor	Smart Managed Freight Fleet Transport Fleet RO of Fleets RO of Vehicles			Digital T		
Subsystem		ight Fleet	Embedded GAIA-X Vehicle as Edge Device	Vehicle Data Collection	Digital Twin based Pred. Maint. Bullwhip Mitigation Sensor Validation	Scen. Identification  Digital Twin –Camera  Automated Optical	
Component			Embedded GAIA-X cle as Edge Device	Collection	ased Pred. Maint. Jllwhip Mitigation Sensor Validation	tification  SIEM –Camera  ed Optical	

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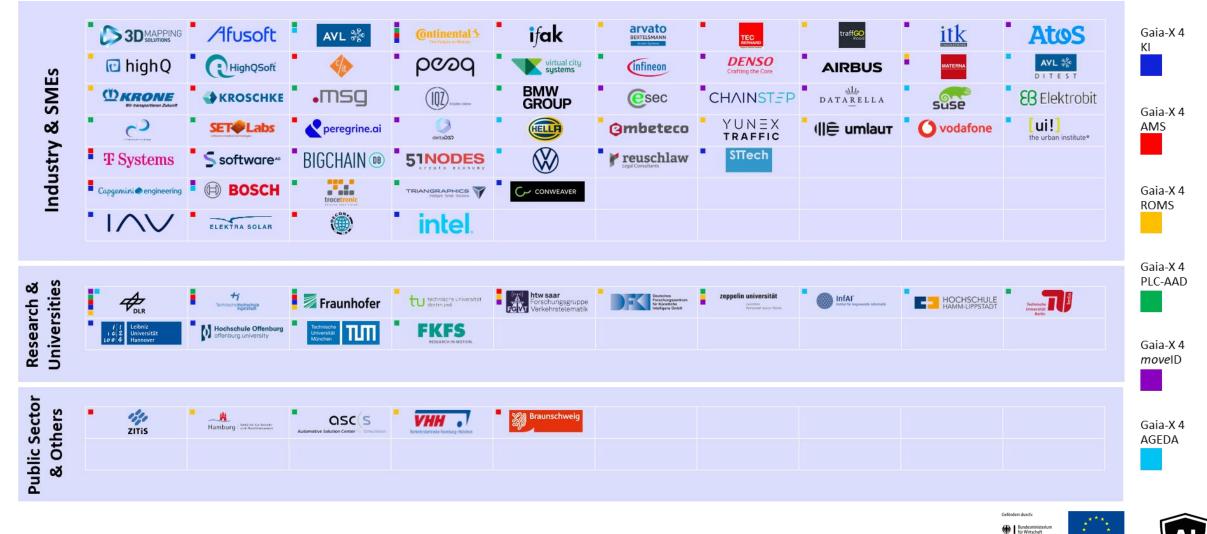


ufgrund eines Beschl ler Deutschen Bunder

Europäischen Unior

NextGenerationEL

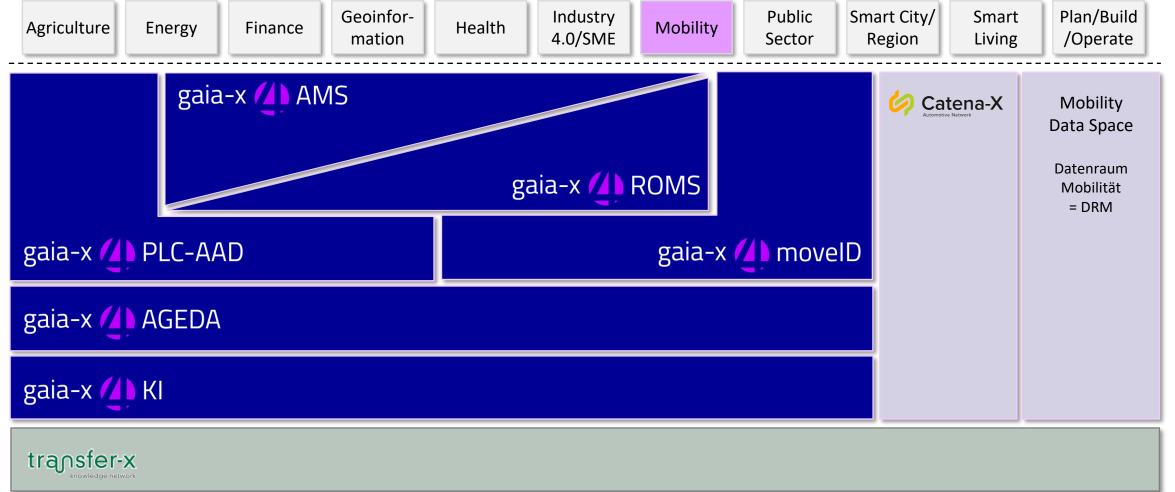
#### More than 80 Partners and ~10K Person Months



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## Contact

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