



Aalto University
School of Science

Data and information

*European Parliament
AGRI Committee
16.3.2021*

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Data and information are raw ingredients to implement Farm2Fork, Green Deal, Digital Strategy

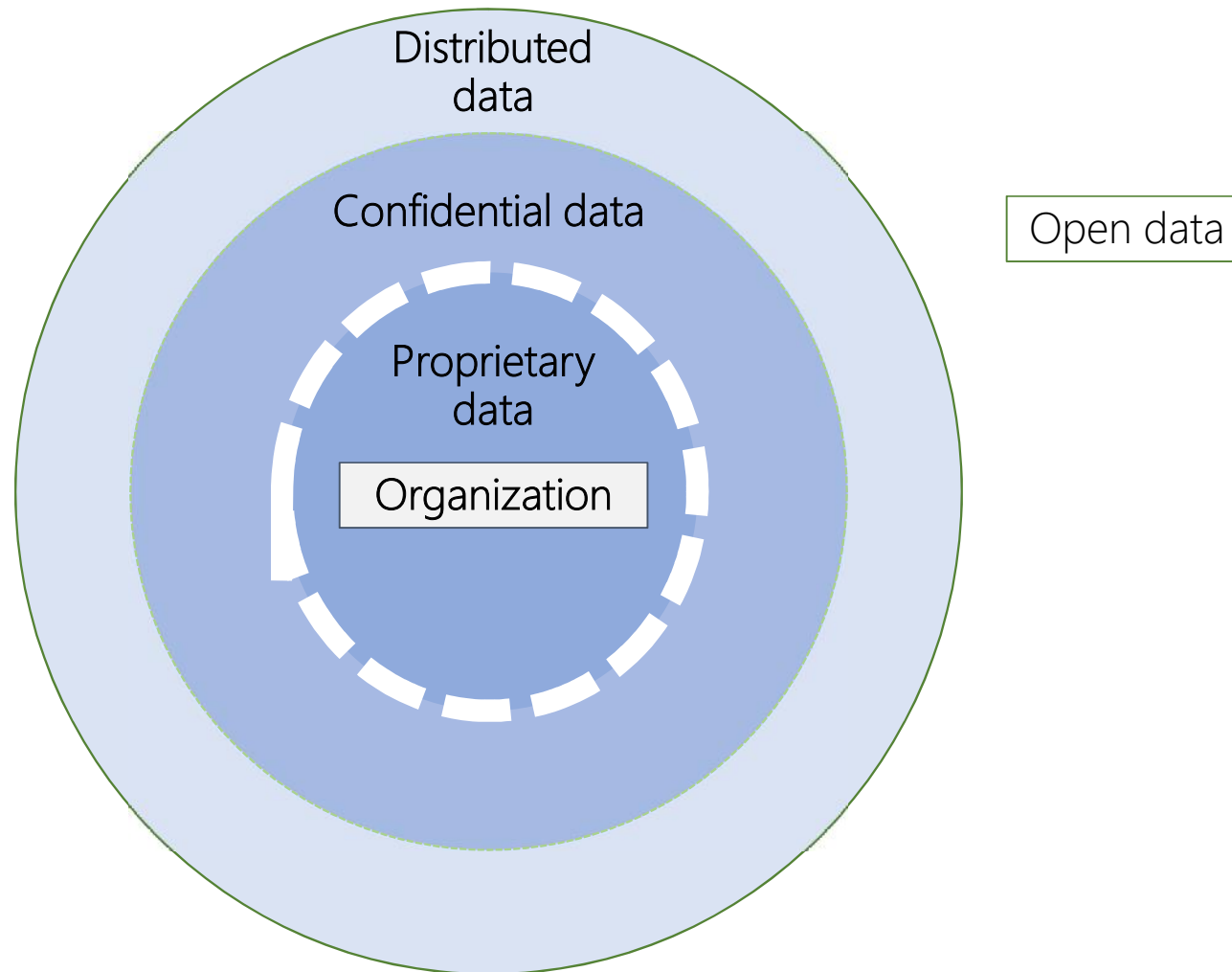


Calculating reliably the carbon footprint at the level of individual farm and product

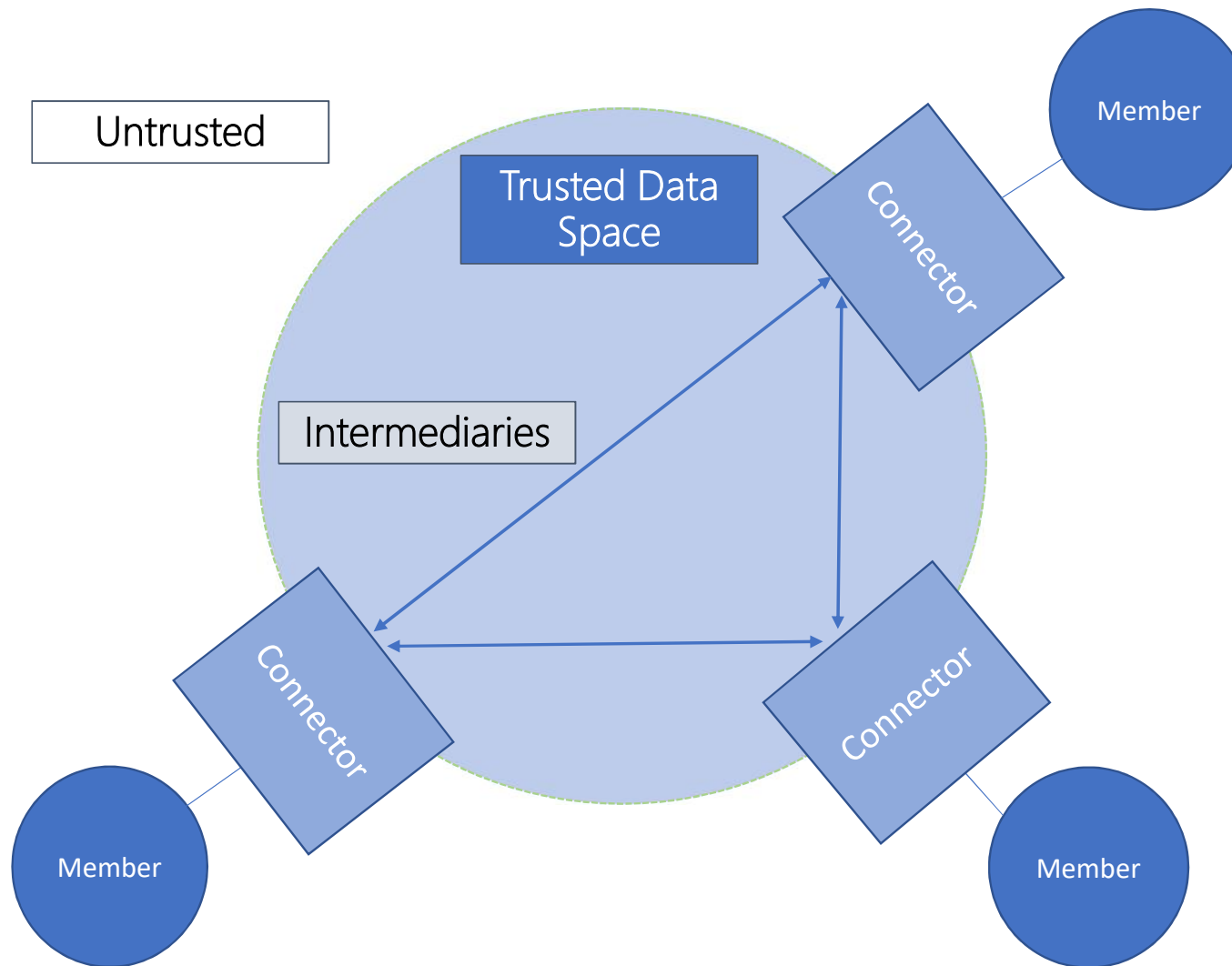


Informing accurately the consumer of their carbon footprint related to food

Organization-centric view on data



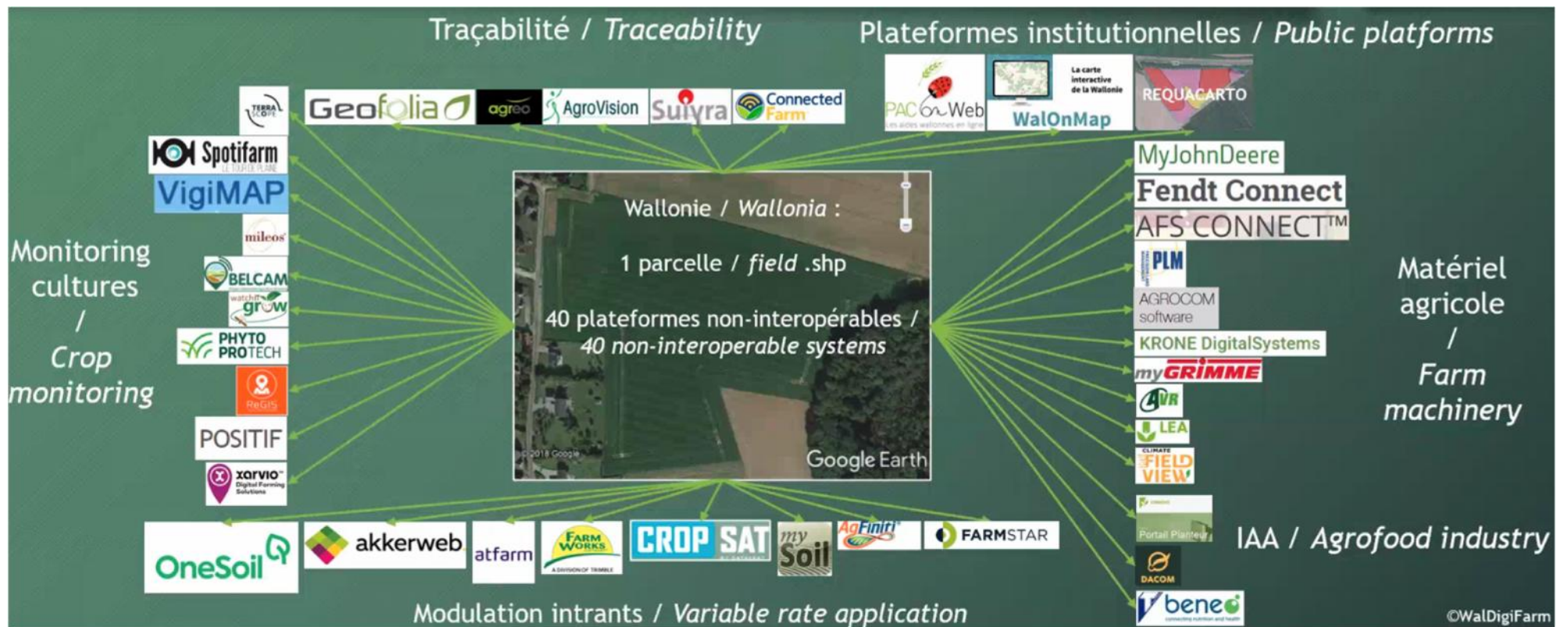
Network-centric view on data



Human-centric view on data



Farmer's view on data (example)



Source: WalDigiFarm

Design principle #1 for data spaces

Data sovereignty

The capability of a natural person or organisation for exclusive self-determination with regard to its economic data goods. This is the innovative and transformative concept underlying data spaces.

Source:
*"Design principles
for data spaces".*
Position paper to
be published by

INTERNATIONAL DATA
SPACES ASSOCIATION



Design principle #2 for data spaces

Data level playing field

New entrants face no insurmountable barriers to entry because of monopolistic situations. When a data level playing field exists, players compete on quality of service, and not on the amount of data they control. A data level playing field is a pivotal condition to create a fair data sharing economy.

Source:
"Design principles
for data spaces".
Position paper to
be published by

INTERNATIONAL DATA
SPACES ASSOCIATION



Design principle #3 for data spaces

Decentralised soft infrastructure

The data sharing infrastructure is not a monolithic centralised IT infrastructure. It is a collection of interoperable implementations of data spaces which comply to a unified set of agreements in all dimensions: functional, technical, operational, legal and economic. Out of the principle of data sovereignty follows functional and non-functional requirements of interoperability, portability, findability, security, privacy and trustworthiness.

Source:
*"Design principles
for data spaces".*
Position paper to
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INTERNATIONAL DATA
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Design principle #4 for data spaces

Public-private governance

For the design, creation and maintenance of the data level playing field a sound governance is essential. All stakeholders need to feel represented and engaged. These include users (persons, organisations) or provider of data services as well as their technology partners and professionals.

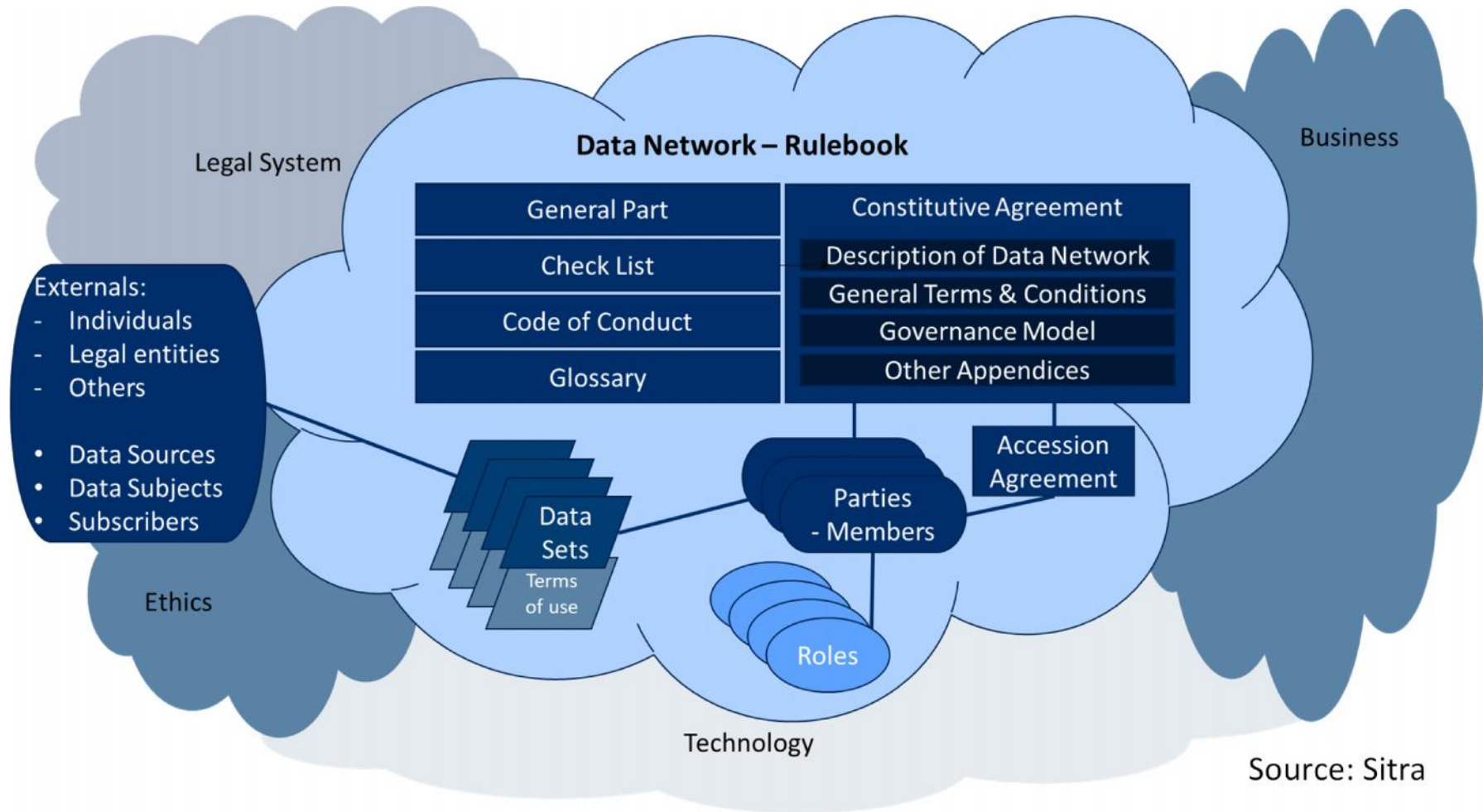
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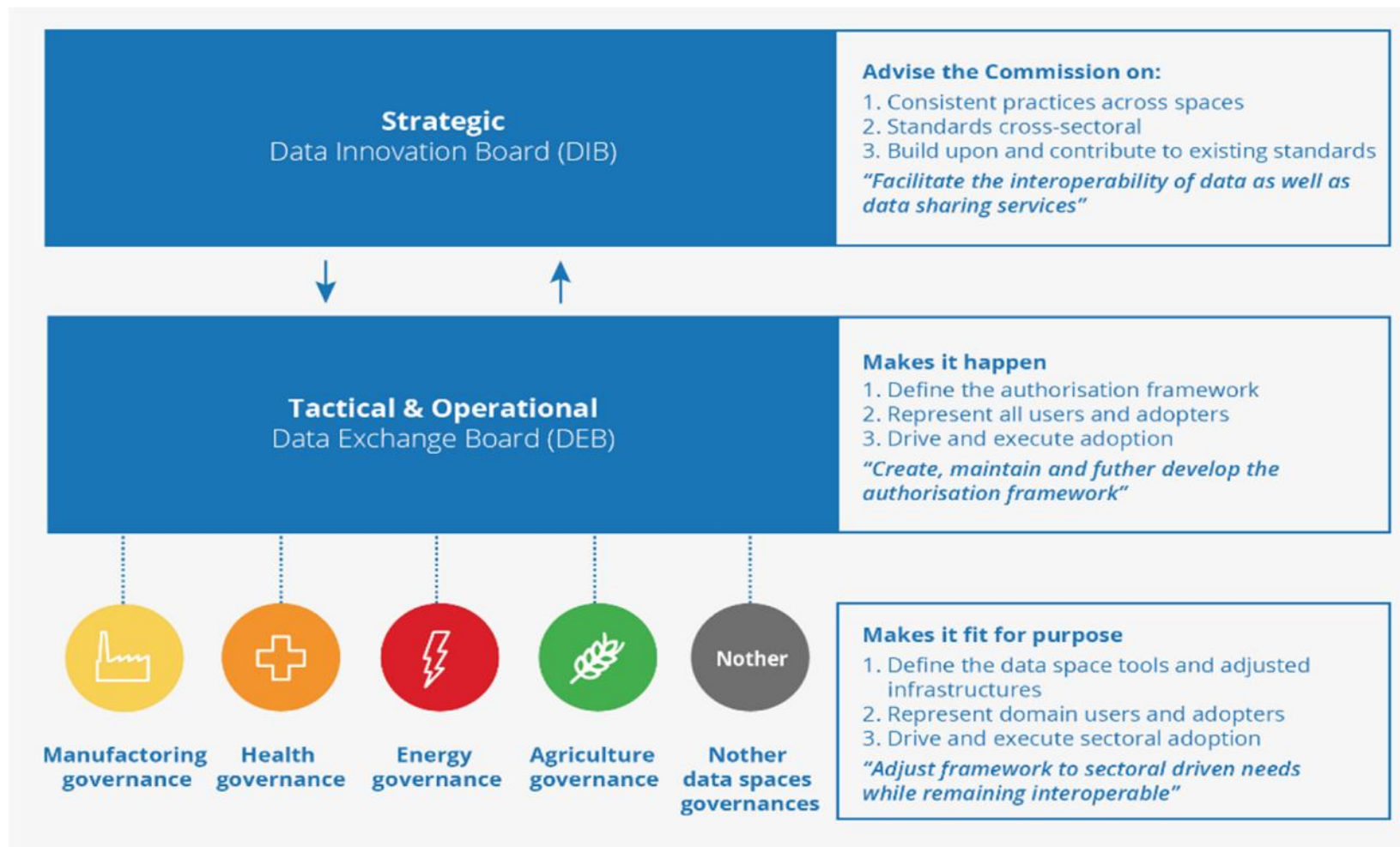
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Fair Data Economy Rulebook





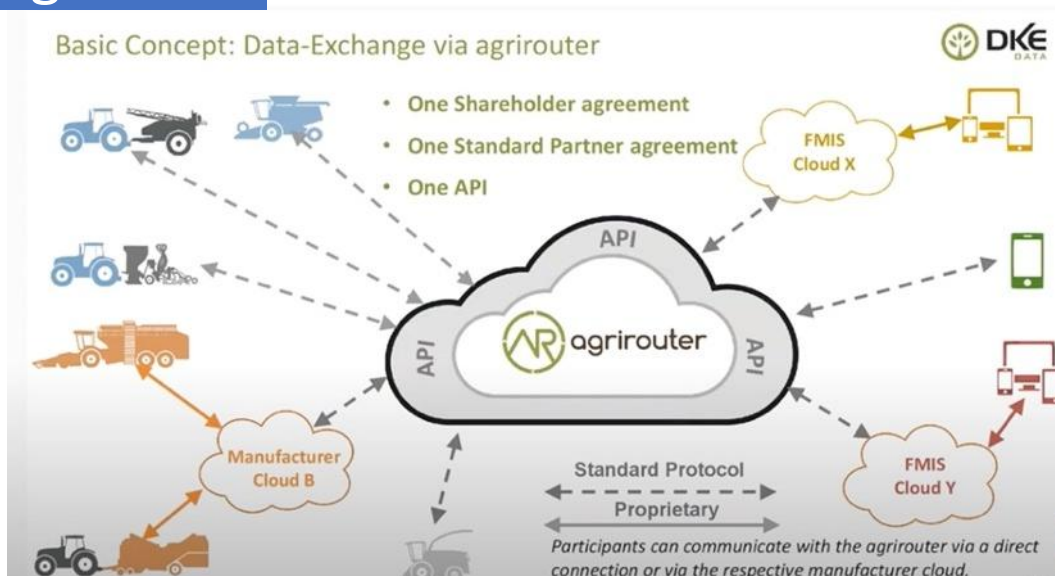
Source:
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Embryonic AGRI data spaces (examples)

agrirouter



DJustConnect

DJUST CONNECT
boer & data

Home Nieuws Partners Contact Help Inloggen

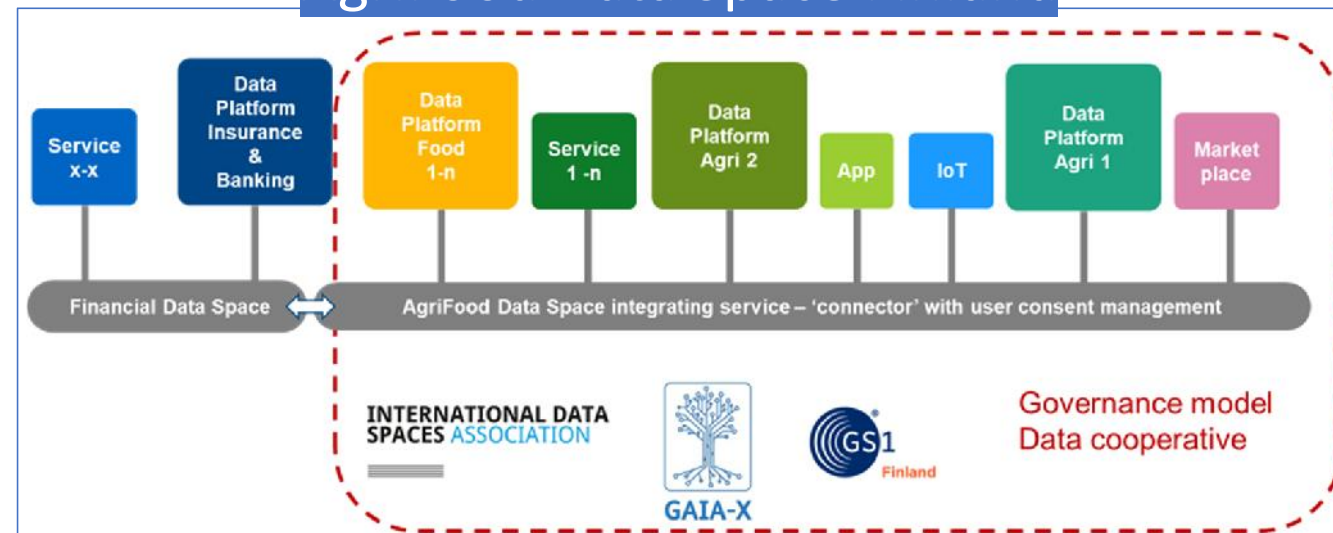
<p>DATA DELEN: PERFORMANT, VEILIG EN TRANSPARANT</p> <p>Meer lezen</p>	<p>BOER AAN HET STUUR</p> <p>Meer lezen</p>	<p>DATA INNOVATIE STIMULEREN</p> <p>Meer lezen</p>
<p>DJUSTCONNECT VOORZIET DATA, BEDRIJVEN BOUWEN</p>	<p>DUURZAAM VERANKERD PUBLIEK - PRIVAAT ORGAAN</p>	<p>IEDEREEN WELKOM</p> <p>Meer lezen</p>

Embryonic AGRI data spaces (examples)

Agdatahub



AgriFood Data Space Finland



Key messages

Fair data economy rules needed for the agri-food chain

- Combination of business, legal, technical and societal viewpoints is required in defining fair data rules for the agri-food sector.

Data enables a more sustainable and circular agri-food system

- Industry-wide sustainability indicators and circularity of the agri-food products and processes are enabled by an efficient and interoperable data infrastructure.

Design principles for data spaces can be applied to the agri-food sector

- Apply common building blocks, while leaving room for agri-food specific solutions. Common soft infrastructure makes cross-sectorial data sharing easier.

Embryonic data spaces are seeds for a European agri-food data space

- National and regional initiatives are important intermediary milestones when moving towards the vision of common European data spaces, as long as they adhere to the data space principles and infrastructure reference models, such as GAIA-X.



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Thank you!

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