

Pilot for the Swedish cloud-of-clouds infrastructure



Mötesplats Avancerad Digitalisering – 2023-05-26

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Ericsson Research

Project overview



- Project kick-off: 2022-03-08
- Project end date: 2023-04-30
- Project Managers:
Magnus Vesterlund, Ulrika Engström
- Project Coordinators:
Rowan Högman, Ulrika Engström



Project partners:

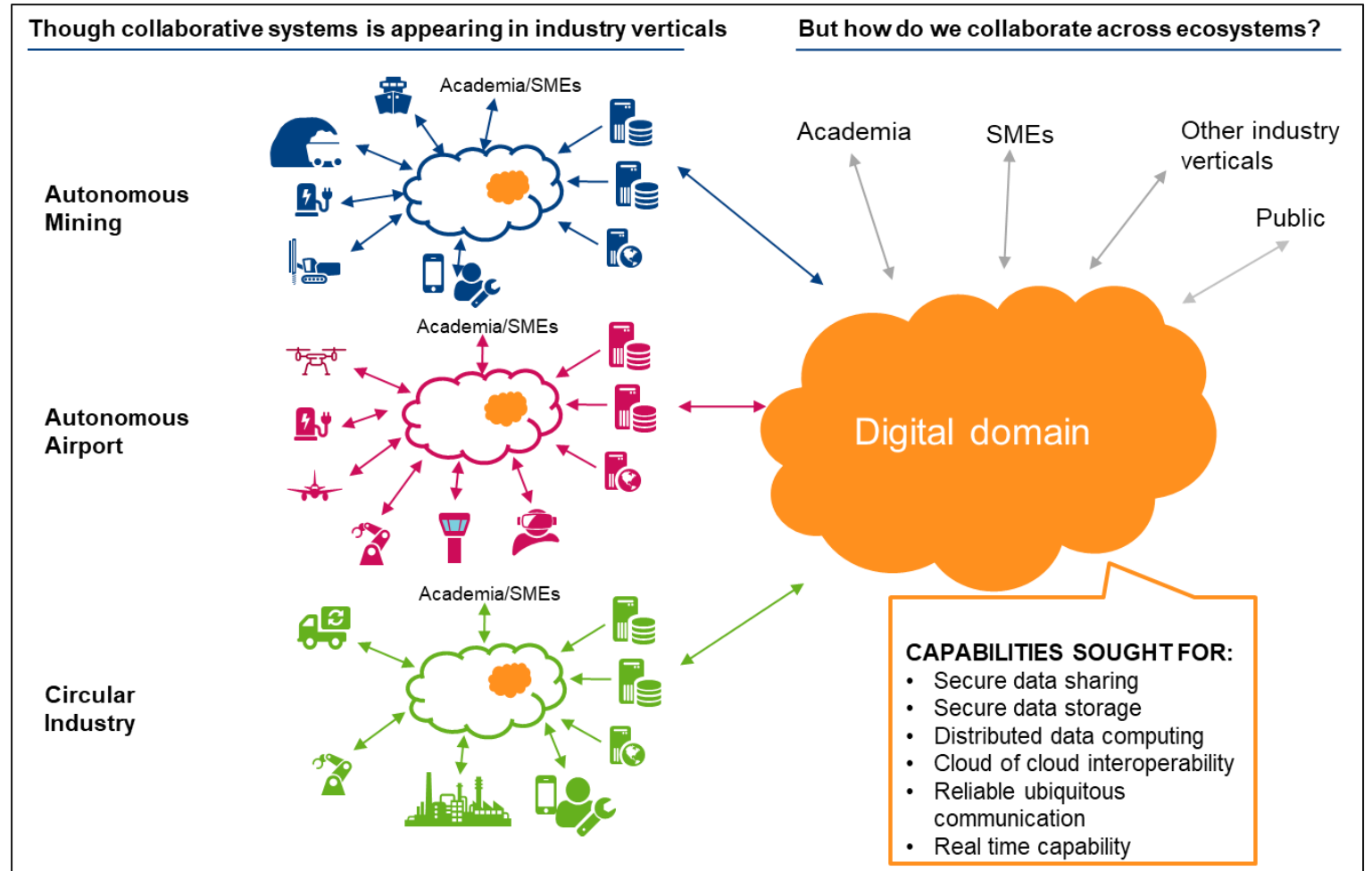


Infrastructure needs



Inter-domain digitalization, access to a common infrastructure:

- Open, secure, scalable, and flexible with a user-centric design
- Secure and trustworthy for heterogeneous sharing of data and services
- Ubiquitously accessible and interoperable for different users under different business models.
- That is ...
 - ...a way to govern and orchestrate testbed infrastructure and research projects, including guidelines and instructions for how to make the infrastructure available.



Cloud of clouds – Areas

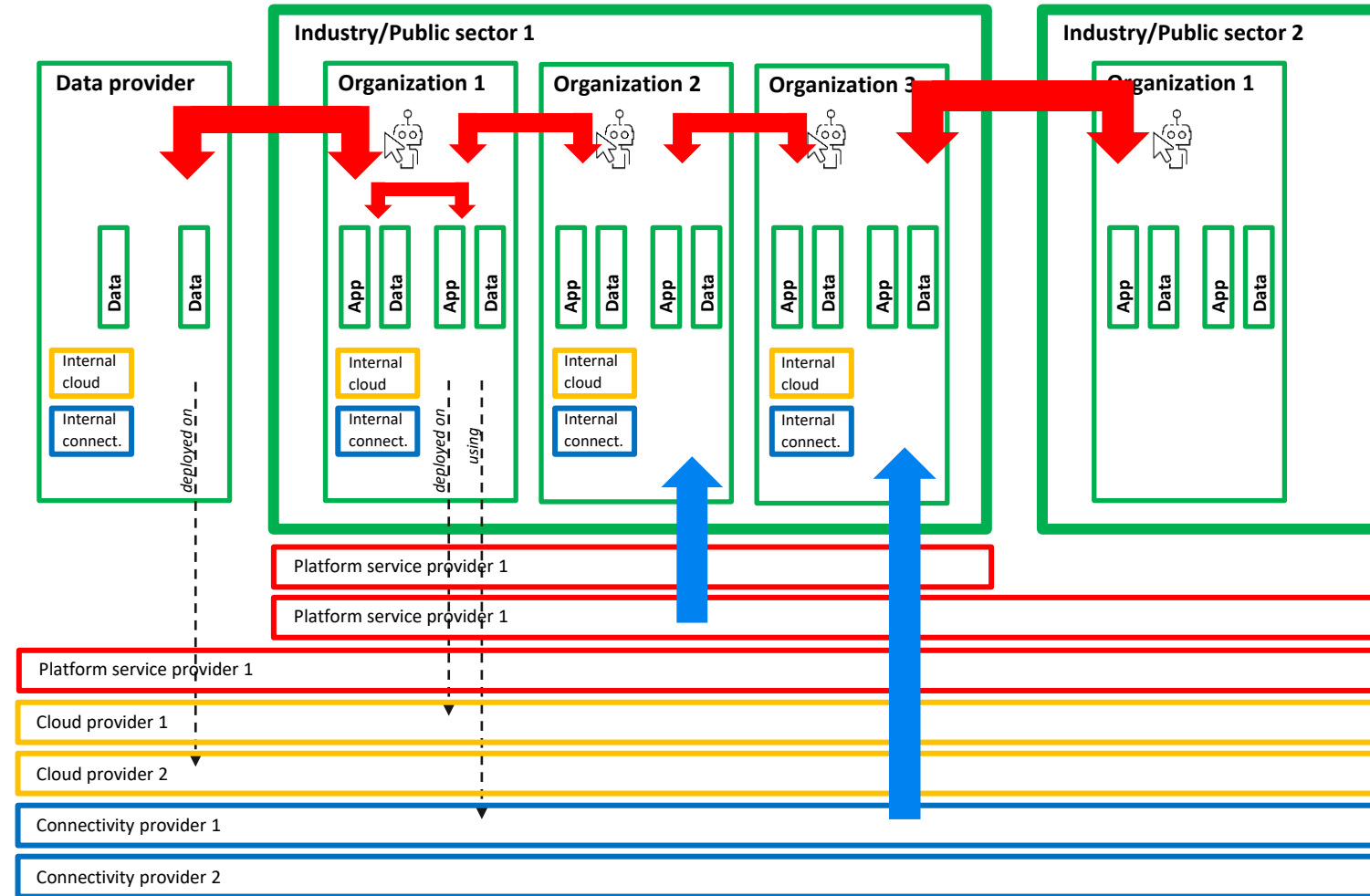


Industry/public sector digitalization

- Collaboration across ecosystems and breaking silos
- New use cases driving requirements on infrastructure and new infrastructure services

Digital infrastructure

- Generic services (cloud, connectivity), increasingly complex landscape of providers
- Public vs private infrastructure
- Global vs national providers
- Cloud services (central vs distributed)
- Network services (service exposure)



Cloud of clouds – Areas

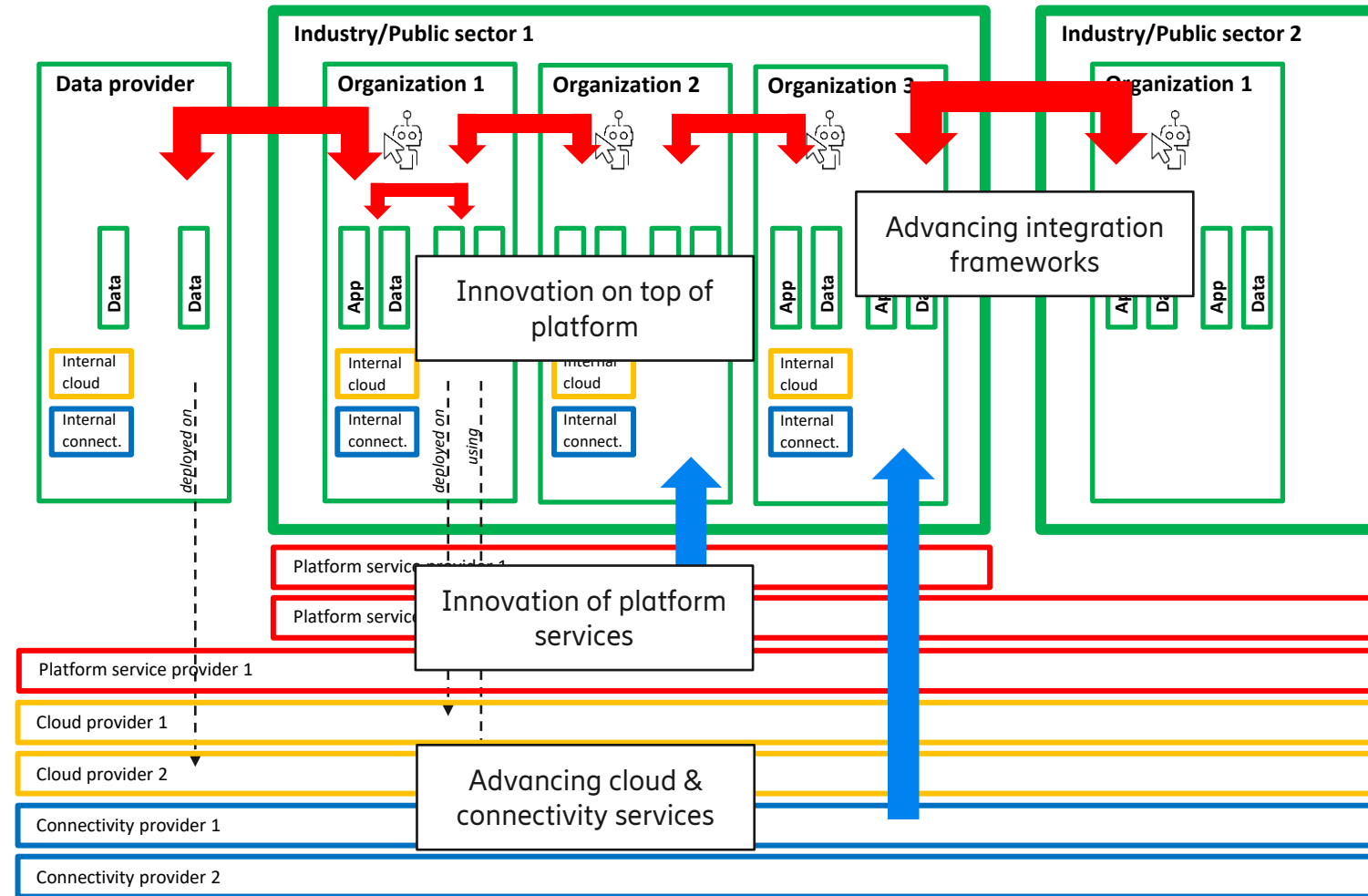


Industry/public sector digitalization

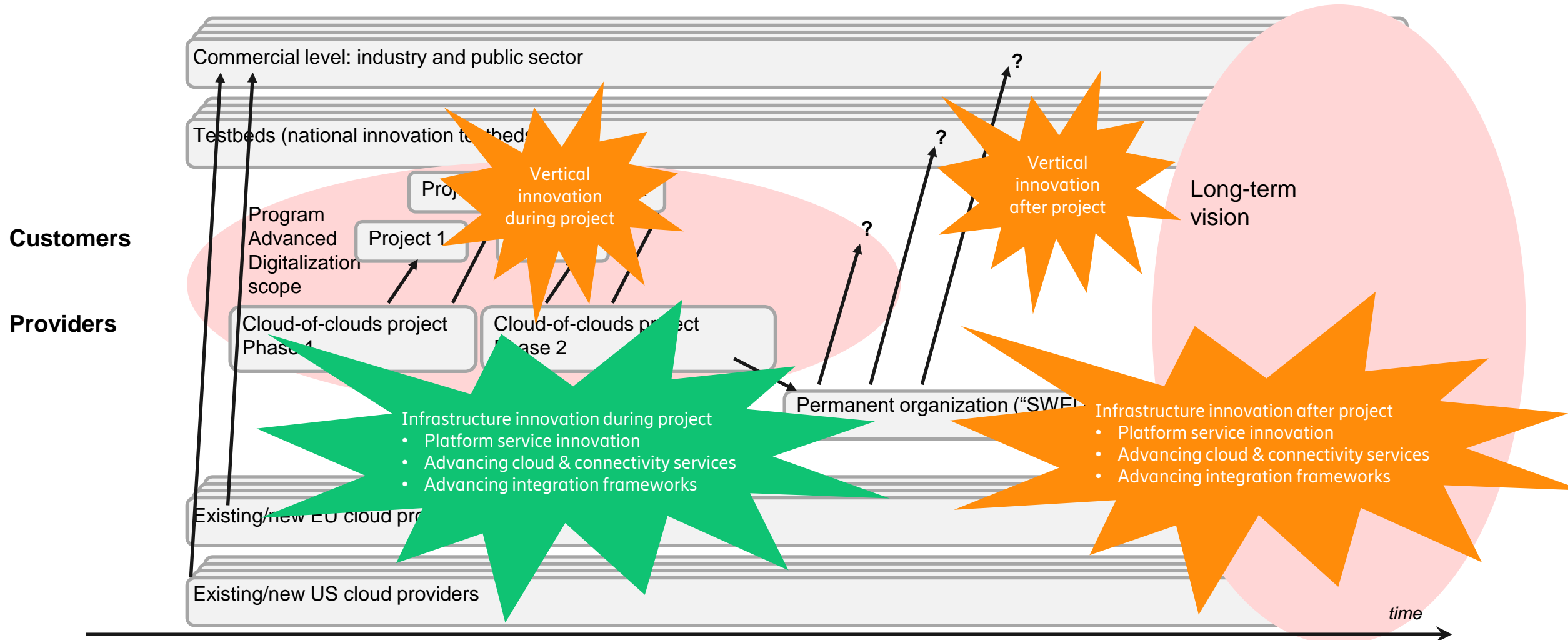
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Where/when is key project value creation?



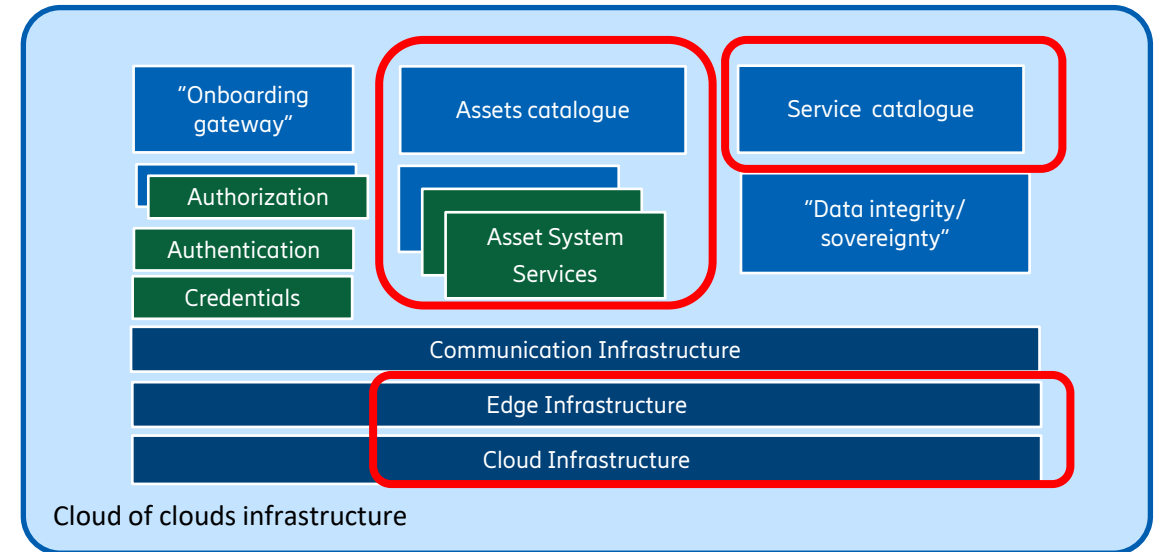
Project results



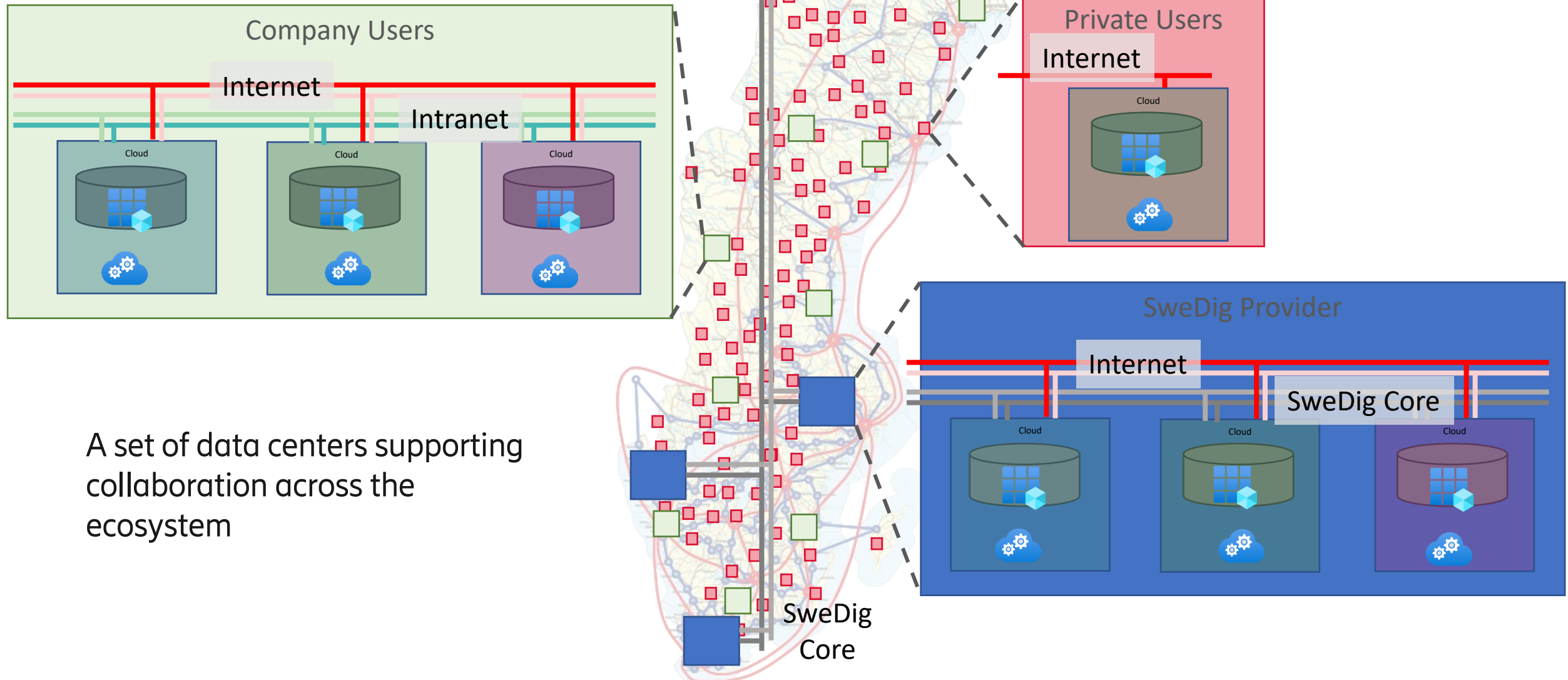
Architecture



- A reference architecture with a set of generic perspectives defined
- Focus on describing
 - Multi-cloud / edge infrastructure
 - Asset catalogue
 - Service catalogue

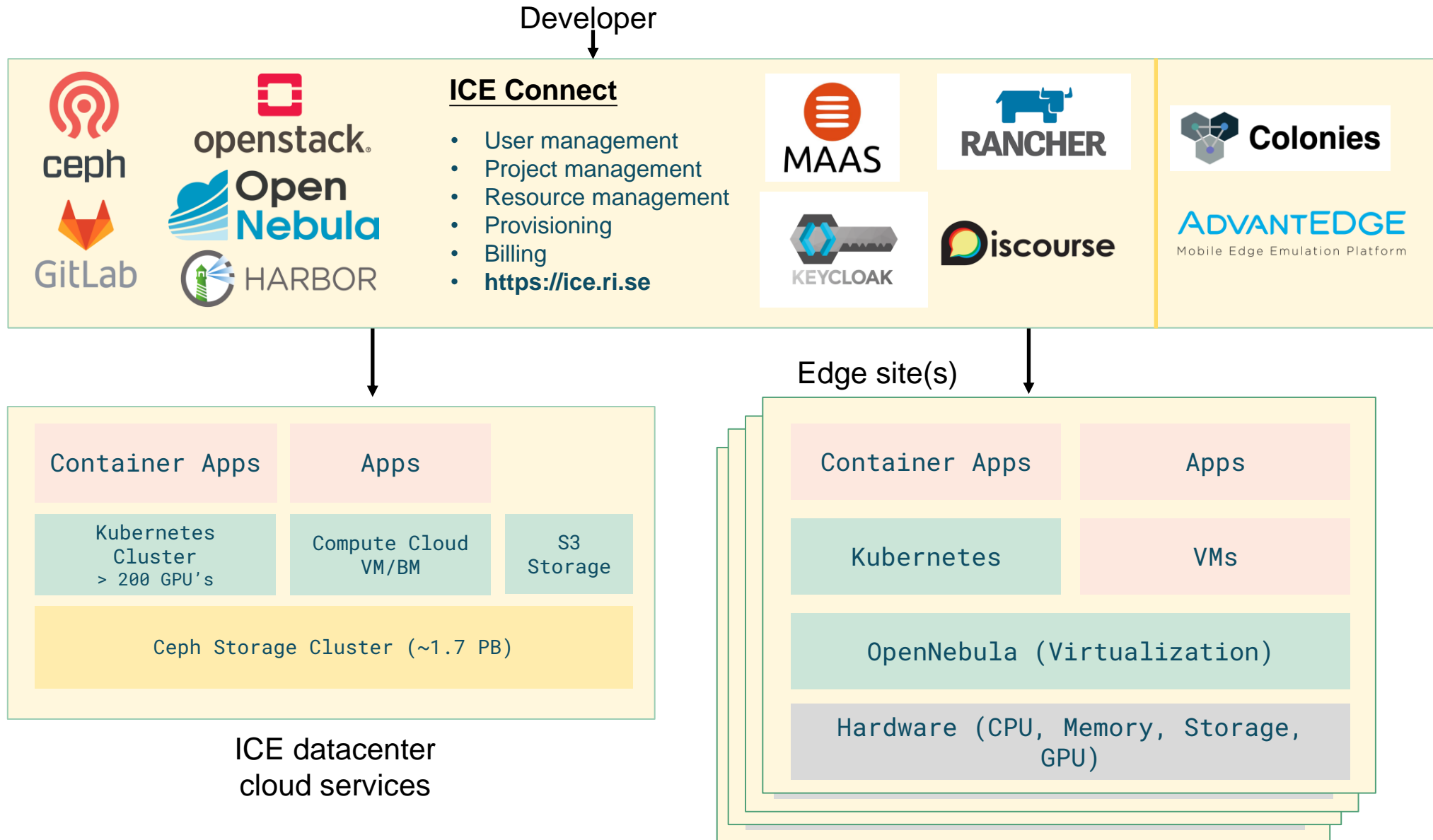


Multi-cloud / edge infrastructure



A set of data centers supporting collaboration across the ecosystem

System specification for multi-cloud / edge

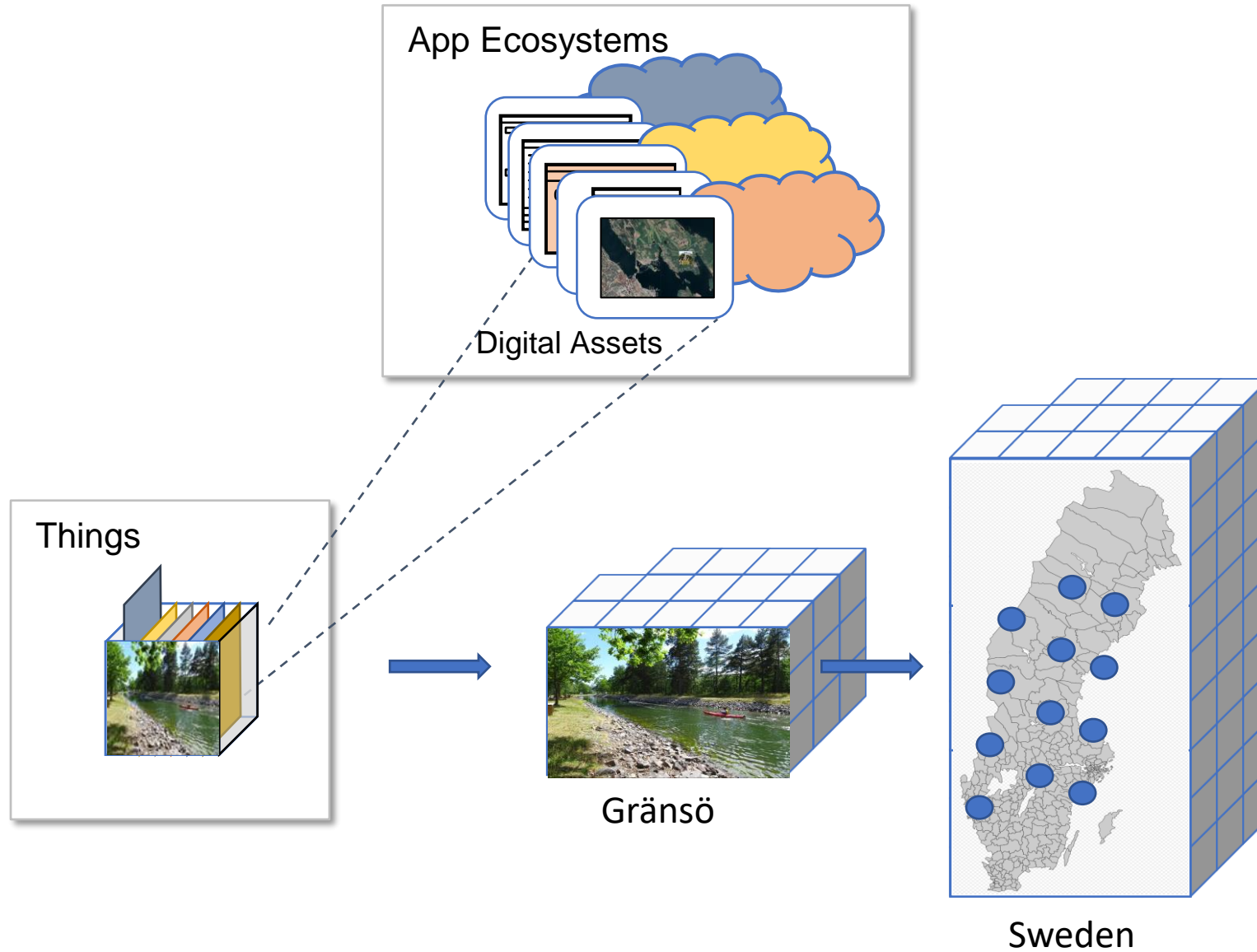


Hardware blueprint

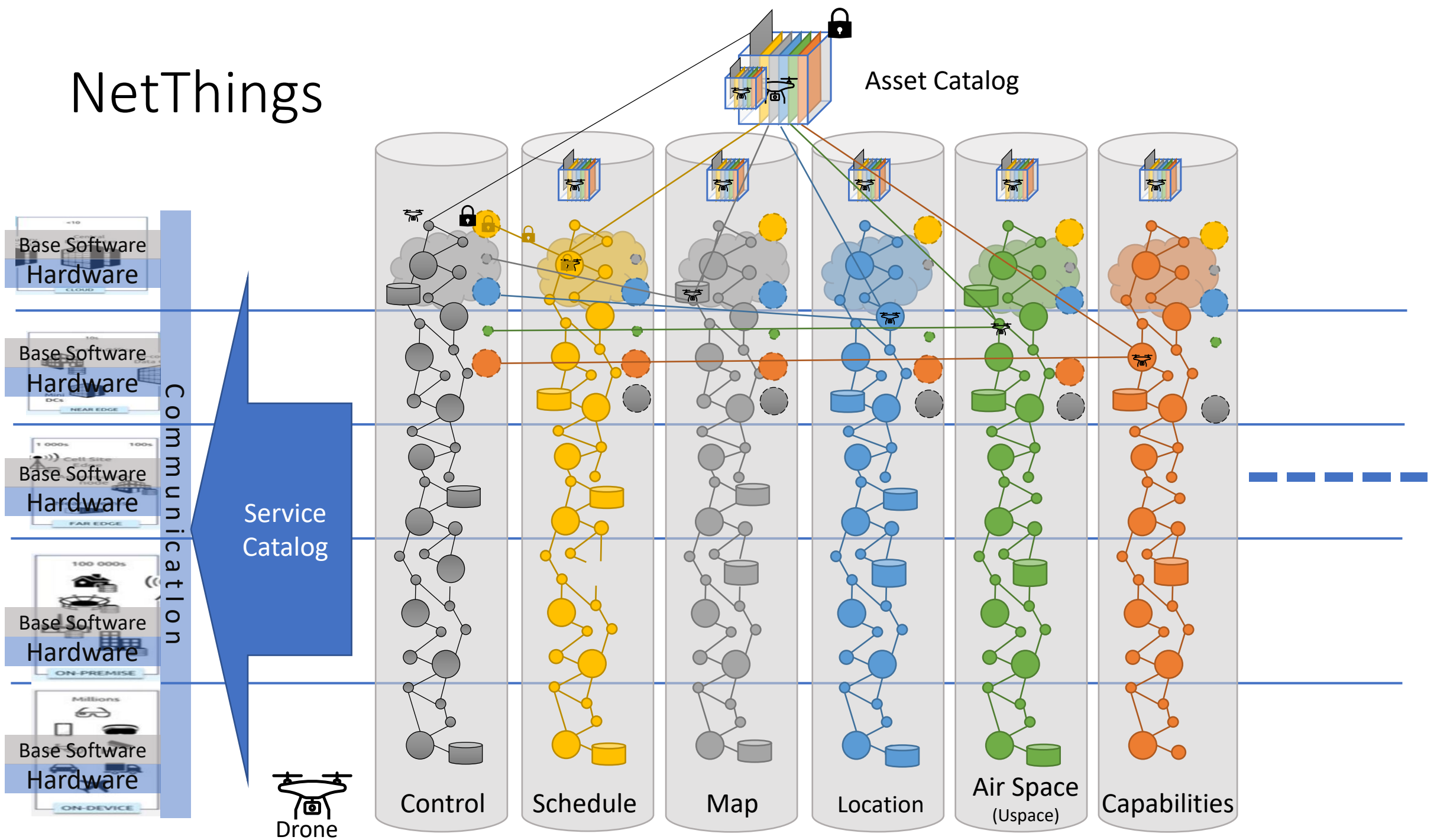
- High performance 2U servers
 - AMD EPYC Milan 7713P
 - 1 TB RAM
 - Nvidia A16



Federated information model of Sweden



NetThings



Reflections and Next steps



- Broad project scope of Cloud-of-Clouds with broad technical scope and several parallel ambitions
 - From cloud infrastructure to data exchange
 - From innovation project to testbed
 - From short term MVP to long term testbed
- Several tracks in Cloud-of-Clouds are key for Advanced Digitalization but are best pursued in more focused initiatives

