



AGRI DIGITAL

*A digital transformation for farmers and rural communities
for sustainable future*



Brussels,
8 December 2023

On-site event,
With web streaming



European
Commission

Time to plan the next crop year using the data collected



[#EUAgriFoodDays](#)

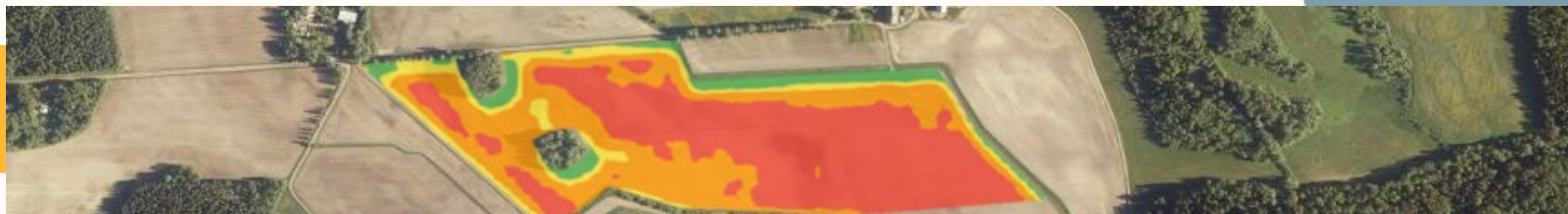


European
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Planning stage



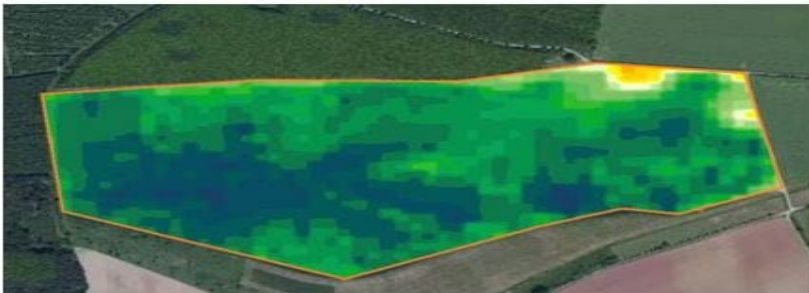
- Harvest data from combine yield monitoring
- Weather data
- Quality from Grain Sense and lab analyses
- Soil analyses and scanning data
- How the markets are looking
- Crop rotation from FMIS
- Combining all this data + some more using Tritom cost 25 €/ month
- FMIS ex. Agri-smart + Agrineuvos
- VIPU-Mobiili → CAP App
- Hardware and software interoperability needed → Standards



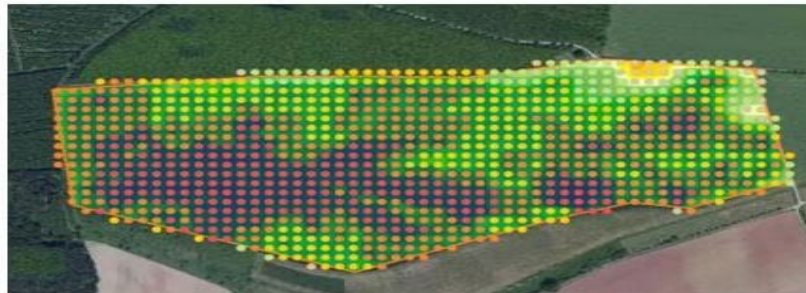
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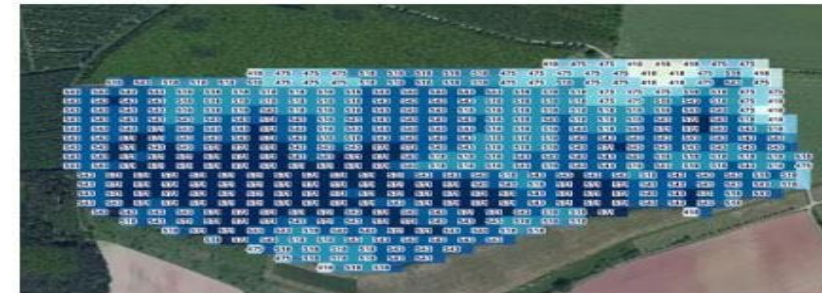
- *Biogas slurry spreading with soil and yield map data → GPS*
- *Plant protection with GPS steering*
- *Apps; ex. LUKE Kaskas, TankmixIT can be used*
- *ISO BUS connection for precision farming applications ex; seeding into cover crops*
- *Many Apps exist ex; YARA N-App*
- *Yield maps can in the beginning be downloaded trough apps ex: Atfarm*



Biomassakartta



Lisälannoituskartta



Levityskartta



Soil preparation and spring planting

- Precision seeding with one go → Fertilizer, seeds and cover crop seeds → GPS steering and variable rate seeds and fertilizer, according to soil and yield maps
- Soil preparation using GPS steering and soil scan data
- Time and fuel saved
- Less compaction
- Collects data



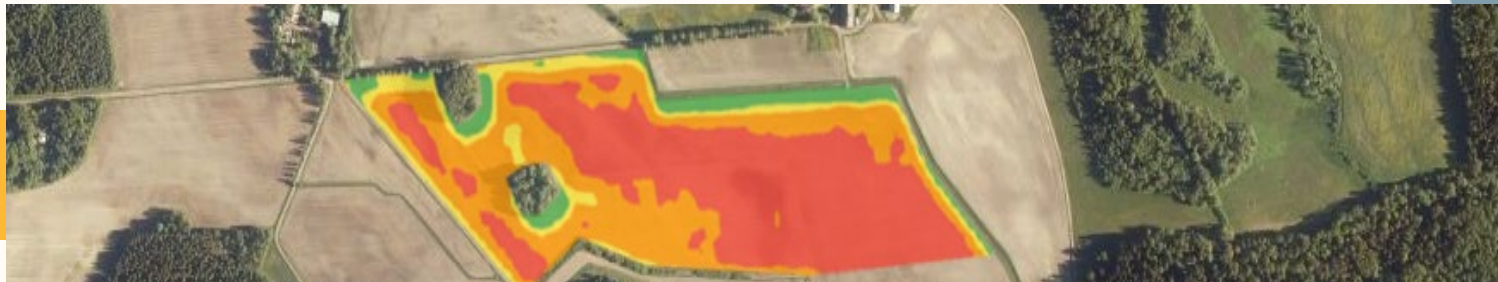
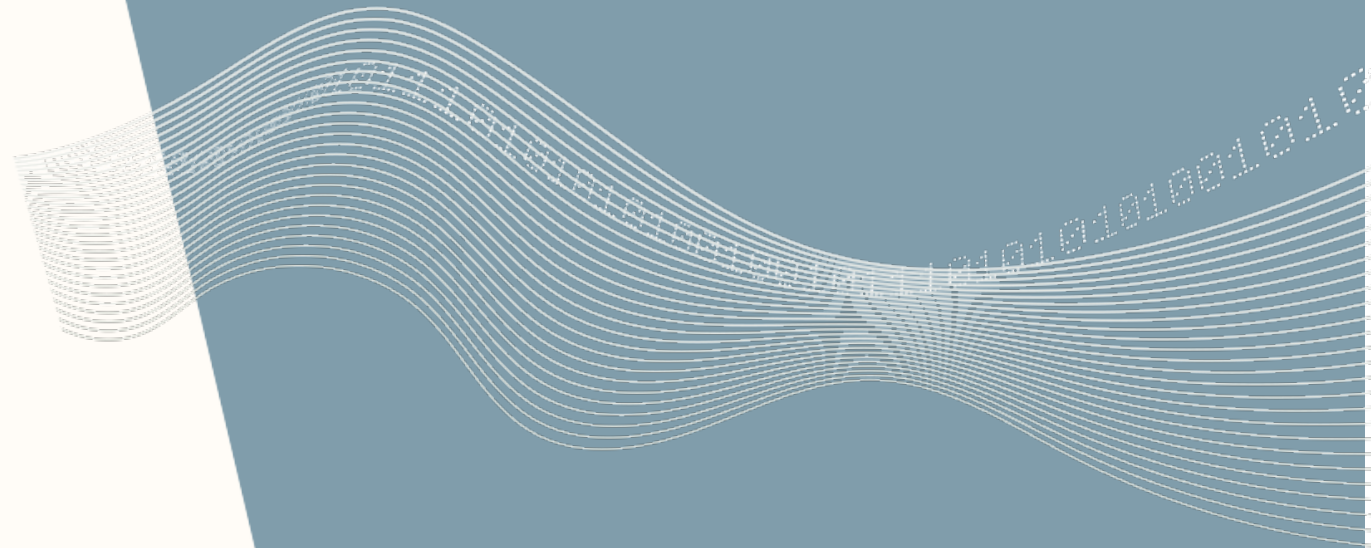
Harvesting and soil preparation

- Yield mapping through the combine harvester
- Quality analyse at the field level with Grain Sense
- Weather station info
- Soil preparation using GPS steering
- Collecting soil samples doing soil scanning
- Good GPS and GSM connectivity needed on field level →
- Interoperability still a challenge to be solved



The beginning

- Farmers start usually with some kind of GPS guidance system
- Next step is a tractor with GPS steering and precision farming capability.
- Implements can be co-owned.
- You can start with cost effective alternatives to get started.
- Contractors are playing an important role in adopting precision farming



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Smart- and precision farming costs ex.



- Tractor 200 hp; abt. 170.000 € + GPS Autosteer + Iso Bus 20.000 €
- Fertilizer spreader IsoBus, variable rate abt; 30.000 €
- Sprayer 24 m, IsoBus abt; 70.000 €
- Combine with yield mapping abt: 220.000 €
- Direct seeder with IsoBus variable rate abt; 90.000 €
- Soil Cultivator IsoBus abt; 100.000 €
- Grain Sense analyser with App abt; 4.000 € + 250 €/Y
- FMIS with precision farming capability 350 € + 150 €/Y
- Fairly big investments for a small farm but working together can solve this challenge → smart investments



The New Crop is producing: yield, quality and data. **Thank You For Your Attention !**

