

EARSC Statement for the European Commission Consultation: EU rules on land use, land use change and forestry (LULUCF) – evaluation

The European Association of Remote Sensing Companies ([EARSC](#)) is a trade association representing over 135 company members across Europe in the **Earth Observation (EO) industry**.¹

EARSC welcomes the European Commission's efforts to assess the implementation and impacts of the revised Regulation on land use, land use change, and forestry (LULUCF) in Member States since its adoption in 2018, evaluate to what extent the Regulation is still fit for purpose in the context of the EU's 2050 climate neutrality goals, and identify which lessons can be learned from the implementation of the regulation and identify where there is room for improvement. Given the critical role of the LULUCF sector in meeting the EU's climate neutrality goals by 2050, it is imperative to leverage advanced technologies for accurate monitoring, reporting, and verification (MRV) of emissions and removals.

Earth observation technologies present a transformative potential in this context, offering precise, timely, and comprehensive insights into land use changes and their carbon implications. It can provide valuable data and insights for LULUCF including in monitoring forest cover and deforestation, estimating carbon stocks and emissions, helping the understanding of land-use patterns and planning of sustainable land management practices, detecting land-use changes, supporting REDD+ initiatives, among others. The integration of satellite data into the LULUCF MRV framework can enhance the accuracy, efficiency, and transparency of emissions and removals estimations.

In terms of the purpose and scope of the evaluation on the LULUCF implementation, there is much to be learned from the Regulation's implementation thus far and to identify room for

¹**Earth Observation (EO)** refers to the use of remote sensing technologies to monitor land, marine (seas, rivers, lakes) and atmosphere. Satellite-based EO relies on the use of satellite-mounted payloads to gather imaging data about the Earth's characteristics. The images are then processed and analysed in order to extract different types of information that can serve a very wide range of applications and industries. Ref. [EUSPA](#)

improvement in terms of the use of EO. In line with the evaluation criteria of efficiency outlined in the Call for Evidence for an Evaluation, satellite-derived data is a key factor. The use of EO for the implementation of LULUCF can drastically reduce regulatory costs and hence the administrative burden for Member States and farmers, forest owners, and other relevant stakeholders. Remote sensing imagery is of great importance as it indeed represents also a cost-effective solution for inventory compilers using global satellite imagery. Additional capabilities and information from the private sector can also be very useful to fill in gaps regarding forestry and other land cover,² where high-resolution satellite imagery allows for detailed mapping of forest cover, deforestation, reforestation, and other land use dynamics.

Ensuring that relevant stakeholders have the resources they need, through a simplified regulatory avenue for the use of EO for LULUCF implementation is vital, there remain gaps in conceptual and harmonised implementation of EO and data in LULUCF implementation and reporting.

Leveraging Earth observation data and other digital data initiatives enables policymakers to effectively address environmental challenges and facilitate the transition to a more sustainable Europe. **EARSC fully supports the integration of new monitoring practices, such as the use of satellite-derived data and value-added services, as operational solutions to bolster the implementation of the LULUCF Regulation and make it more fit for purpose.** EARSC stands ready to collaborate on achieving this objective and to support the Commission's efforts to enhance the capacity to address environmental issues, ensuring a healthier environment by closing implementation gaps and improving environmental governance.

² F. Achard. Use of Satellite Remote Sensing in LULUCF Sector: Background Paper at the IPCC Expert Meeting to Consider the Current IPCC Guidance on Estimating Emissions and Removals of Greenhouse Gases from Land Uses such as Agriculture and Forestry. [JRC](#).