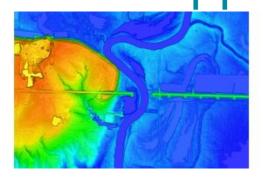
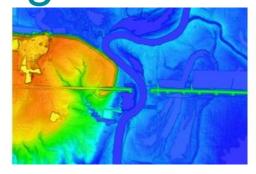


## Fugro to Support Government of Romania in Flood Hazard and Risk Mapping





Fugro will be supporting the government of Romania in preparing flood hazard and risk maps, and flood risk management plans, at national level.

Fugro's geodata acquisition contract, which has been awarded as part of ongoing technical assistance provided by the World Bank to the Romanian Ministry of Environment, Water and Forests, will aid World Bank efforts to help Romania

meet the requirements of the EU Floods Directive 2007/60/EC.

Romania is one of the European countries most at risk of flooding, and climate change is expected to increase both the frequency and magnitude of extreme events. Under this contract, Fugro will provide accurate digital terrain models, digital surface models and orthoimagery over an area of nearly 30,000 km² and will survey around 13,300 cross sections, and 3500 bridges and hydrotechnical infrastructures, within 11 river basin administrations and the Danube river.

## Digital terrain and surface models

Fugro and their local partners will perform a range of surveys, including: airborne Lidar and bathymetry of inland rivers and the seashore to create digital terrain and surface models; aerial imagery for high-resolution orthophotography mapping; and topographic surveys of all hydrotechnical and engineering structures that interact with and have influence on selected river flows. The acquired geodata will be used for hydraulic modelling and flood hazard mapping by the World Bank to support the implementation of the second and third stage of the second cycle of the EU Floods Directive for the Romanian Ministry of Environment, Waters and Forests and the National Administration "Romanian Waters" (ANAR).

Huug Haasnoot, Fugro's director for Land Asset Integrity in Europe and Africa, said: "We are delighted to have been awarded this project by the World Bank. The results of our work will support the development of flood hazard and risk maps that will contribute to Romania's flood risk management plans and safeguard water security for their people, economy and environment."



The World Bank will use Fugro's accurate digital terrain and surface models for flood hazard mapping in Romania (example digital surface model shown).

https://www.gim-international.com/content/news/fugro-to-support-government-of-romania-in-flood-hazard-and-risk-mapping