



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



BCO Study on connectivity requirements of precision farming: scope and methodology

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The BCO Network

Working for European connectivity

- Broadband Competence Offices (BCOs) are the national and regional public authorities responsible for broadband deployment.
- They advise policy makers, project promoters and citizens on broadband and the technological, legal and financial challenges of broadband projects.
- The **European Broadband Competence Offices Network Support Facility** is an EU-funded initiative supporting EU Member States and regions, the Western Balkans and Norway, to **accelerate the deployment of high-speed broadband to all citizens**, reaching the EU's digital connectivity targets by 2030.
- To do so, BCOs particularly target **rural and remote** areas, in order to close the **digital divide** by:
 - Providing **knowledge exchange, capacity building and networking** activities and resources throughout the year, **in close collaboration with the European Commission** (these range from online and in-person events, video interviews, publications and studies).
 - Fostering **collaboration among national and regional BCOs**.



Examples of discussion topics

Online and physical workshops

The digital divide:
broadband
deployment in
rural areas

**Connectivity for
rural areas:**
Croatia's State
aid scheme

**Funding for
connectivity
post 2027:**
challenges
for the future
MFF

**Smart farming
and 5G rural use
cases**
in Horizon-funded
pilot projects

**Quantum-ready
networks:**
next generation
of secure
connectivity

Subsea cables:
future investment
needs

**Smart Villages
Strategy:**
digital transition of
rural areas

Rural healthcare:
importance of
connectivity



Open event – you're invited:



Tuesday 03 March



11:00 – 12:30 CET



Online



ASTEIO Observatory
findings: digital
needs of rural
citizens

BCO
Network

Find out more
and register





Check out our videos



GRÜNEWALDE BECAME THE FIRST VILLAGE IN RURAL BRANDENBURG WITH A COMPLETE FTTH INFRASTRUCTURE

00% FTTH-connected village: Grünewalde in rural Brandenburg, Germany



EIP-AGRI and BCOs work together to ensure high-speed broadband for European agriculture



5G connectivity boosts rural potential



Connectivity is essential for Precision Farming



ALTRI VIDEO

Find out more



STUDY:

Connectivity requirements of precision farming

Challenge

The growing use of drones, sensors and connected machinery is enabling new ways of farming and managing livestock. However, **machinery manufacturers need to be able to develop their solutions and equipment based on available connectivity assumptions.**

Scope is to assess:

1. key trends in the **development of connected precision agriculture**
2. the **connectivity assumptions** used by equipment manufacturers

Key question

Is satellite connectivity sufficient to cover the needs of precision agriculture, or would 5G or hybrid solutions add significant value?



MASSIVE POWER BLACKOUT IN SPAIN

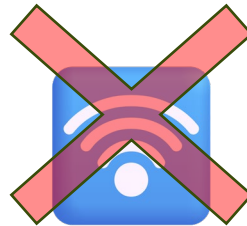
April 28th 2025



FIELD UASS TRAINING COURSE

Universitat Politècnica de Catalunya

- No electricity
- No internet connection
- No communication



Training course was cancelled
80 attendants from all around Europe





Connectivity is essential for precision farming

Precision farming and digital solutions are **transforming European agriculture**, making it both more competitive and more sustainable. The technology itself and farmers interaction with it, however, **rely on seamless mobile connectivity, a challenge in many rural areas.**

Using connected tools such as satellites, GPS, drones and sensors, farmers can monitor and respond to their crops and animals, precise needs.

While the benefits of precision farming for the farmer, the consumer, and the environment are clear, **the possibility for farmers to adopt it is stymied by the lack of reliable broadband connectivity in rural areas.**



Connectivity is essential for precision farming

Precision Farming is to do the **right things**, on **right time**, at the **right place**, and applying the **right dose**.

Ulrich Adam
Secretary General
CEMA

<https://digital-strategy.ec.europa.eu/en/library/connectivity-essential-precision-farming>



Connectivity is essential for precision farming

Connectivity is a **key pillar** for **Precision Farming**.

Ulrich Adam
Secretary General
CEMA

Why is broadband fundamental for precision farming?

<https://digital-strategy.ec.europa.eu/en/library/connectivity-essential-precision-farming>

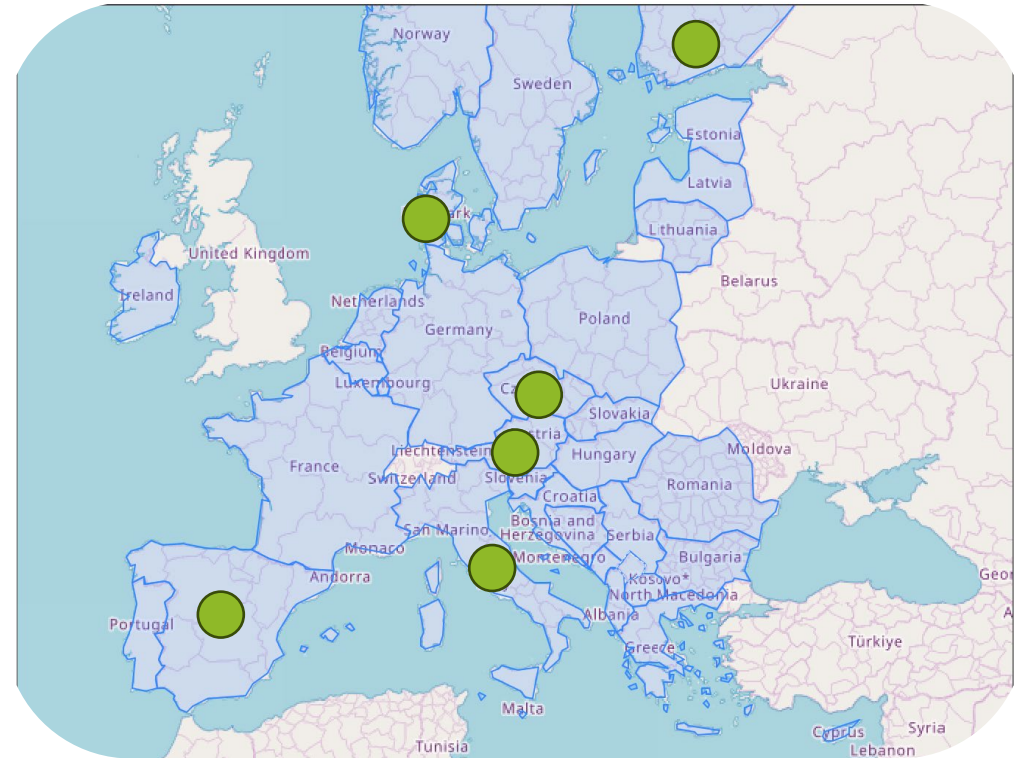


BCO Study on connectivity requirements of precision farming:

Are the **existing connectivity** solutions **sufficient** to meet the current and future **needs of precision farming**?

Next steps

Starting **interview series** in **different countries** and with representative stakeholders to pulse their **needs, expectations** and **problems...**



... to gather information about

In my main rural area, current connectivity coverage is sufficient in the FIELDS for:

- 4G/LTE
- 5G
- Hybrid 5G
- Fixed Wireless Access (FWA)
- GEO satellite
- LEO satellite

Please indicate your level of agreement with the statements below about current connectivity:

- Upload speed is sufficient for my needs
- Download speed is sufficient for my needs
- Latency is low enough for my needs
- Connectivity is stable (few drops/jitter)
- Reliability/availability is sufficient during critical operations
- In-building penetration (signal indoors) is sufficient
- Connectivity costs are affordable for the value delivered
- Installation/maintenance complexity is acceptable

In the next 5–8 years, the following will grow significantly in my context:

- IoT sensors
- Drones / remote sensing imagery
- Robotics / autonomy
- AI / advanced analytics platforms
- Livestock monitoring technologies
- Forestry-related digital solutions
- Irrigation automation / water management



We need your help!

Answer the survey

Connectivity needs of precision farming





Questions & answers



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Valencia, Spain**

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>

