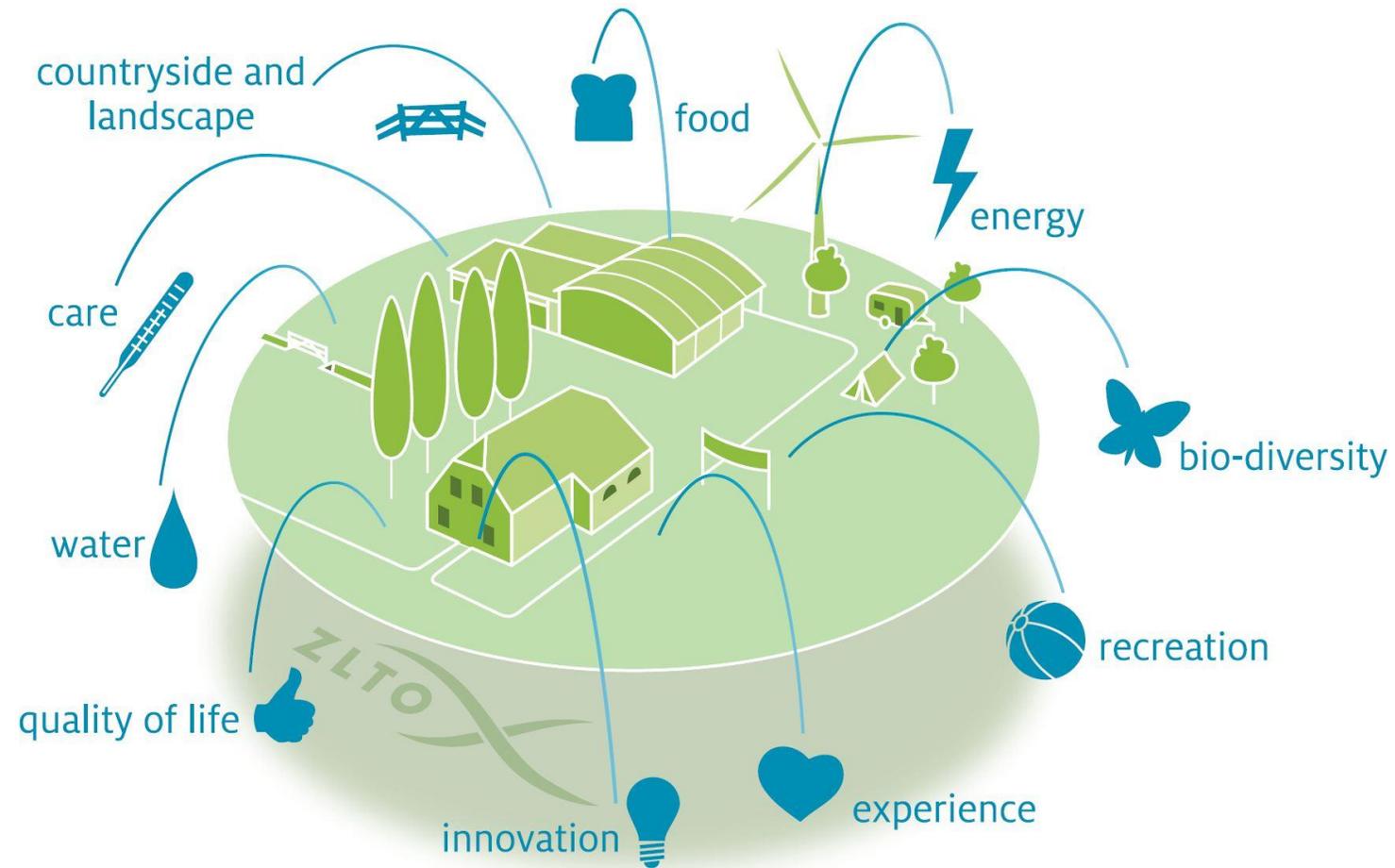


ZLTO: FARMERS ORGANISATION



Partner in Regional, Interreg, National, H2020



WITHIN FIELD MANAGEMENT ZONING

Arable use case 1.1

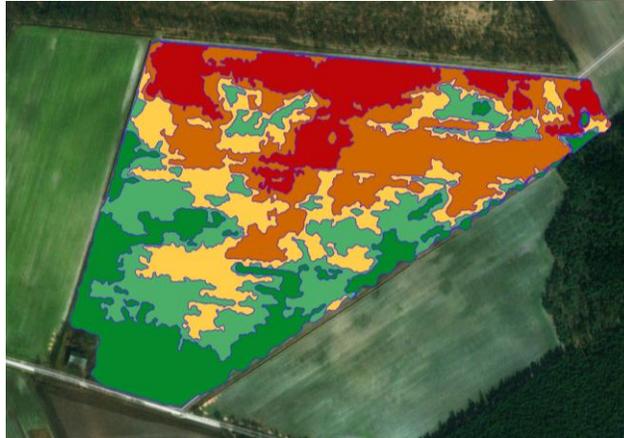
- Focus on Potato, 2 arable farms on sandy and clay soil
- 4 IoT demonstrations (wireless transmission of data, yield prediction and mapping, crop protection in management zones, and track&trace bulk storage)
- IoT devices, integration and equipment in each demonstration

MALAGA 27-11-17



Tooling the members: Compost calculator

- Optimum use of compost
- Max improvement soil
- Accepted addition
 - Logistics and impaction
 - Minerals
 - Enterprise/ parcel: Legal max
 - Subparcel: soil life
- Need of simple decision support tool
- Basis: Soil Scan/ Field zones
- Task maps for machines



LINK TO LOCAL KNOWLEDGE

Very practical test of soil quality, Raising awareness of farmers and others (students, citizens)

Capsella Soil Health app



Granular (rounded surfaces)



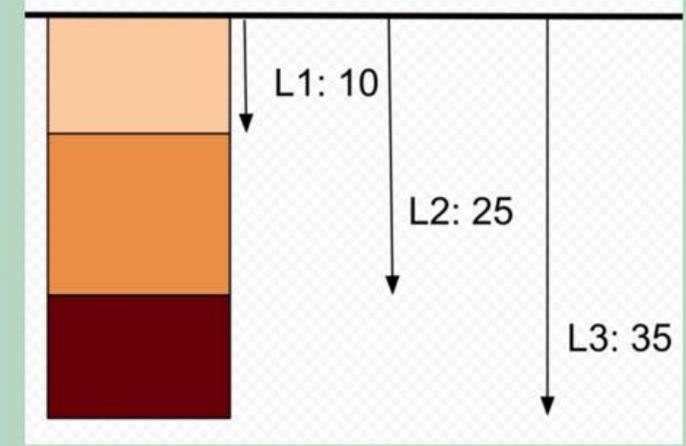
Crumb (rounded surfaces but larger than granular)



Blocky Small



from 25 to 35 enter 10, 25 and 35.



A layer is identified by:

1. assembly of aggregates of similar shape and/or dimension
2. Homogeneous color;
3. Similar presence of roots



Collaboration, bridging between communities

With a **community based** approach, leading to **practical tools for farmers** and citizens, **Capsella** could make a difference, appreciated by farmers and challenging professionals.



CODE OF CONDUCT ON DATA *BETTER CONTRACTS FOR FARMERS*

Great expertise among contributors CoC

Energy of Organisations around CoC, to

- Communicate with members and clients /suppliers
- Join related initiatives and groups
- Reach guarantees for long term data exchange: contracts

Challenges:

- Juridical-organisational issues/ ethics:
- Business aligning & development
- Founding and sustaining networks/ecosystem/groups
- Technical solutions of data exchange, inclusive for farmers; f.i. Joindata NL
- Develop projects and new initiatives

Support of EU projects like IoF2020, SmartAgriHubs



fertilizers
europe

ceetjar

copa*cogeca
european farmers european agri-cooperatives

copa*cogeca
european farmers european agri-cooperatives

ESA

CEMA
European
Agricultural
Machinery



EFFAB
European Forum of Fair Animal Breeders



CEJA
European
Crop Protection



JOINDATA

TIALORED DATA EXCHANGE

- Founded by cooperatives and farmers organisation
- Open for all data using organisations
- All farmers are member via their organisation
- Authentication & authorisation on high level
- Detailed yes/no
- No organisation can influence data streams, so no vendor lock-in
- Link to CoC: detailed CoC implementatieon



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A banner image for JoinData showing a golden wheat field at sunset. The sky is a mix of orange, yellow, and blue. The text 'JoinData' is prominently displayed in white, with the tagline 'The future of Smart Farming' below it. At the bottom, there are logos for various partners: FrieslandCampina, agrifirm, CRV, LTO Nederland, Rabobank, and EDI-Circle. A central text says 'JoinData is powered by'. There are also some data points overlaid on the field, such as 'CURRENT AIR TEMP: 8°C', 'CURRENT SOIL TEMP: 3°C', 'OPT. TIME TO HARVEST: 14days', and 'LAST UPDATE SENT: 5m'.

JoinData

The future of Smart Farming

JoinData is powered by



ORIGIN OF JOINDATA: TRANSACTION & SENSOR SENSOR DATA

Smart Dairy Farming

- 5 years **Friesland-Campina**
- Milking machine producers
- Combine with milk control
 - Tank milk
 - Milk per cow: **CRV**
- Data Broker tool in Joindata



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A banner image for JoinData showing a sunset over a field of golden wheat. The text 'JoinData' is prominently displayed in white, with the tagline 'The future of Smart Farming' below it. A sensor icon is shown with data points: 'CURRENT AIR TEMP: 6°C', 'CURRENT SOIL TEMP: 2°C', 'OPT. TIME TO HARVEST: 14days', and 'LAST UPDATE SENT: 3m'. Below the banner, the text 'JoinData is powered by' is followed by logos for Friesland Campina, agrifirm, CRV, LTO Nederland, Rabobank, and EDI-Circle.

JoinData

The future of Smart Farming

JoinData is powered by



Rabobank



ORIGIN OF JOINDATA: TRANSACTION & SENSOR TRANSACTIONS

Edi Circle

- 15 years, accountant platform
- Low cost, flexible
- >100 companies (most farmers)

Kringloopwijzer (nutrient balance)

- 18000 farmers

One authorisation tool



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A banner image for JoinData showing a field at sunset. A sensor is visible in the field with data: CURRENT AIR TEMP: 6°C, CURRENT SOIL TEMP: 3°C, OPT. TIME TO HARVEST: 14days, LAST UPDATE SENT: 3m. The text "JoinData is powered by" is displayed above several partner logos: FrieslandCampina, agrifirm, CRV, LTO Nederland, Rabobank, and EDI-Circle.

JoinData

The future of Smart Farming

JoinData is powered by

FrieslandCampina
nourishing by nature

agrifirm

CRV

LTO Nederland

Rabobank

EDI-Circle

ORIGIN OF JOINDATA: TRANSACTION & SENSOR AUTHORISATION DASHBOARD

ZLTO 2016, plans:

- Continue with existing tool
- Make available for all data

LTO 2017, realised

- Co-founder Joindata
- European context: BE/ILVO
- Audit commission

INDEPENDENT DATA COOP



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JoinData
The future of Smart Farming

JoinData is powered by

Current Air Temp: 6°C
Current Soil Temp: 2°C
Opt. Time to Harvest: 14 days
Last Update Sent: 3m

Friesland Campina
agrifirm
CRV
LTO Nederland
Rabobank
EDI-Circle

The banner features a background image of a golden wheat field at sunset. A sensor icon is shown with a data stream and a list of metrics: 'CURRENT AIR TEMP: 6°C', 'CURRENT SOIL TEMP: 2°C', 'OPT. TIME TO HARVEST: 14 days', and 'LAST UPDATE SENT: 3m'. Below the sensor, the text 'JoinData is powered by' is followed by logos for Friesland Campina, agrifirm, CRV, LTO Nederland, Rabobank, and EDI-Circle.

DATA WORKSHOP:

(Short intro)
-What can YOU do for....
-What chances you see in
your network

