demeter

Implementing the DEMETER reference architecture

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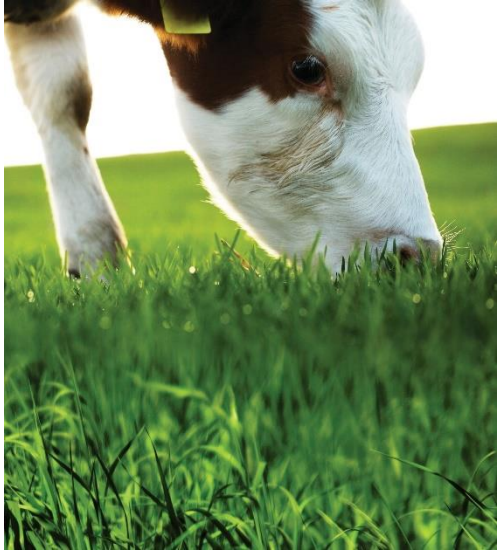
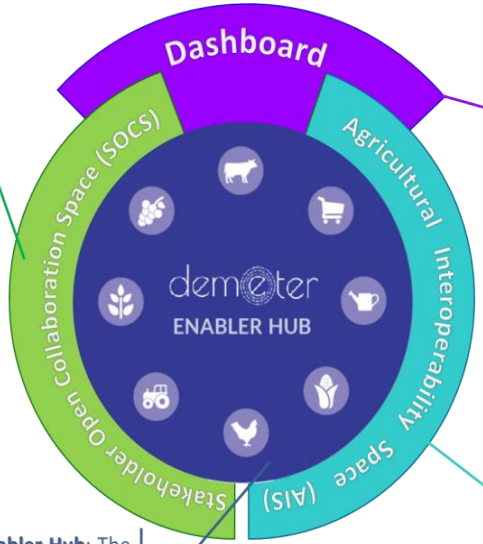


The main DEMETER elements



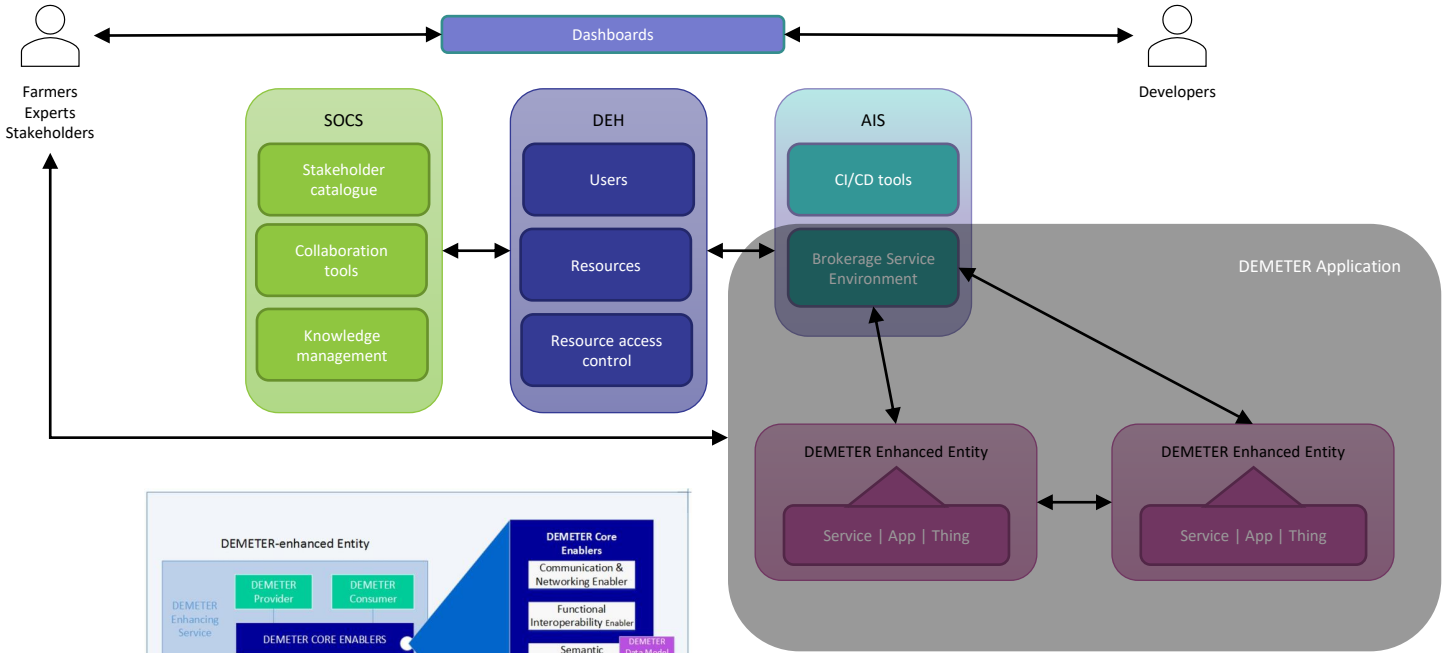
Knowledge sharing and co-creation space where
- Farmers/service advisors express their needs and
- Service advisors and providers team-up to define the most appropriate combination of tools.

DEMETER Dashboard: Sole entry point to the DEMETER ecosystem for all DEMETER Stakeholders.

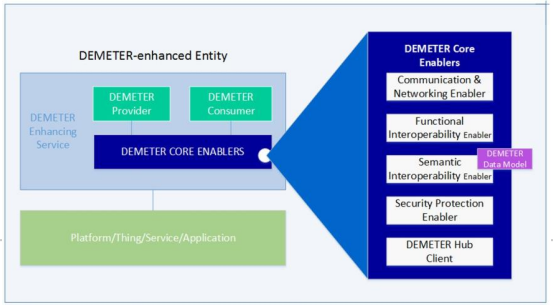
Implementation Space: A virtual space where providers team-up and interoperate to develop and deliver the appropriate combinations and customisations of tools to the farmers ensuring interoperability with existing solutions.

DEMETER Enabler Hub: The available collaboration spaces (SOCS and AIS) are built around this hub that enables access to all resources that are available for integration and deployment.

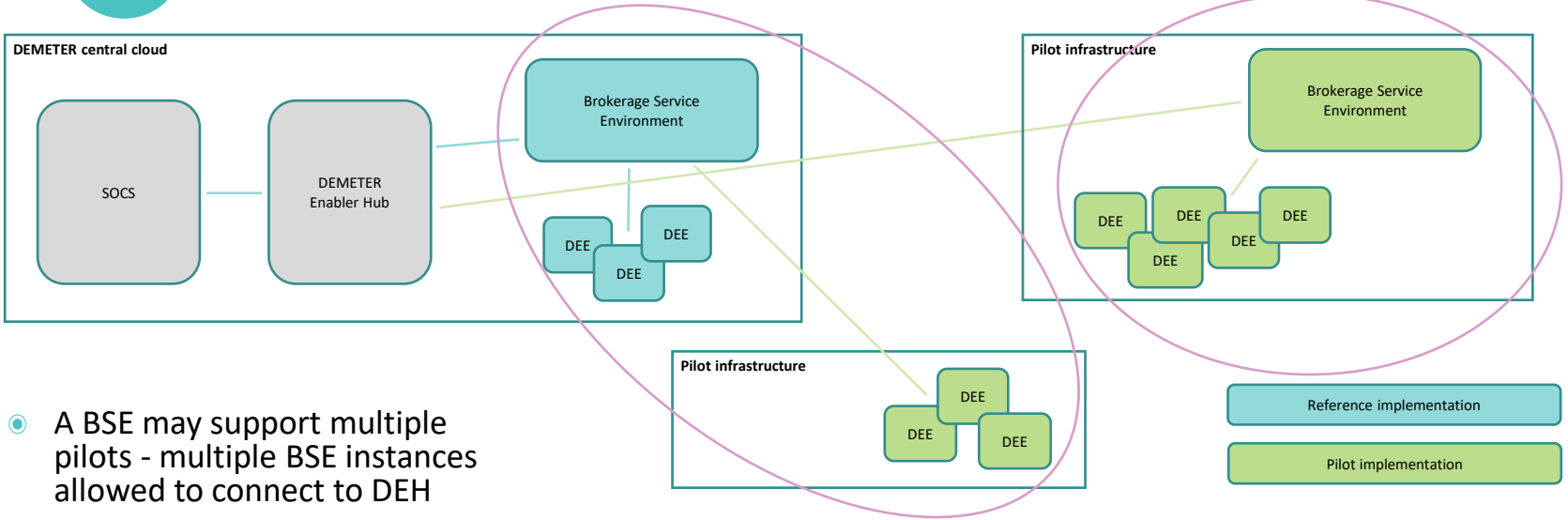
Arraying the main elements



AIM: the DEMETER Agriculture Information Model, a common semantic data model



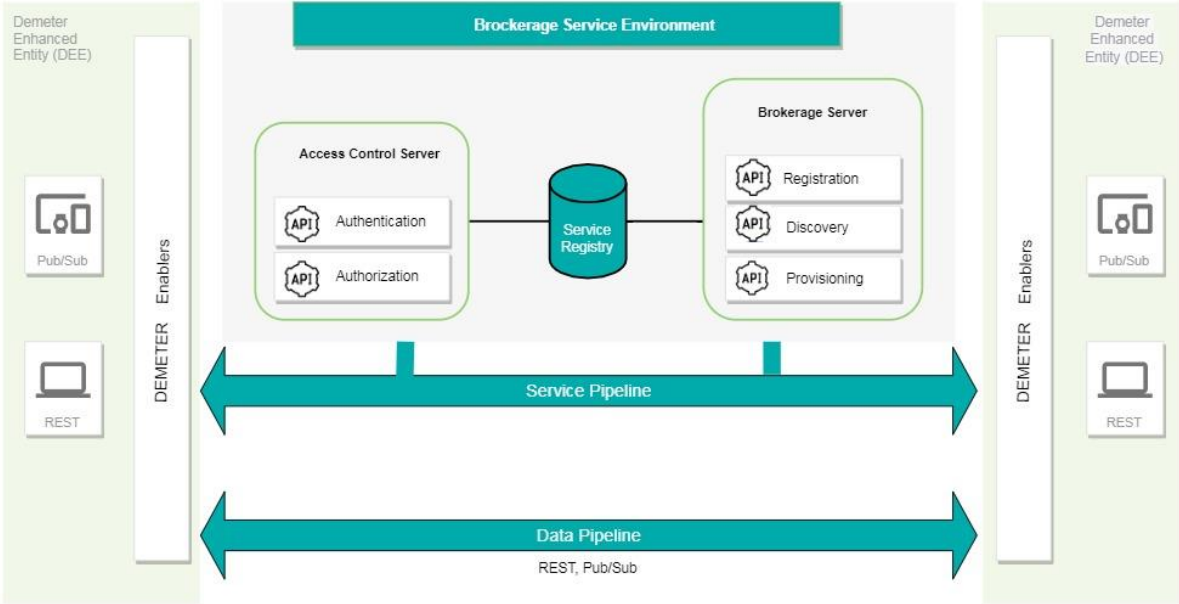
Implementation approach



- A BSE may support multiple pilots - multiple BSE instances allowed to connect to DEH
- One DEH deployed within the project, but multiple are possible if required by business models
- Our implementation approach: provide a **concrete** implementation and at the same time allow full **flexibility** for business development

DEMETER Brokerage Service Environment (BSE)

- **Microservices**-based framework
- DEEs after **auth** will be able to consume BSE's API for service **registration/discovery/ provisioning**
- DEEs will have direct communication through **REST** APIs with other DEEs
- Or, DEEs can subscribe to a DEE supporting the **publish-subscribe** pattern



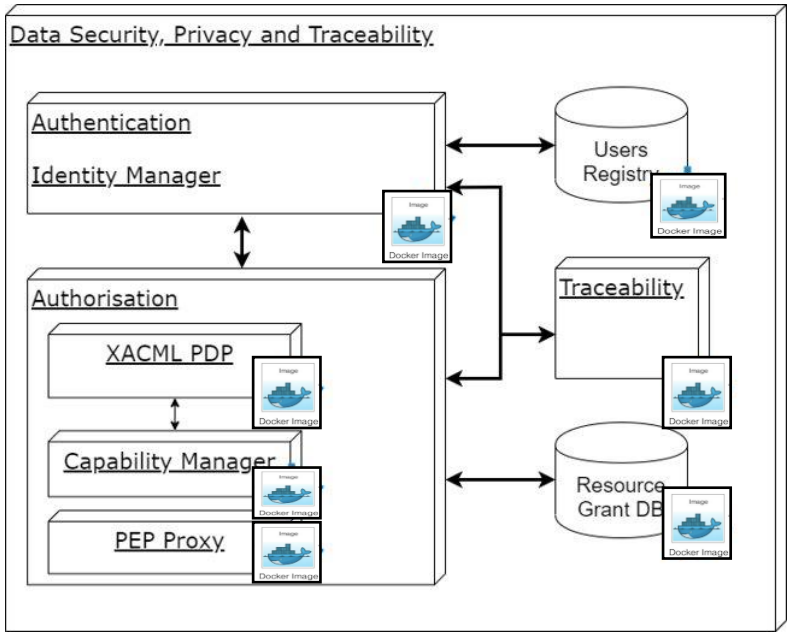
DEMETER Access Control Server (ACS)

The Communication and Security Framework will provide

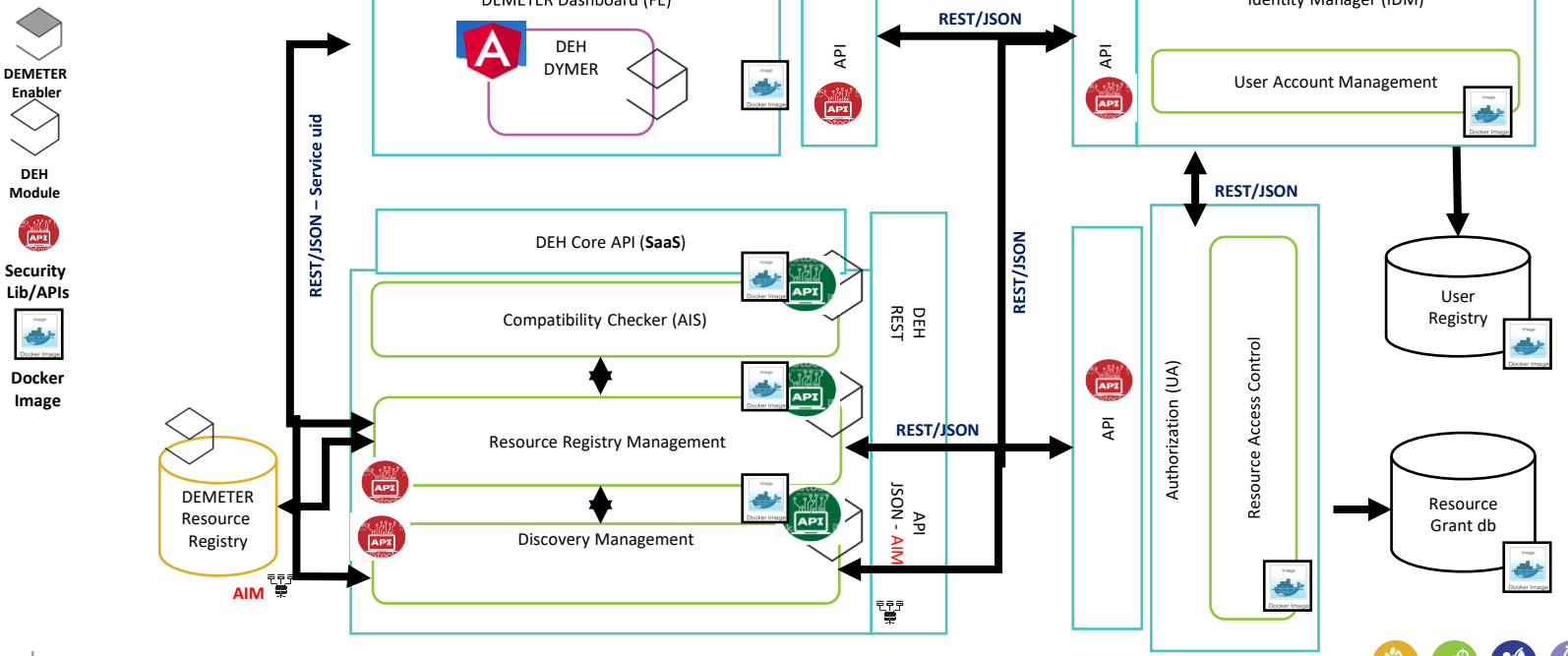
- authentication
- authorization
- information audit capabilities

to

- DEMETER components **DEH** and **BSE**
- DEMETER **Enablers** (Core and Advanced)



DEMETER Enabler Hub (DEH)



SOCS priority features

Stakeholders Catalogue

Discover who is part of the network

- User catalogue (Consumers, Service Advisors, Providers)
- Organisations Catalogue

Success Stories

DEMETER best practices, get inspired!

- Agrifood Trial Catalogue

Collaboration Tools

Share experiences and interact with the rest of the community, join forces, exploit synergies, build partnership.

- Blog & Discussion
- Events Matchmaking

Knowledge Management

Find out the most relevant resources shared by DEMETER partners

- Papers and publications
- References (Bookmarks)
- Events

Experimental Facilities

Integrate research and innovation processes in real life and controlled environments!

- Pilots Catalogue

Innovation Space

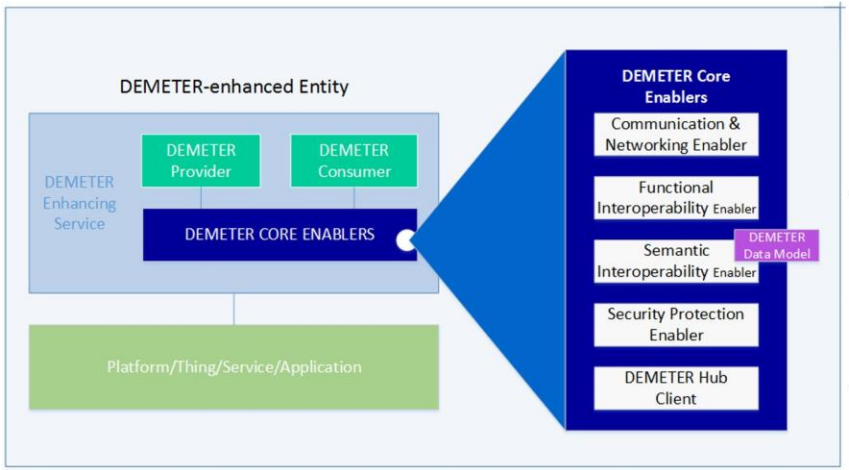
Create, share and manage your innovative ideas in a collaborative way

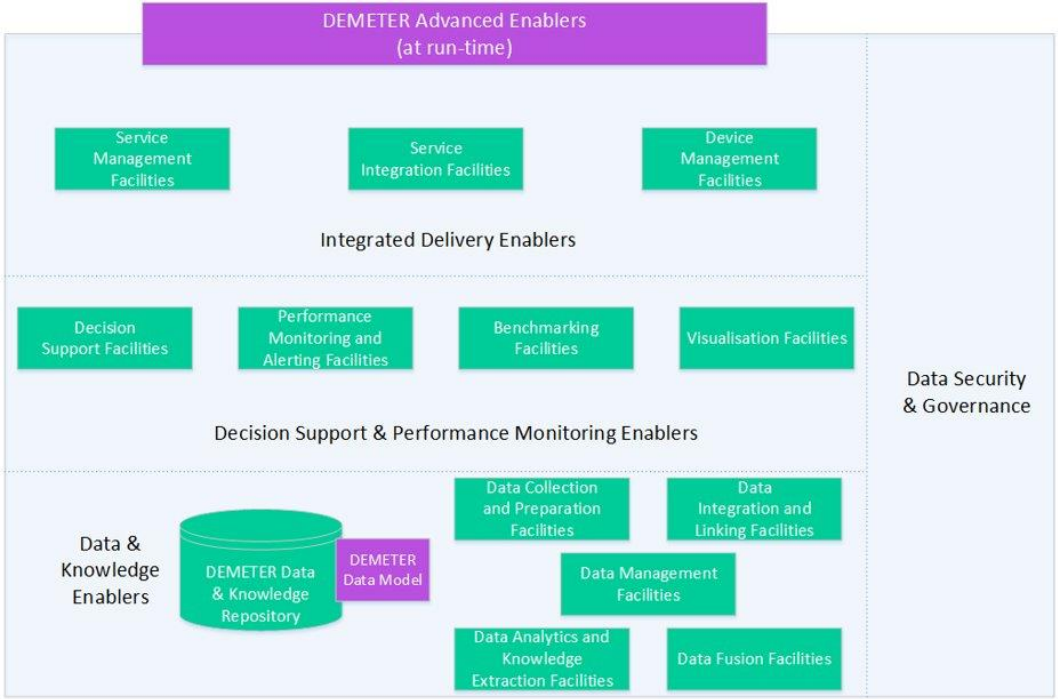
- Idea Management System
- Weight up decision
- Multi poll

Universal Search

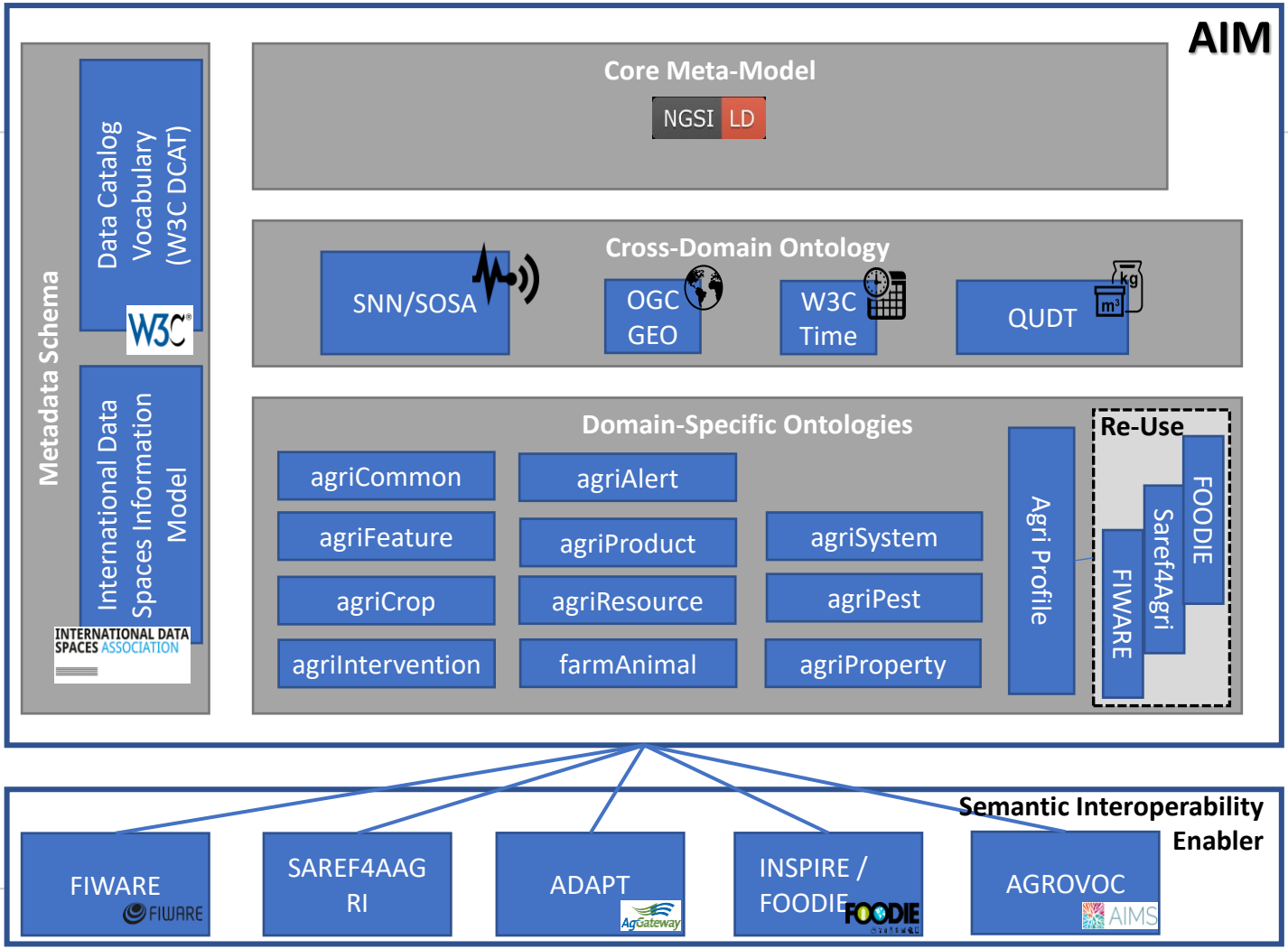
Workflow and KPI

Enablers: under development

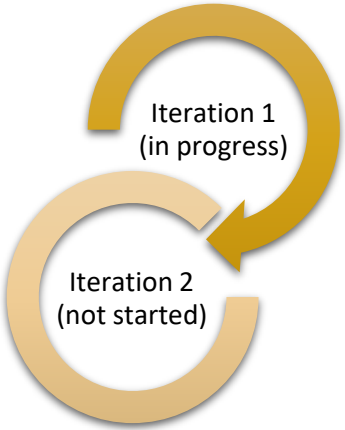


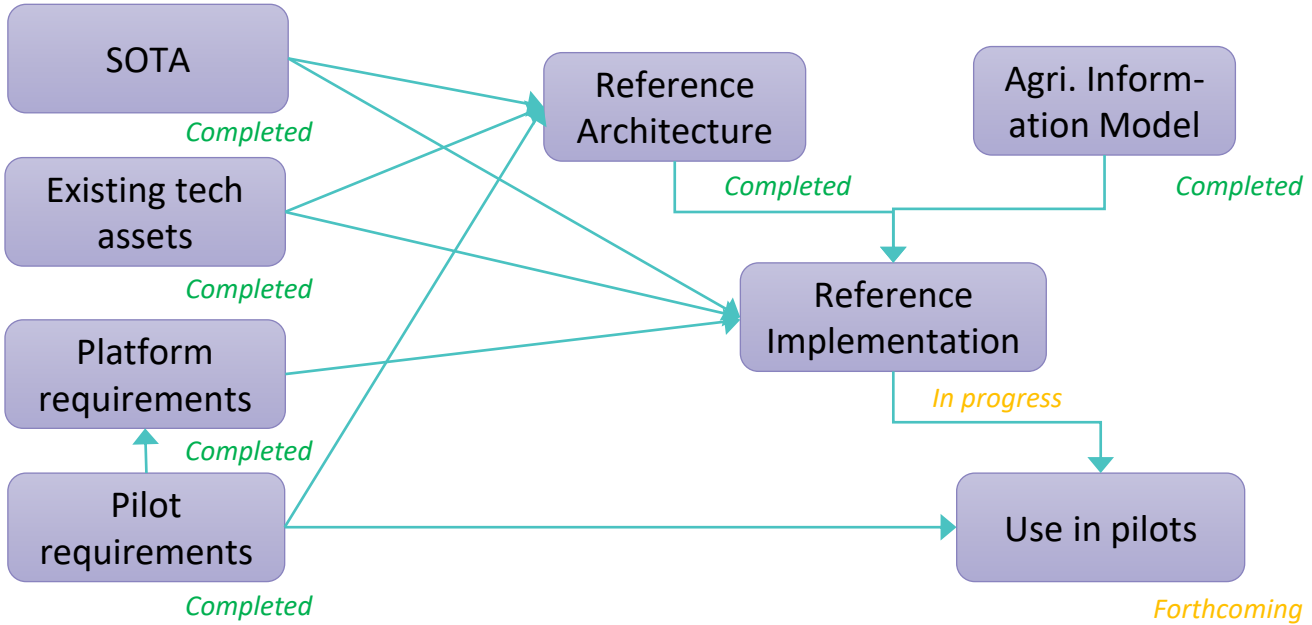


DEMETER Agriculture Information Model (AIM)



Roadmap: things falling into place





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For more information visit:

www.h2020-demeter.eu

or Email us at :

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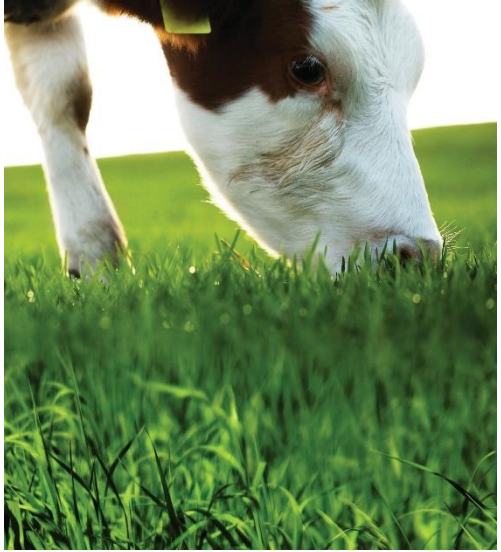

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Thank you for your attention!

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