The European Land Monitoring System (ELMS)
-
Data from the farmer for the farmer

Unit C1 - CAP Strategic Plans Coordination - DG AGRI

IACS as basis for ELMS

Use of new technologies/data

Copernicus and CAP

The Common Agricultural Policy (CAP) is a big user of EO!

1. The Integrated Administration and Control System
   - Main civil user of Copernicus Sentinel data
   - **covers 77,9% of CAP expenditure (43bn € annually)**
   - 3 main systems :
     - Identification System for Agricultural Parcels + QA
     - Geo-Spatial Application System + QA
     - Area Monitoring System + QA

VHR

2. Drive & Evaluation of policy impacts Copernicus (S1/S2)
3. Crop/Yield forecast

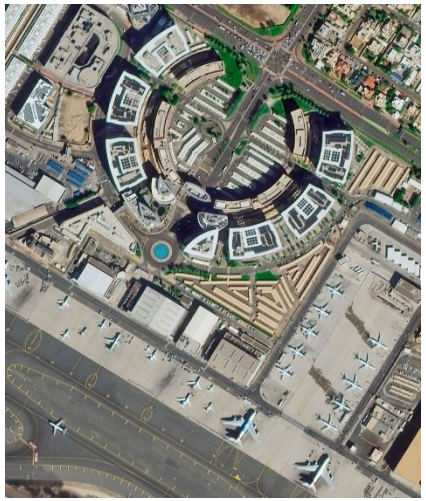
European Commission

Example of VHR 30 cm (civil use)

LPIS Identification System for Agricultural Parcels

Very high resolution data

LPIS



Delineation of reference parcels

European Commission

GSA Geo-Spatial Application

European Commission

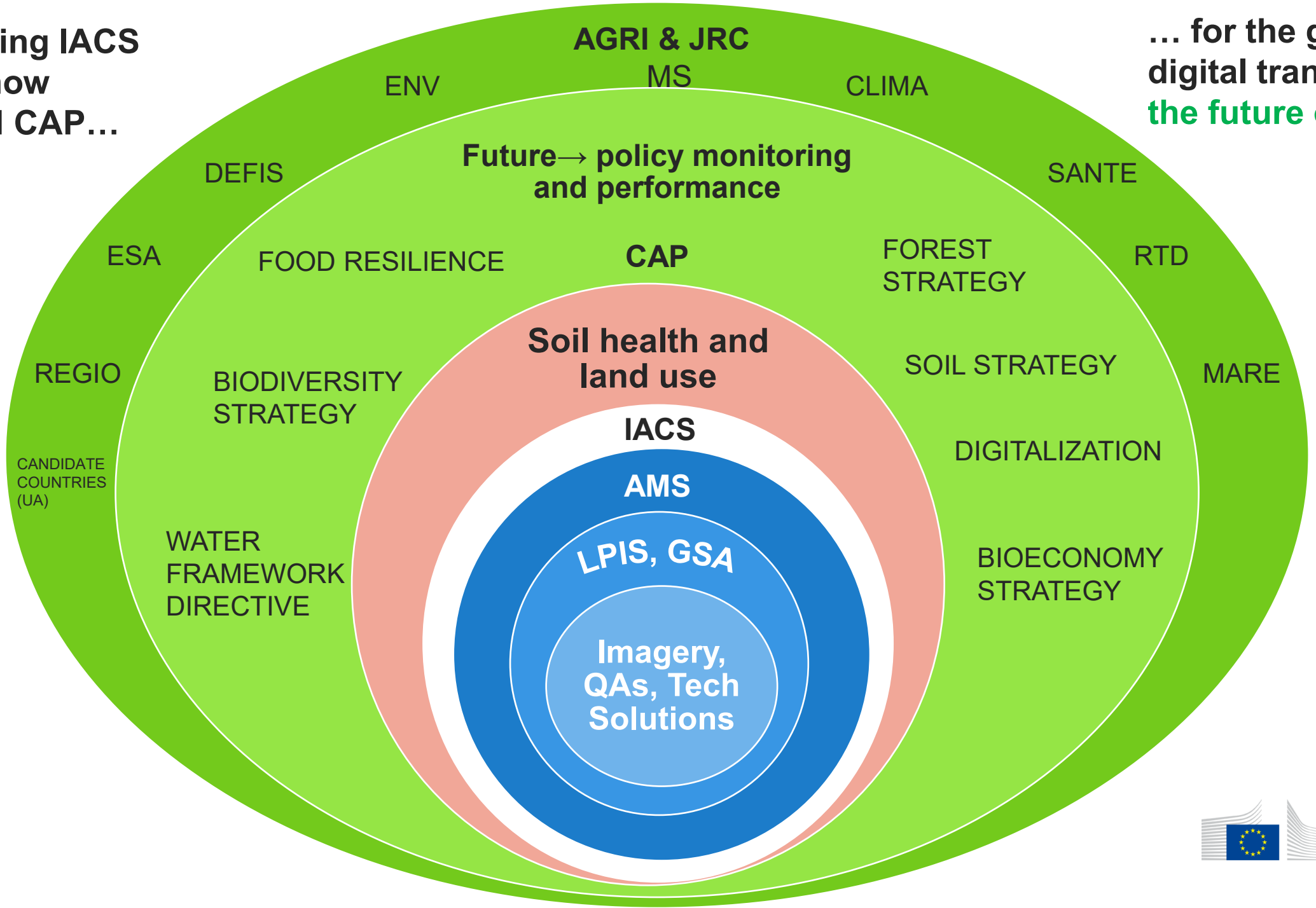
The *AMA MFA Foto App* – The Austrian example

Next step?

European Land Monitoring System (ELMS)

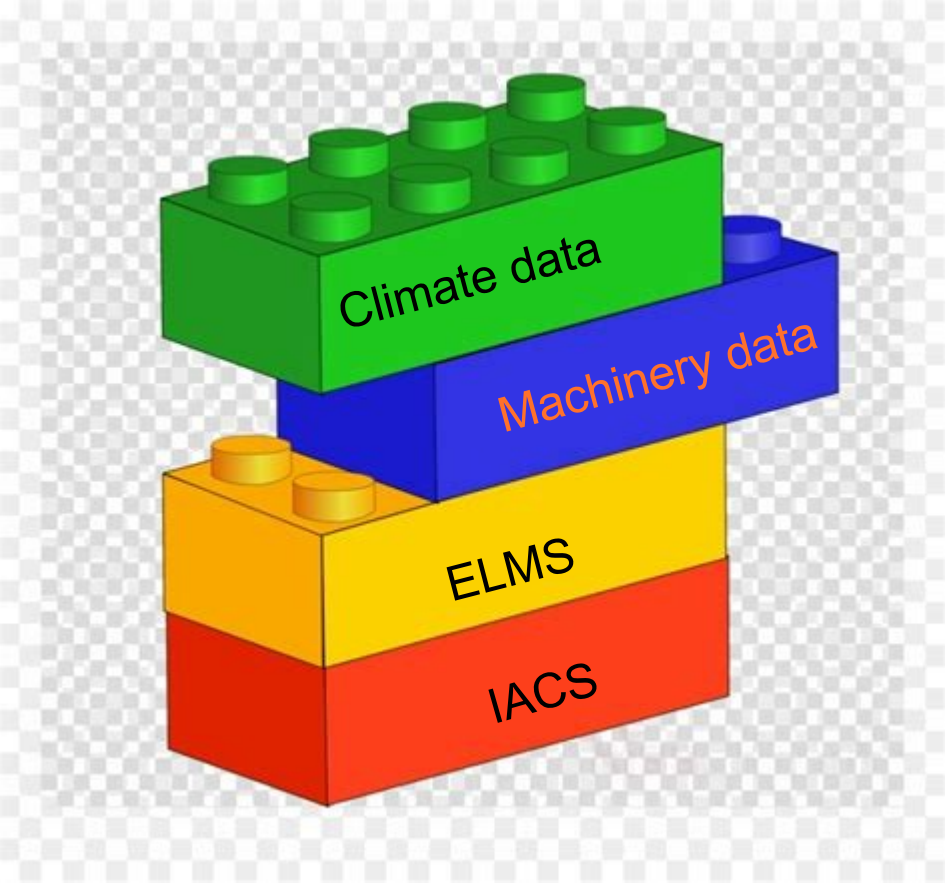
upgrading IACS know-how beyond CAP…

… for the green and digital transitions - the future of farming



European Commission

The way ahead: Data from the farmer for the farmer = ELMS



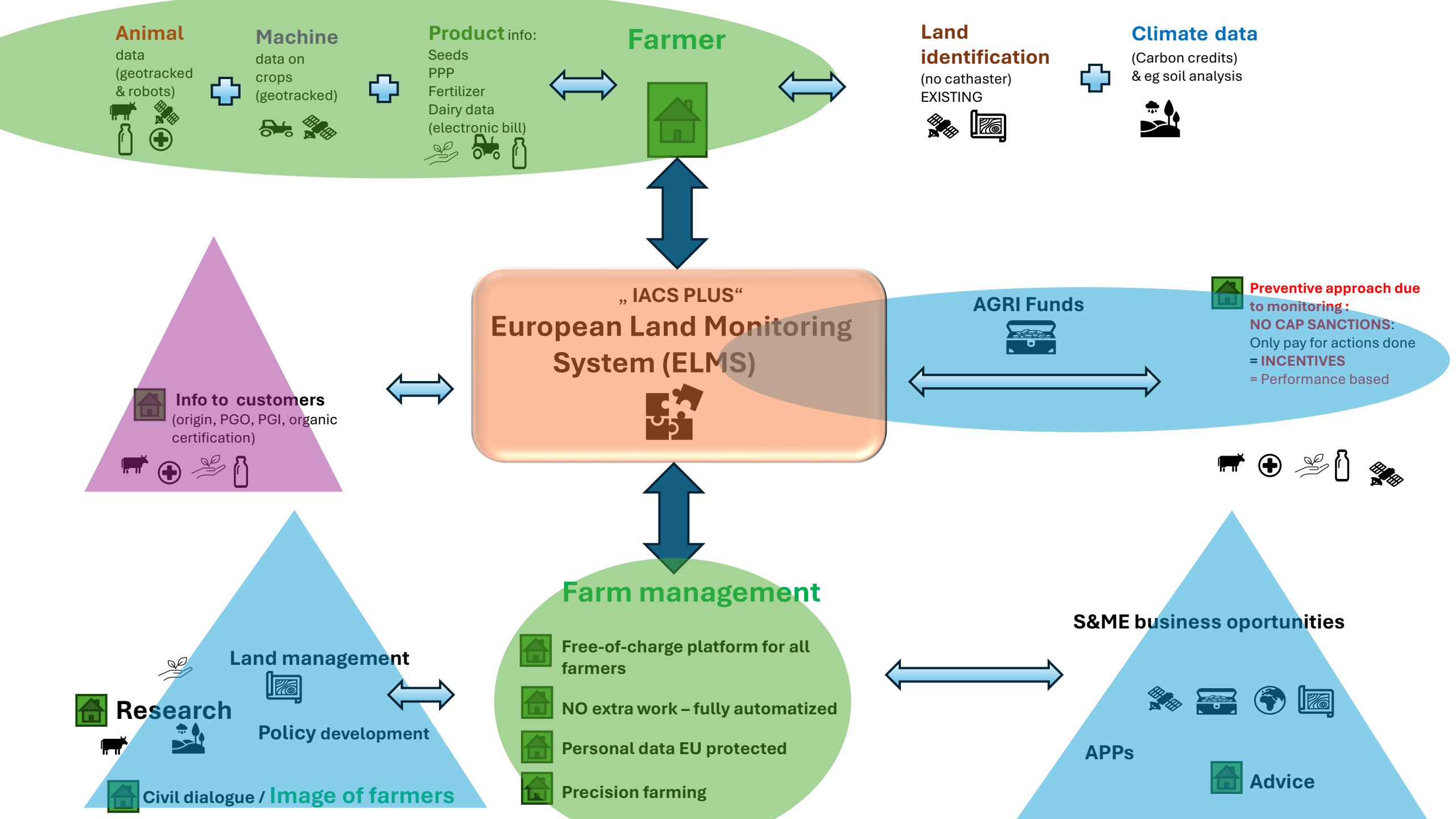
Farmer decides if/how/with whom data is shared

Full subsidiarity for MS on elements of ELMS

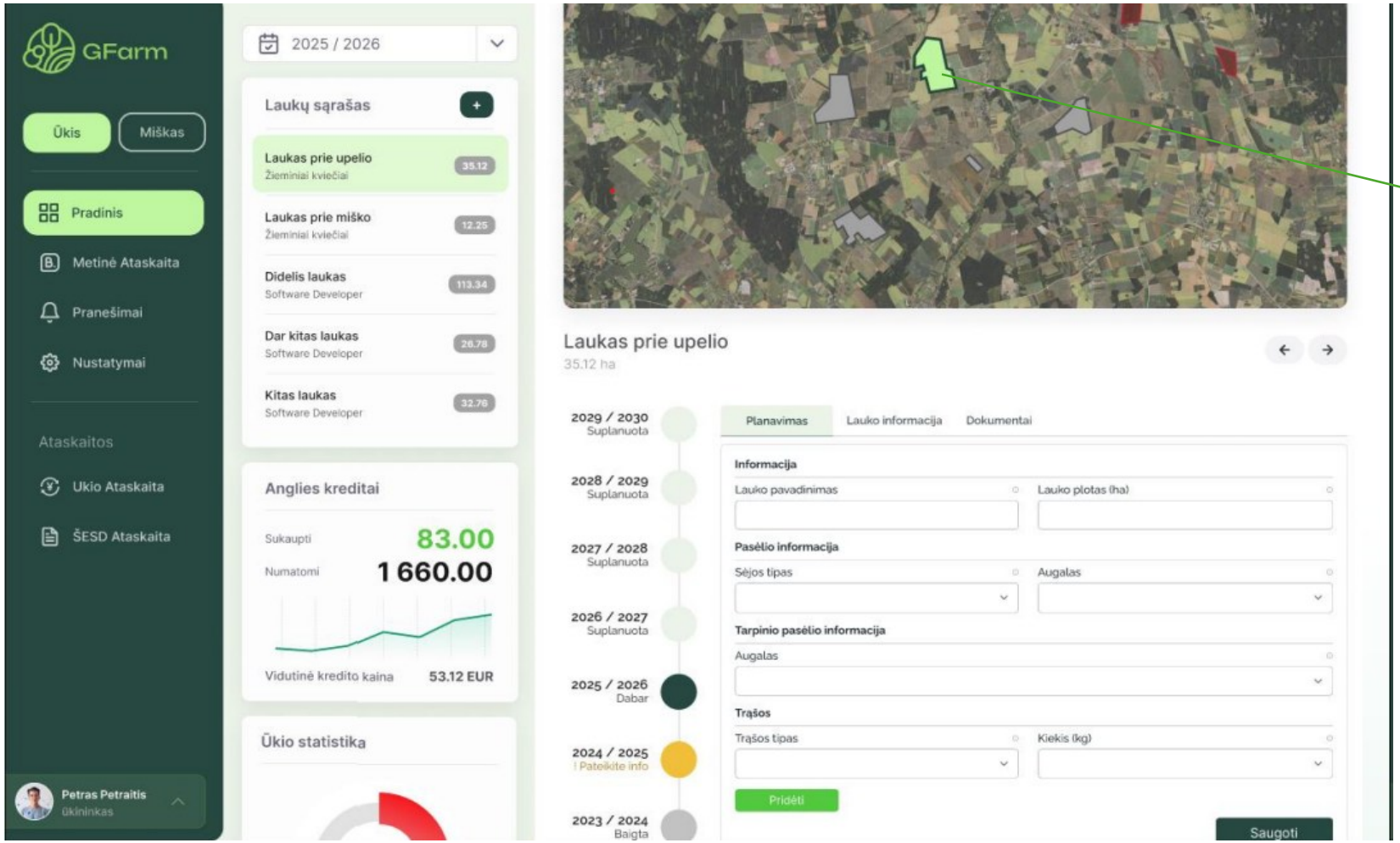
IACS = Minimum ELMS

Data governance authority to ensure on data interoperability

ELMS see Art. 70 (6) proposed NRPP Regulation


Animal
data
(geotracked
& robots)
Machine
data on
crops
(geotracked)
Product info:
Seeds
PPP
Fertilizer
Dairy data
(electronic bill)
Farmer
Land
identification
(no cathaster)
EXISTING
Climate data
(Carbon credits)
& eg soil analysis
„ IACS PLUS“
European Land Monitoring
System (ELMS)
AGRI Funds
Preventive approach due
to monitoring :
NO CAP SANCTIONS:
Only pay for actions done
= INCENTIVES
= Performance based
Info to customers
(origin, PGO, PGI, organic
certification)
Farm management
Free-of-charge platform for all
farmers
NO extra work – fully automatized
Personal data EU protected
Precision farming
Land management
Research
Policy development
Civil dialogue / Image of farmers
S&ME business oportunities
APPs
Advice

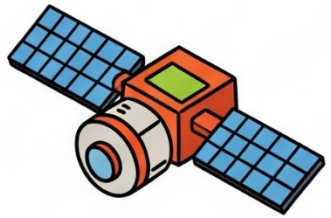
ELMS in real life: Area monitoring & Carbon credits in Lithuania



Parcel identified by LPIS
Use monitored by AMS

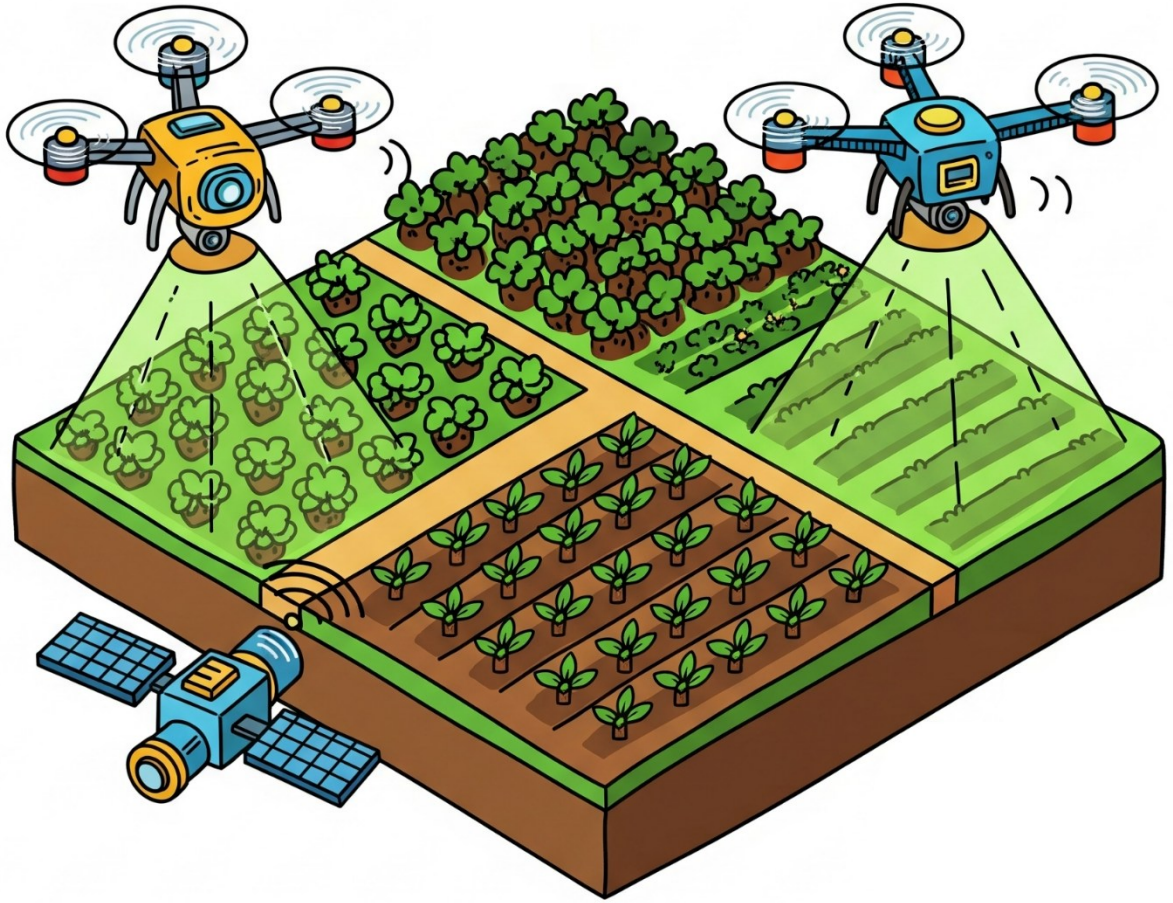
Source NPA, Lithuania

ELMS potential for the future beyond farms



There is plenty of room to improve and innovate!

1. For the private sector :
   - Satellite constellations with high spatial resolutions and good revisiting times
   - Hyperspectral constellations
   - Specific agricultural space services (e.g. crop detection at parcel level, analysis of events in grassland (mowing events), etc.)
2. For research :
   - Better exploit Copernicus data (markers)
   - Better integrate other data sources for comprehensive coverage (geotagged photos, farm machinery data, drones, …)




Thank you
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