

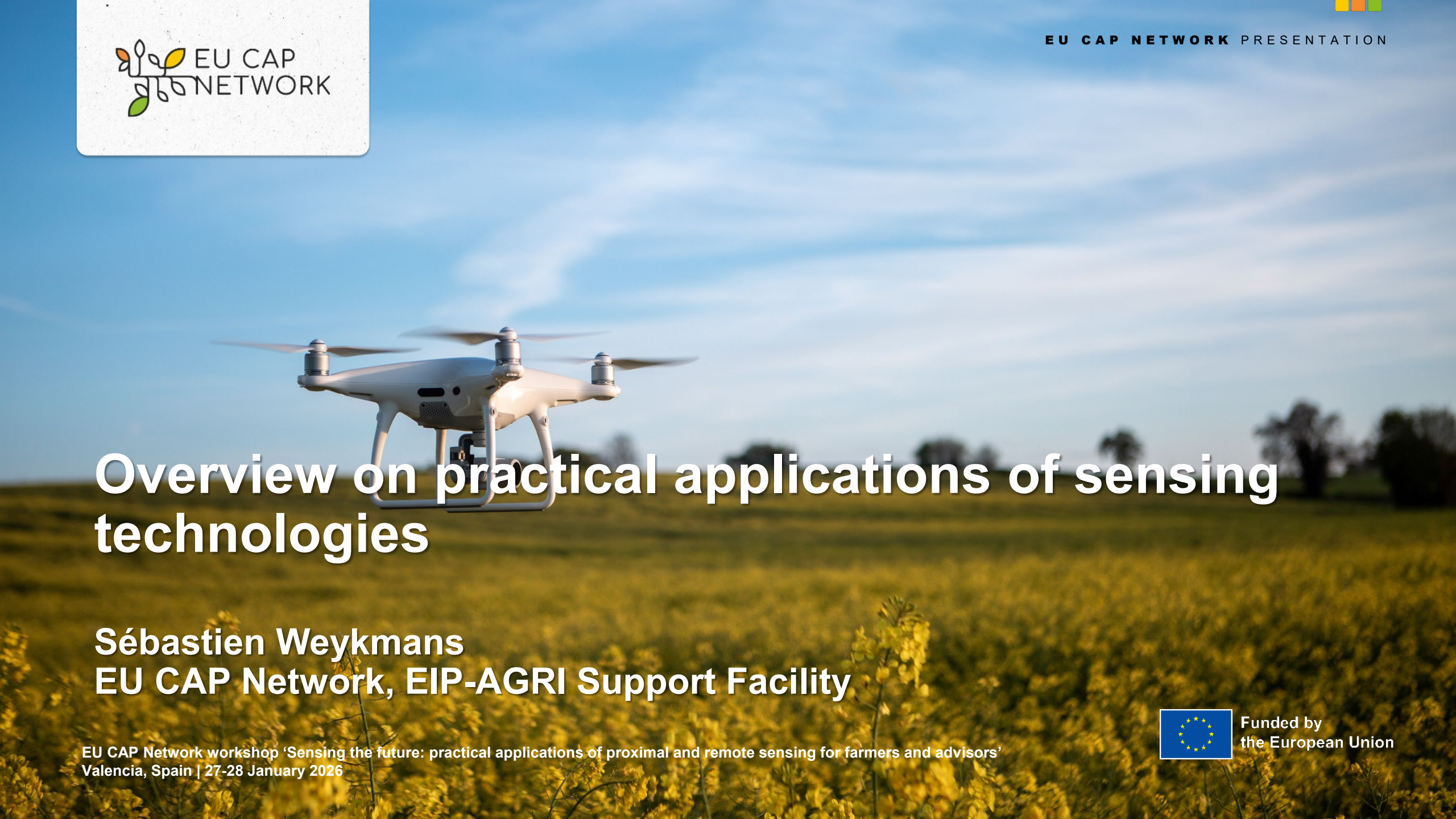


EU CAP Network workshop ‘Sensing the future: practical applications of proximal and remote sensing for farmers and advisors’

Valencia, Spain
27-28 January 2026



Funded by
the European Union



Overview on practical applications of sensing technologies

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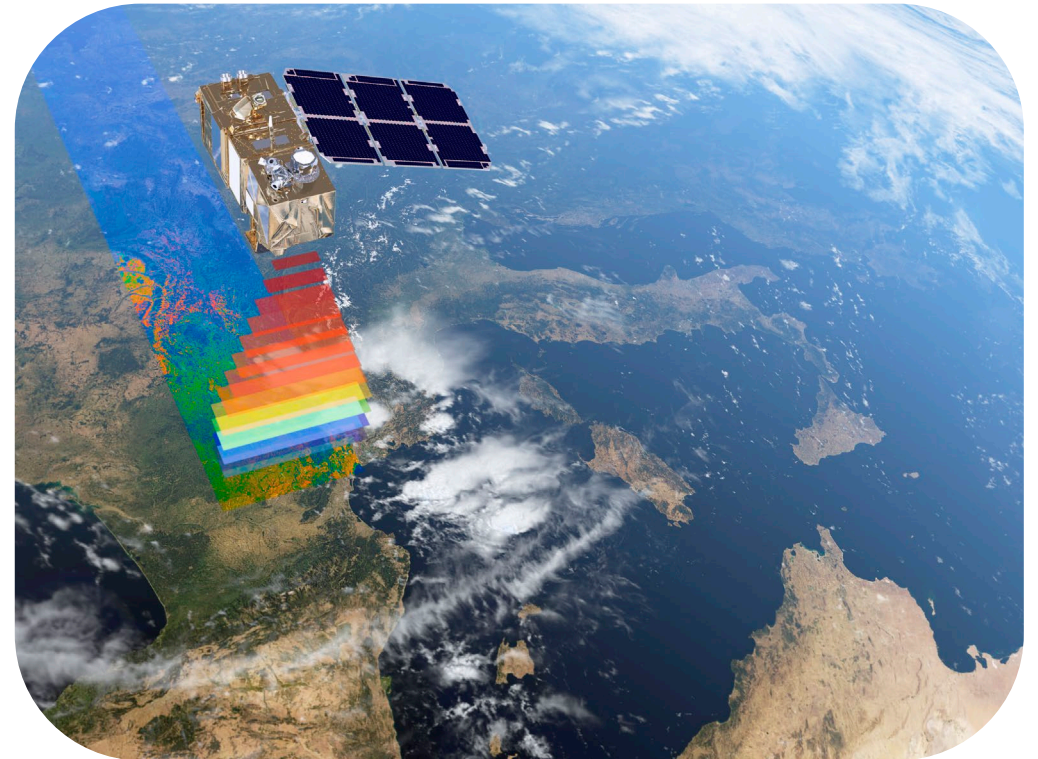
Proximal and remote sensing in agriculture and forestry

- › Objective : to collect data to monitor
 - › Crops
 - › Forests
 - › Animals
 - › Soil
 - › Environmental conditions
- › How ?
 - › Proximal sensing
 - › Remote sensing



Remote sensing

- › Collecting data from a distance
 - › Satellites
 - › Aircrafts
 - › Unmanned Aerial Vehicles (drones)
- › Large areas
- › Data
 - › Vegetation indexes
 - › Crop stress
 - › Land use
 - › Forest fire
 - › ...



Source : European Space Agency



Proximal sensing

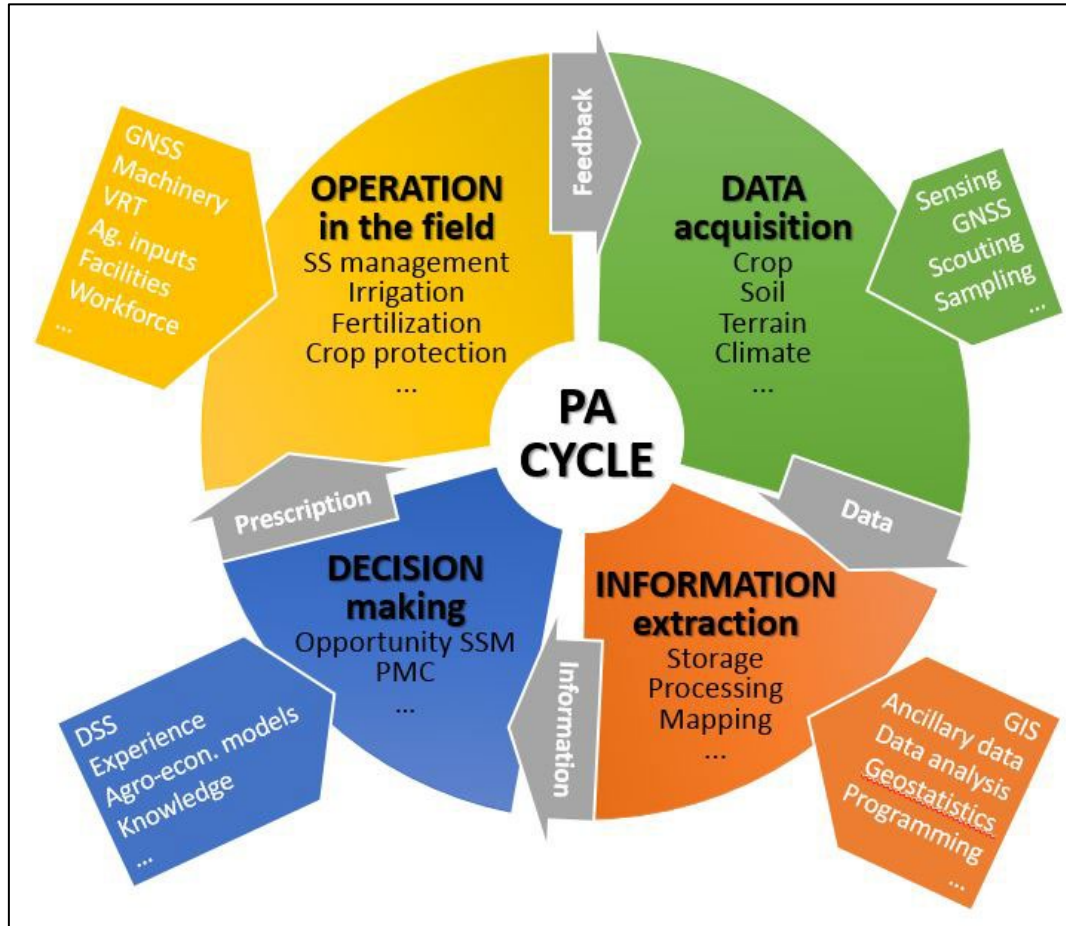
- › Measuring conditions close to the plant, animal, soil
 - › Sensors on farm machines
 - › Smart collars on animals
 - › Handheld devices
 - › Stationary connected objects (IoT)
- › High-resolution data
- › Data
 - › Plant health / nutrients requirements
 - › Tree growth
 - › Animals welfare



Source : Walloon Agricultural Research Center



Sensing technologies & Precision Agriculture



Source : WalDigiFarm

Source : University of Lleida - GRAP
<https://www.grap.udl.cat/ca/presentacio/que-fem/agricultura-de-precisio/>

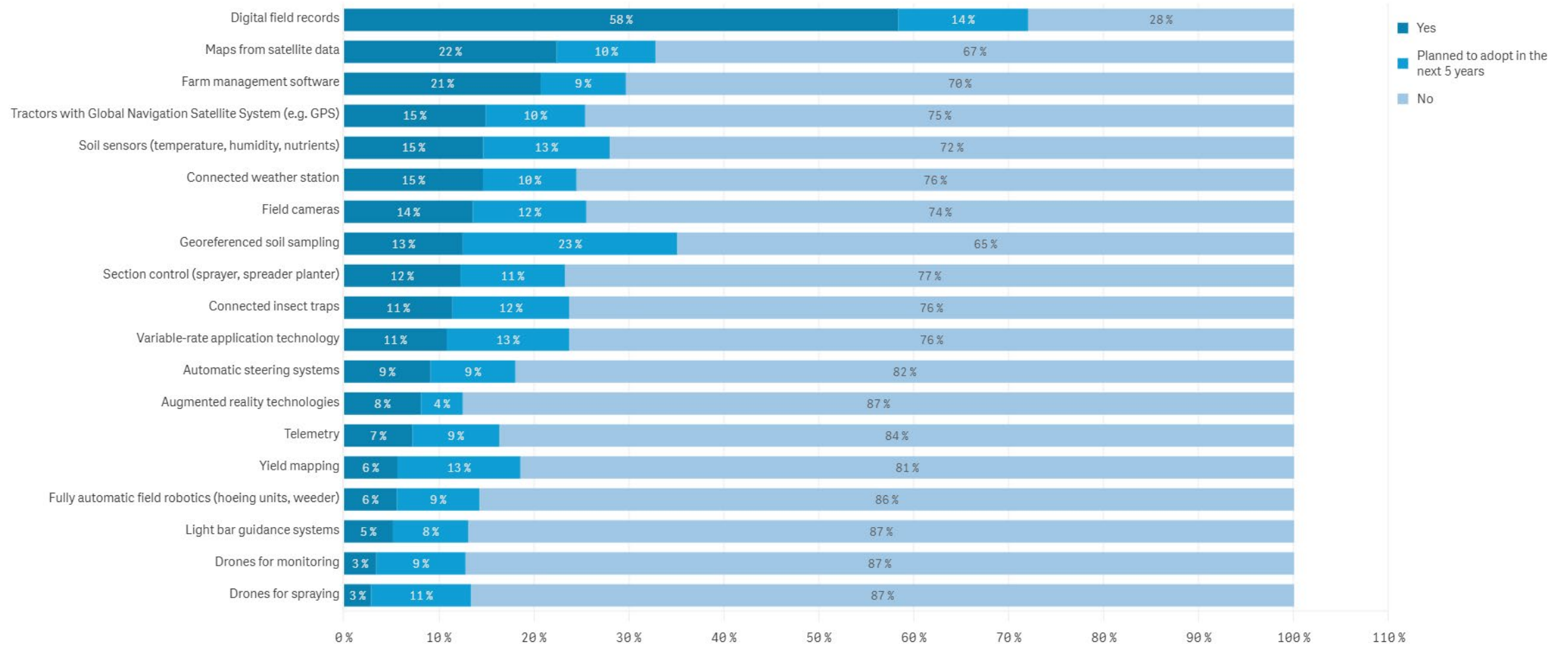


Sensing tools on farms



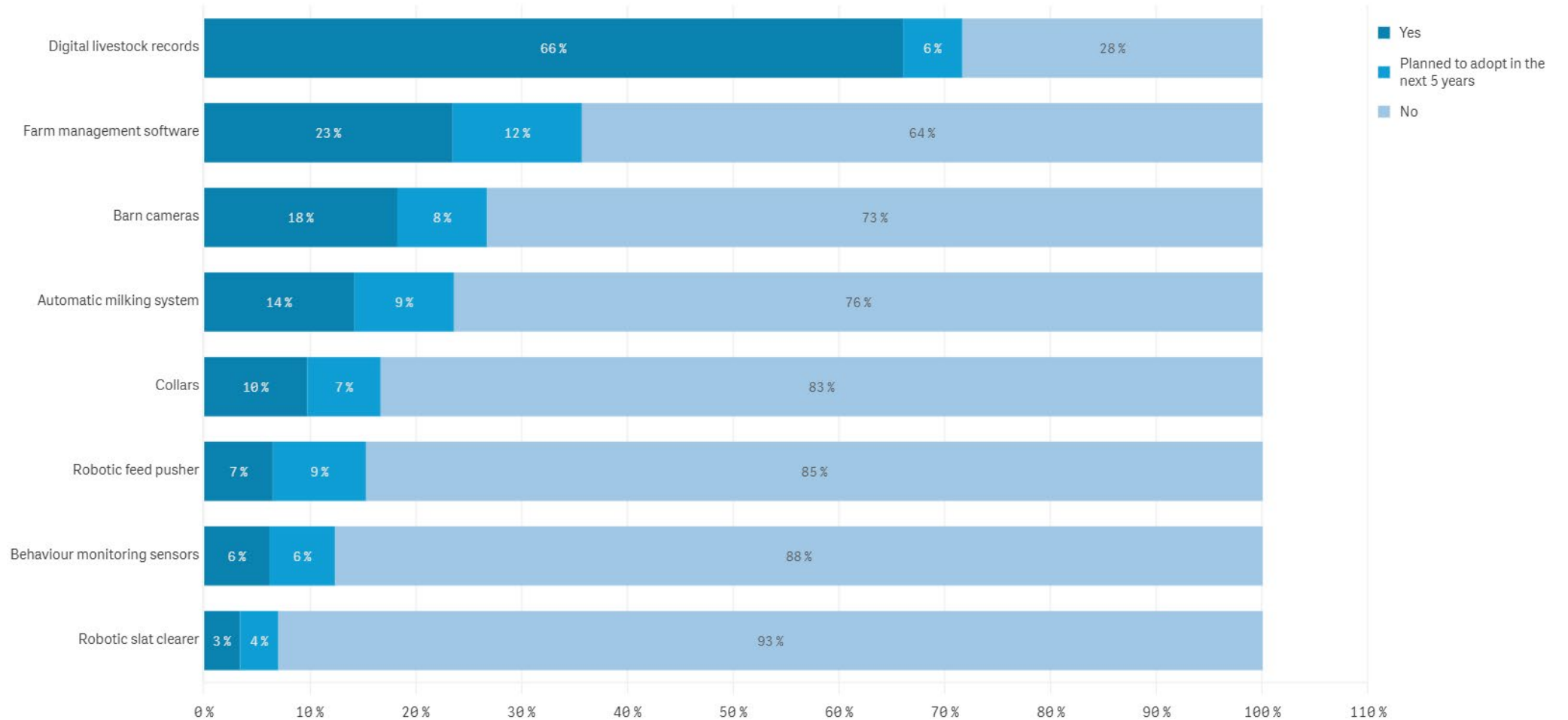
Sensors on/in buildings	(42)
Satellite sensors	(46)
Sensors on animals	(67)
Fixed sensors	(192)
Embedded sensors on machine	(51)
Embedded sensors on drone / aircraft	(70)
Handheld sensors	(101)
Positioning devices	(30)
Surveillance robotics	<u>(17)</u>
	(616)

Rate of adoption of digital technologies in crop production by surveyed farmers





Rate of adoption of digital technologies in livestock production by surveyed farmers



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All information on the workshop is available on the event webpage:

<https://eu-cap-network.ec.europa.eu/events/eu-cap-network-workshop-sensing-future-practical-applications-proximal-and-remote-sensing>

