# Press release: UK-led mission to improve climate change forecasts added to European Space Agency programme

Space offers a unique vantage point from which to observe, measure and monitor the Earth's climate. At the EU Competitiveness Council and EU-ESA Space Council on 28 May, Science Minister Chris Skidmore highlighted the importance of space as a green technology to tackle climate change and restated the UK's desire to host the critical COP26 climate conference in 2020.

This new mission, conceived by the UK's National Physical Laboratory (NPL) — a world leading centre for measurement science — and called TRUTHS, will improve confidence in climate change forecasts.

It will do this by creating a 'climate and calibration laboratory in space', making benchmark measurements, against which climate change trends can be detected quickly. It also allows other satellites such as those in Copernicus or emerging constellations to be rigorously re-calibrated in space, removing biases and facilitating a global interoperable 'climate quality' earth observing system.

TRUTHS stands for Traceable Radiometry Underpinning Terrestrial- and Helio-Studies. The spacecraft will carry a hyperspectral imager, an instrument which can measure incoming radiation from the Sun as well as radiation reflected back from the Earth in fine spectral detail, i.e. individual wavelengths like the colours of a rainbow.

NPL has developed a novel on board calibration system which is traceable to the SI (International System of Units) to ensure an unpresented level of accuracy.

Science Minister and interim Minister for Climate Change Chris Skidmore said:

Space technologies and satellite applications are key green technologies that allow us to observe the Earth and record changes to our climate. This new mission will allow scientists to more accurately calculate the energy absorbed and reflected by the Earth over a much shorter timescale than is currently possible.

The UK Government is determined to be a world leader on climate change by supporting cutting-edge research and the space sector through our modern Industrial Strategy. We've made clear our desire to host the critical COP26 climate conference in 2020 — and announcements such as these demonstrate our commitment to tackling climate change.

Earth Observation from space is improving understanding of climate change and becoming an increasingly important tool in achieving sustainable development goals. TRUTHs would contribute to the Global Climate Observing System, the Committee on Earth Observation Satellites, the World Meteorological Organization, the Copernicus Climate Change Service and the Group on Earth Observations, by enabling a critical element of an international space-based climate observing system. This objective was the key outcome put forward in the Strategy Towards an Architecture for Climate Monitoring from Space.

It would also provide observations that meet requirements for the key radiation balance essential climate variables and underpin many others, particularly those related to the Earth's carbon cycle.

Nigel Fox, Science lead for the Earth observation, Climate and Optical group of NPL and the missions principle investigator said:

Enabling society to have access to the trustable data and information it needs to make informed decisions on mitigation and adaptation resulting from climate change lies at the heart of NPL's strategy, along with responsibilities for the nation's time and other measurements e.g. mass and the Kilogram. TRUTHS will allow us to take 'NPL into orbit', mimicking in space what we do in our Teddington laboratories. Delivering a ten-fold improvement in measurement uncertainty not only for TRUTHS' data but that of the World's earth observing system as a whole.

TRUTHS will be proposed as an additional operational mission for Earth Observation during the Space19+ meeting on 27-28 November 2019, when government ministers responsible for space activities in ESA Member States will gather in Seville, Spain, to decide on space programmes and funding for the coming years.

ESA's Director of Earth Observation Programmes, Josef Aschbacher, said:

ESA is happy to include the TRUTHS mission in our package of programme proposals for Space19+. It is a very interesting mission that will bring many benefits to better understand climate change and provide well-calibrated measurements for cross-reference with other missions.

It is now up to ESA Member States to take up this offer and participate in this exciting programme.

The UK has led global efforts to tackle climate change decarbonising faster than any other country in the G20, and is looking to drive more ambitious action as it bids for the COP26 climate talks and works towards a net zero economy.

### <u>Press release: Appeal for help in tracing Keighley river pollution</u>

Oil seen in a tributary of the River Worth

### <u>Press release: Appeal for help in tracing Keighley river pollution</u>

The Environment Agency is appealing to people in Keighley for help in tracing the source of some oil pollution that is affecting a tributary of the River Worth.

Environment officers have been investigating the pollution for the past two weeks after being informed of a black oily substance visible on the water near Mariner Walk, off South Street, in the town.

They have been using absorbent pads and booms to contain the oil, reducing the impact of the pollutant and preventing it from entering the River Worth.

However the oil is continuing to enter the watercourse and investigations have so far been unable to identify where it is coming from.

Anyone with any information on how the oil is entering the river is urged to contact the Environment Agency's hotline on 0800 807060 so it can take action to halt the pollution.

Mark West, Environment Management Team Leader at the Environment Agency said:

We've been successful in containing the oil in the tributary, but it is ongoing so we need to find the source as soon as possible.

The pollutant may be entering the watercourse from a leaky container, or it could be that someone is knowingly disposing of it illegally; either way, we need to find it as soon as possible. Any information the public can provide would be greatly appreciated — please call our hotline so we can investigate.

### Press release: DIT launches new tool to drive foreign investment

A new online tool will help potential investors by connecting them with over 300 businesses and experts who can help them set up or expand in the UK.

## Press release: DIT launches new tool to drive foreign investment

The Department for International Trade (DIT) announces the launch of the UK Investment Support Directory, a new online tool which will help international investors set up and expand their operations in the UK.

Hosted on the <u>invest.great.gov.uk</u> website, the new searchable Directory will connect international investors to businesses across the UK which provide services key to helping a business set up or expand their operations in the UK, including experts in accountancy, law, consultancy, recruitment and more.

Through the new online platform, potential investors will be able to tailor their search for support and source experts by industry, region, business experience and language expertise. Once an appropriate business has been identified, the investor will be offered a free hour-long consultation to discuss their specific business needs.

### Minister for Investment, Graham Stuart MP said:

The launch of the new Investment Support Directory is one of many ways in which DIT is helping to drive investment to every corner of the UK.

We hope this new Directory will be an invaluable resource for investors thinking of setting up operations in the UK.

We are making it easier than ever before for foreign investors to find opportunities in the UK, supported by our network of HMTCs and global experts across more than 100 countries, to ensure the UK remains the number one destination for foreign direct investment in Europe.

### Mark Slaughter, Director General for Investment said:

The UK Investment Support Directory is a smart, new digital tool that innovatively connects investors to private sector expertise.

This interactive platform allows investors to tailor their searches to find the specific advice they are looking for or generates a range of businesses if they aren't sure what they're looking for yet.

It is another way DIT is helping support foreign investment by streamlining connections between UK businesses and overseas investors.

The new platform is designed to support the investment process by making information more accessible and is part of wider initiatives by the department to increase foreign direct investment into the UK. Recent figures published by the OECD confirm the UK as the leading destination for foreign direct investment in Europe, and the third most significant in the world, behind the US and China.

The directory will also help promote the expertise of the UK's service sector to investors across the globe.

The directory is currently live and can be found here.

**ENDS** 

### Further information:

- Contact newsdesk@trade.gov.uk or DIT's media team on 020 7215 2000
- Follow us: @tradegovuk and gov.uk/dit

### Notes to Editors

The Department for International Trade (DIT) secures UK and global prosperity by promoting and financing international trade and investment, and championing free trade. We are an international economic department, responsible for:

- Bringing together policy, promotion and financial expertise to break down barriers to trade and investment, and help businesses succeed
- Delivering a new trade policy framework for the UK as we leave the EU
- Promoting British trade and investment across the world
- Building the global appetite for British goods and services

### Latest FDI data

### Latest Export data

• Latest statistics from the ONS show UK firms sold more overseas in the

2018/19 financial year, £639.9 billion, than at any time since records began.

- The UK has now achieved 36 consecutive months of export growth on an annual rolling basis.
- Separate OECD data shows UK exports grew faster than Germany, France and Italy between 2016 and 2018.