

**Service ID** S00142



**Location** At user's premises, Netherlands

## Assessment of interoperability for AI-driven solutions

### Provider service

Wageningen University WUR

### Link to content

<https://agrifoodtef.eu/catalogue-of-services/assessment-interoperability-ai-driven-solutions>

### Type of Sector

Arable farming, Greenhouse, Horticulture, Livestock farming, Tree Crops, Viticulture

### Accepted type of products

Data, Design / Documentation

### Type of service

Conformity assessment, Data augmentation, Test design, Test execution, Test setup

### Description

Data interoperability in the agrifood sector hinders innovation and development due to the need for many custom solutions to share data. This service helps agricultural organisations improve how they handle and share data across the entire food value chain. By implementing standardised reference data models like rmAgro (<https://rmagro.org>), we help to optimise your data flows and make your information systems work better together. Our team at Wageningen Research provides expert guidance in data modelling and implements reference models that align with industry standards and tests the reference models against various use cases. This promotes more efficient data sharing between different systems and organisations, reducing data integration challenges and improving operational efficiency. The service is particularly valuable for organisations looking to modernise their data infrastructure or needing to share data more effectively with partners in the agri-food sector. This service provides an assessment of interoperability for AI-driven solutions within the agri-food sector. The service facilitates conformance testing and verification of whether the related IT systems comply with relevant standards, guidelines, data space regulations, and other interoperability requirements. By evaluating the IT systems against established reference data models and frameworks like rmAgro (<https://rmagro.org>), the service ensures that it meets the necessary criteria for effective data sharing and integration. Wageningen Research leverages its expertise to evaluate the overall AI solution on its quality, performance, and how well it aligns with industry standards, offering insights and recommendations for improvement. This service supports organisations in ensuring their solutions are interoperable, compliant, and ready for seamless integration within the agri-food value chain.

## How can the service help you

Before using this service, organisations often struggle with incompatible data formats, difficult data exchanges between systems, and inefficient data flows. After implementing our reference architecture and data modelling solutions, you will have:

- Standardised data structures that make sharing information more meaningful
- Interoperable information systems
- More efficient data flows across your organisation and with value chain partners
- Reduced costs, time, and effort spent on data integration
- Improved capability to participate in data-sharing initiatives

## How the service will be delivered

The service can be customised based on:

- Scale of your organisation
- Scope and complexity of your data flows
- Uniqueness of the agricultural subsector (crops, livestock, fruit, etc.)
- Goals, ambitions, and data maturity of your organisation

Limitations:

- Service focuses on semantic modelling and data sharing; it does not include actual software development.
- Requires basic technical understanding and documentation of existing systems

## Service customisation

The service is delivered through a structured process that includes:

- Intake conversation to define user requirements
- Initial assessment of your current data infrastructure, relevant standards, and user needs
- Customised offer for service implementation, such as:
  - A planning workshop with your technical team (typically 2-3 sessions);
  - Maturity assessment of the interoperability performance
  - Improvement opportunities and hotspots
  - Documentation and knowledge transfer sessions (typically 3-5 sessions)
- Optional: Provision of a base framework with design patterns;
- Optional: Design sessions to model semantics
- Duration: The complete service typically takes 3-12 months depending on the scope and complexity.