

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



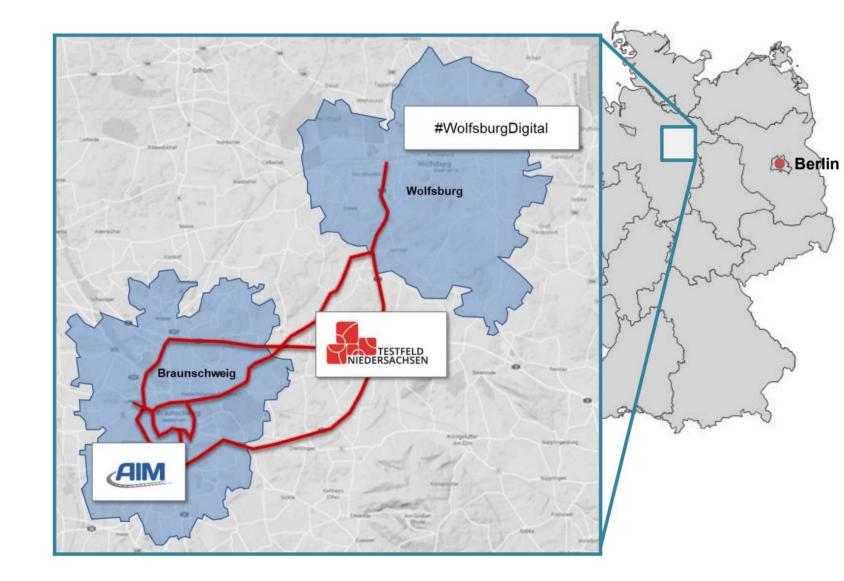




Gefördert durch

PIB

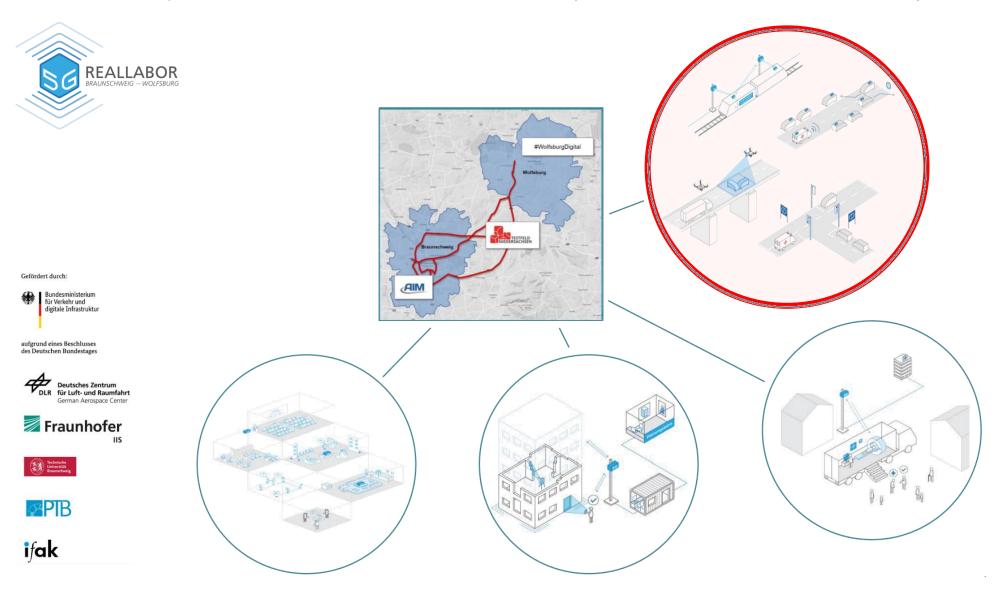






5G Living Lab in the Mobility Region Braunschweig-Wolfsburg Research and Implementation of Use Cases in the Areas of Mobility, Healthcare, Construction and Smart City







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

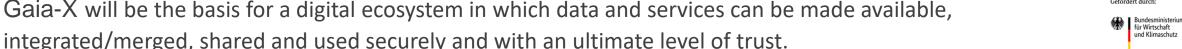
inanziert von de Europäischen Union NextGenerationEL

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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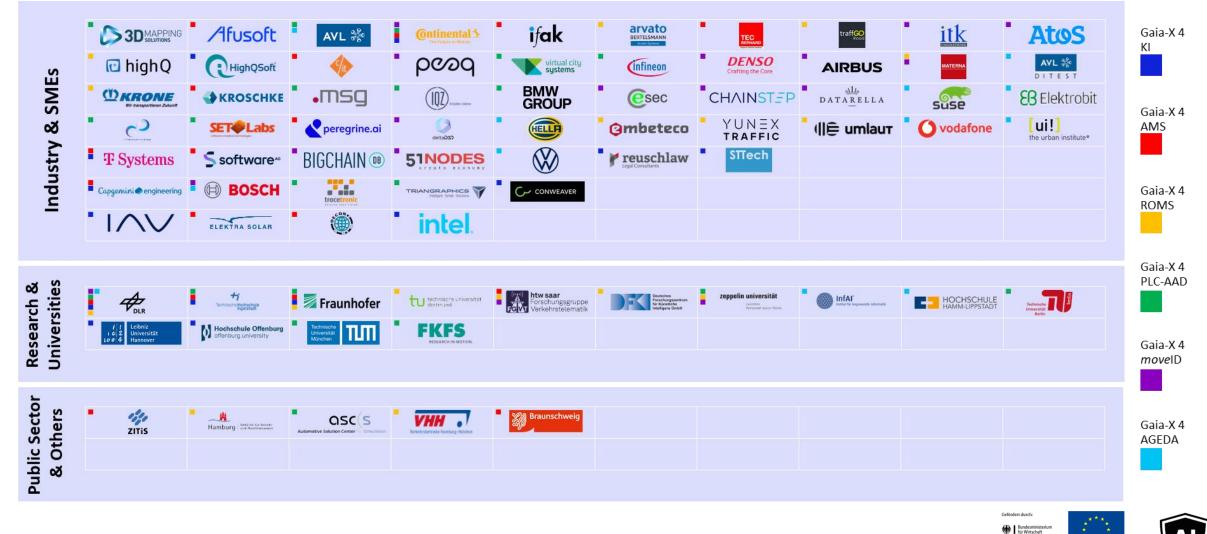


ufgrund eines Beschl ler Deutschen Bunder

Europäischen Unior

NextGenerationEL

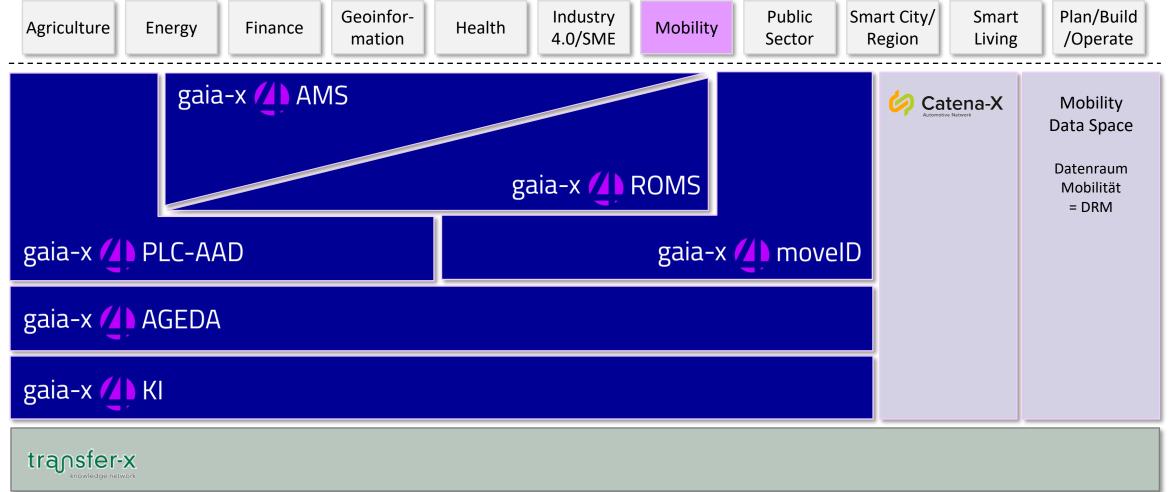
More than 80 Partners and ~10K Person Months



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