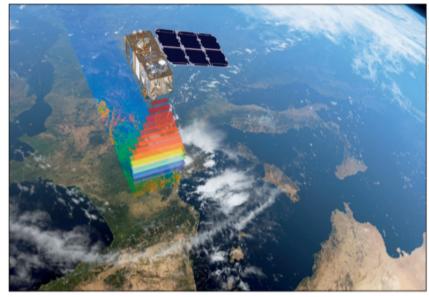
12/08/2021 Gallery

Funding

European Union unveils new €7.5bn space deal

The European Space Agency (ESA) has unveiled a new space programme following a €7.5bn partnership deal with the European Union (EU). The investment, running from 2021 to 2027, accounts for approximately 20% of ESA's total budget and will be spent designing new-generation navigation systems and programmes to boost the economy and provide a green and digital Europe. It will also support new initiatives in security and space commercialization, and offer new funding opportunities for entrepreneurship.

ESA is an autonomous international organization with 22 member states that include countries outside the EU, such as the UK. The EU agreement defines the roles and responsibilities of all ESA's member states and the European Commission, as well as the new EU Agency for the Space Programme. The EU's agreement includes work on a prototype for a quantum key distribu-



tion satellite that will support a new EU flagship on secure connectivity. It will also entail an in-orbit demonstration/validation service and space-safety activities to monitor space hazards.

The cash will in addition be used to further develop three of ESA's flagship missions – Galileo, Copernicus and the European Geostationary Navigation Overlay Service (EGNOS) – that it has spent the last

Big spenders

The partnership between the European Space Agency and the European Union will support new initiatives in security and space commercialization.

two decades designing and developing. Copernicus has become one of the biggest providers of free and open Earth-observation data and the new programme will expand on this with new missions to respond to the demand for larger amounts of data. These missions will monitor various aspects of climate change and will support the implementation of EU policies, such as the Green Deal.

As Europe's civil global satellite navigation constellation, Galileo is one of the world's most precise satellite navigation systems, offering metre-scale accuracy to more than two billion users around the globe. The new EU funding will develop a second generation, supporting emerging fields such as self-driving cars, autonomous drones and the "Internet of Things".

As ESA is not an EU organization, the UK's membership of ESA is not affected by leaving the EU. There are ongoing negotiations with the EU for the UK to remain involved with Copernicus. However, the UK no longer participates in the Galileo or EGNOS programmes.

Martijn Boerkamp

Physics World August 2021

chrome://media-app 1/1