



EARSC Statement

Nutrients- Action Plan for a better management

The European Association of Remote Sensing Companies ([EARSC](#)) is a trade association based in Brussels, representing the European downstream services sector. EARSC counts more than 135 members across 25 countries of Europe.

EARSC welcomes the European Commission's initiative on the Integrated Nutrient Management Action Plan with the objective to bring nutrient loads within safe operating levels and reduce negative environmental effects from nutrient excess.

Nutrient pollution and inefficiencies in the nutrient cycle can cause a wide range of climate change impacts and affect the ecosystem. Monitoring nutrient levels in the soil and tissues is a necessary step to take measures accordingly. By providing a *regular nutrient analysis*, satellite capabilities can provide crucial information. The analysis of the *spatial distribution of soil nutrients* in agricultural field crops allows informing and providing recommendations to farmers in order to *reduce the amount of fertilisers* and practice a more sustainable agriculture. The remote sensing technologies can also help to identify *nutrients deficiencies* in a cost effective and timely manner so that a long-term nutrient application methodology can be applied.

In the context of an Integrated Management of Nutrients, the promising benefits of using satellite technologies rely on the *accuracy, reliability and diversity* of the information provided. With the European Earth Observation flagship Programme [Copernicus](#) and its valuable data, operational solutions are developed by the industry to monitor nutrients levels on *land, water and atmosphere*. By combining satellite data with other datasets and Machine

Learning technologies, a precise analysis on each nutrient and the environmental components can be assessed.

Remote sensing and other spatial data provide capabilities for nutrients monitoring and can play a key role in the development of an Integrated Nutrient Management Action Plan. Consequently, EARSC believes that the Nutrients Action Plan should specify that Earth Observation data and added-value services are operational solutions, which shall be used for the development of a more sustainable and efficient nutrient management framework. EARSC remains at your disposal to work together on this objective.