

Document control sheet

1. ISBN or ISSN Keine	2. type of document (e.g. report, publication) Veröffentlichung (Publikation)
3. title Individueller Abschlussbericht Gaia-X 4 ROMS – Yunex Traffic Gaia-X 4 ROMS – Remote Operations for Automated and Connected Mobility Services Entwicklung Daten-Ökosystem, Applikationen Verkehrsmanagement	
4. author(s) (family name, first name(s)) Ganzenmüller, Jürgen Krause, Sabine Scheucher, Isabel Walischewski, Hanno	5. end of project 28.02.2025 6. publication date 15.07.2025 7. form of publication Document Control Sheet
8. performing organization(s) name, address Yunex GmbH Otto-Hahn-Ring 6 81739 München	9. originators report no. 10. reference no. 19S21005O 11. no. of pages 26
12. sponsoring agency (name, address) BMW E	13. no. of references 8 14. no. of tables 1 15. no. of figures 21
16. DOI (Digital Object Identifier)	
17. presented at (title, place, date)	
18. abstract <p>GAIA-X, as a European initiative, offers a trustworthy, federated data infrastructure that enables the secure and interoperable exchange of mobility data. Technologically, the focus lies on Self-Sovereign Identity (SSI), federated services, and data spaces. The goal of the project was to create a scalable, interoperable ecosystem for automated mobility services. In addition to managing automated vehicle fleets and developing new operational models, a particular emphasis was placed on the integration of traffic management systems to make traffic flows more efficient, safer, and more sustainable.</p> <p>The project was structured into six subprojects, addressing data space architecture, infrastructure, data and service ecosystems, automated passenger and freight transport, and project coordination. In the area of traffic management, ontologies, data flows, and interfaces were modeled and prototypically implemented to integrate traffic lights, incident reports, and real-time data into federated data spaces.</p> <p>Beyond the successful implementation of a GAIA-X-compliant data space, concrete applications in traffic management were realized. These include the integration of infrastructure data for real-time monitoring of traffic lights (LSA) and the provision of incident data via EDC connectors. The developed solutions were successfully tested in demonstrators and publicly presented. GAIA-X 4 ROMS demonstrates how modern traffic management systems can be made smarter, more flexible, and more sustainable through federated data spaces. The developed concepts are transferable to urban and regional mobility contexts and provide a foundation for data-driven control, better resource utilization, and new mobility services.</p>	
19. keywords Gaia-X 4 ROMS, Traffic Management	
20. publisher	21. price

Nicht änderbare Endfassung mit der Kennung 2753753-3