

INFACT and Smart Exploration projects join forces to test non-invasive mineral exploration technologies in Spain

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The [EU Horizon 2020 programme](#) for research and innovation actively encourages the collaboration between academia, research and industry from different member countries or associated partners. International projects with diverse cultural identities and skillsets enable the consortia to excel through collaborative thinking and working. At the same time, the funded projects are encouraged to cluster some of their activities to maximise their impacts and boost dissemination.

The [INFACT](#) and [Smart Exploration](#) projects now demonstrate the benefits of such a cross-project collaboration. [SkyTEM](#), a Smart Exploration partner, is currently performing a helicopter-based deep penetrating TEM (transient electromagnetic) geophysical survey in Spain on one of INFACT's reference sites. SkyTEM is a leading airborne geophysical survey company and acquires high quality airborne electromagnetic data to optimise mineral exploration among other activities.



SkyTEM has developed a prototype of an airborne device that will allow a deeper penetration and better resolution of their technique within the Smart Exploration project. SkyTEM is currently conducting a survey using this state-of-the-art technology on a well characterised mineral deposit in Spain. The system is totally harmless for the environment and thus provides a string basis for sustainable and acceptable exploration. The reference sites are located in Andalusia (Spain) and encompasses two mines (Rio Tinto operated by [Atalaya Mining](#) and Cobre Las Cruces operated by [First Quantum](#), both INFACT partners). The sites represent a geological reference with well-known characteristics of the mineral deposits. The INFACT project allows partners to use the sites to assess the quality of new, non-invasive surveys and their acceptance by the general public and other stakeholders.

SkyTEM will fly its system with a helicopter provided by INFACT for about two weeks and will then deliver survey data to the INFACT project for further evaluation. This activity will benefit both projects but, more importantly, the mining sector and all the stakeholders engaged in the development of a modern and more efficient exploration in Europe.

More information:

The Innovative, Non-invasive and Fully Acceptable Exploration Technologies project (INFACT) aims at developing technologies that are more acceptable to society and that will invigorate and equip the exploration industry, unlocking unrealised potential in new and known areas.

The Smart Exploration project focusses on the development of cost-effective, environmentally-friendly tools and methods for geophysical exploration in very challenging brownfield areas.

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