ATLAS





Agricultural Interoperability and Analysis System

Introduction and Objective

The overall objective of ATLAS is the development of an open digital service platform for agricultural applications and to build up a sustainable ecosystem for innovative data-driven agriculture using the platform. The platform will allow the flexible combination of agricultural machinery, sensor systems and data analysis tools to overcome the problem of lacking interoperability and to enable farmers to increase their productivity in a sustainable way by making use of the most advanced digital technology and data. The platform will define a service architecture providing hardware- and softwareinteroperability layers which enable the acquisition and sharing of data from a multitude of sensors and the analysis of this data using a multitude of dedicated analysis approaches. The benefits of data driven agriculture will be demonstrated using the ATLAS platform within a multitude of pilot studies. Around these pilot studies, so called "Innovation Hubs", a network of end-users, service providers, researchers and policy makers along the agricultural value chain, will be established to exploit the benefits of digital agriculture to a larger audience. ATLAS will put





significant effort into the definition of the next

generation standards for data driven agriculture.

Consortium

ATLAS' consortium involves thirty partners from leading research institutions, companies and agricultural organizations.



Home countries of the consortium's partners.



Overall Concept

To improve the interoperability of technology in the agricultural sector and to enable a more sustainable and productive agriculture based on four main aspects: • Building a platform based on open standards, protocols and data formats to interconnect sensors, machines and services.

- Demonstrating the platform's benefits in **pilot studies**. **Building-up business incubators** around the pilots through **Innovation Hubs**.
- **Extending** the proven and established **ISOBUS standard** to match the requirements of the data driven agriculture of the future.

The ATLAS Platform ATLAS connects different sensors, machines and actors locally and on demand delivers data to cloud services, where data storage, processing and evaluation services are run to then share the data with the users granted access to it. In the cloud will

be frameworks for knowledge exchange and decision support as well as the infrastructure to store and process all data, granting access to single users, user communities, SMEs, NGOs and other stakeholders. ATLAS follows a flexible microservice architecture. Microservices can be run locally and independent for a specific task.

Project Partners



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