# New report highlights how use of geospatial data by AI and innovative tech is helping grow the UK economy

A new report out today (Tuesday 27 August 2019) highlights how the matching of geospatial and location data with 8 key emerging technologies, including artificial Intelligence (AI), 3D scanners, and immersive technologies, is growing the UK economy.

The report, funded by the Geospatial Commission and published by PUBLIC, an organisation that helps technology start-ups work better with the public sector, analyses commercial opportunities for use of geospatial data, considers the maturity of each technology in the UK, and provides numerous case studies and success stories.

Location data is a valuable tool for both the public and private sector, helping them make better decisions, that could range from tackling crime hotspots or finding the quickest routes for emergency services, to deciding where best to locate warehouses. Consequently, the Geospatial Commission was launched in 2017, and supported by £80 million of funding over that time to drive the move to use this data more productively.

This work builds on wider Cabinet Office plans for cross-government digital transformation, including a new Technology Innovation Strategy, launched in June, which sets out the government's approach to boosting the adoption of new technologies across the public sector.

Minister for the Cabinet Office Oliver Dowden, said:

Government investment in geospatial data is helping to grow our economy and improve public services. I welcome this report and look forward to taking the opportunities of geospatial technology even further.

Sir Andrew Dilnot, Chair of the Geospatial Commission, said:

I welcome this report published today which gives us a better understanding of the maturity of eight technologies and how they are likely to impact the future geospatial sector, which is rapidly growing.

It also outlines opportunities geospatial technologies provide to the UK, with insights into the investment landscape and snapshot case studies for external audiences who have not yet engaged with the geospatial community. Dan Korski CBE, CEO and Co-Founder of PUBLIC added:

We are really excited to be launching this report, alongside the Geospatial Commission. Geospatial data and technology has the capability to drastically improve public services, from the way we manage transport in cities to how we plan smart energy policy.

The UK government is only at the beginning of its journey in exploiting these new technologies for the benefit of citizens and service providers alike. We look forward to seeing the impact of this report in the policy and projects to come.

# Partnership and technology: UK theme at the 2019 International Defence Industry Exhibition

A range of world leading British technologies are being exhibited at MSPO 2019, working with Intec, as the United Kingdom looks to strengthen defence industrial ties with Poland.

Her Majesty's Ambassador to Poland, Jonathan Knott, is leading a strong UK delegation supported by Air Vice Marshal, Nigel Maddox, Senior Military Advisor in the Department for International Trade's Defence and Security Organisation (DIT DSO). UK companies are looking to develop new defence equipment relationships with Polish companies to identify innovative solutions to Poland's future requirements through partnerships and industrial cooperation.

#### Ambassador Knott said:

I am very pleased at the number of UK participants attending MPSO 2019, this reflects the importance and the commitment of both the British Government and UK companies to building a strong defence relationship with Poland.

The UK has a long-established track record of offering world leading value for money capabilities supported by training and logistic support. Our unique selling point is our commitment to close defence-industrial collaboration, including technology transfer. A number of UK exhibitors already have Polish partners.

Air Vice Marshal, Nigel Maddox, DIT DSO said:

MSPO 2019 is an important opportunity to discuss with the Polish Government how we can further strengthen our already close defence and security relationship. The UK themes are "Partnership and Technology Transfer" and I will be encouraging more industrial cooperation across the defence and security sectors.

The UK is committed to creating the ideal environment for UK and Polish companies to work together more closely in order to build a strong defence and security industrial base for our mutual benefit.

All interested partners and media are invited to visit the UK companies in Hall D Stand 12.

## UK pavilion at the Economic Forum in Krynica

The Krynica Economic Forum will take place on 4-6 September 2019. Attended by thousands of people from all over the world, it is one of the biggest events of its kind in the region. A special UK pavilion at the Forum will host a variety of events, including presentations, panel discussions, and cultural events.

Throughout the Forum, participants of the Forum visiting the UK pavilion will have the chance to see the <u>"100 years of friendship" photo exhibition</u> on 100 years of renewed diplomatic relations between the UK and Poland, drink coffee by Wild Bean Café by BP, and enjoy VR activities by Sage.

The following events are open to all participants of the Forum:

#### Tuesday 3 September 2019

19.00 Opening event: "Great British Hits" party with DJ Trent

#### Wednesday 4 September 2019

- 12.00 Panel discussion: "Women in leadership: will we ever have an all-women board?"
- 17.00 Celebrating 100 years of partnership between Poland and the UK
- 17.30 Report presentation: "Economic relations between Poland and the UK an exceptional and enduring partnership", by Deloitte

### 19.00 British film and drinks evening, followed by British hits party with DJ Trent

The pavilion will be located at Pavilion D.

### British built rover begins journey to Mars, via France

Rosalind Franklin, which is the result of cutting edge work from UK, European and Canadian scientists and engineers will now be shipped from the Airbus factory in Stevenage, Hertfordshire to Toulouse in France for testing to ensure it survives its launch from Earth next summer and the freezing conditions of Mars when it lands on the planet in March 2021.

The rover is part of ESA's ExoMars mission to examine the geological environment on Mars and search for signs of life, past or present.

Dr Graham Turnock, CEO of the UK Space Agency, said:

This is a major milestone for this exciting project which demonstrates the UK's leading capabilities in robotics, space engineering and exploration, as well as our ongoing commitment to the European Space Agency.

As we hand the rover over to France for final testing, we should celebrate the huge efforts of the hundreds of people across the UK who have been involved in the design and build of the rover and its instruments, which will look for life on Mars.

Last week the panoramic camera system which will allow the rover to 'see' was successfully fitted. With funding and support from the UK Space Agency and European Space Agency (ESA), PanCam was developed in Britain by scientists from UCL's Mullard Space Science Laboratory (MSSL), working with the University of Aberystwyth and dozens of other experts across the UK in partnership with colleagues in Switzerland, Germany, Austria and scientists from nine nations.

UK scientists from the University of Leicester and Teledyne e2v worked on the rover's Raman Spectrometer, a powerful tool for the identification and characterisation of Martian minerals. The UK Science and Technology Facilities Council provided electronics, including the data processing board.

Colin Paynter, Managing Director of Airbus Defence and Space UK, said:

Seeing the Rosalind Franklin rover finally leave Airbus in Stevenage is a great moment, and I would like to thank all the teams involved for their efforts in making this happen. This European flagship mission now moves to the next stage for final testing and one step closer to launching to the Red Planet next summer.

ExoMars is an ESA program in cooperation with Russian Space Agency Roscosmos with contribution of NASA. Thales Alenia Space is the key Exomars mission industrial partner, supported by Airbus Defence and Space for the rover vehicle, OHB for the carrier module, Lavochkin for the descent module and its surface platform, while Leonardo has provided Rosalind Franklin's drill.

The UK Government is backing businesses to succeed by increasing investment in science to 2.4% of UK GDP by 2027, because countries that invest in ideas create more opportunities for business. The ambition is for the UK be the world's most innovative economy — and our leadership in ESA is a part of this ambition.

The UK Space Agency is the second largest European contributor to the ESA-Roscosmos ExoMars mission, having invested €287 million in the mission and £14 million on the instruments. This, in addition to successful negotiations with ESA, secured key mission contracts for the UK space sector.

Dr David Parker, Director Human and Robotic Exploration, European Space Agency, said:

Completing the build of the Rosalind Franklin rover under the strict cleanliness requirements, with all the science instruments onboard, is a major milestone of our ExoMars programme. It is thanks to the dedication of all the teams involved that we are able to celebrate this moment today.

We're looking forward to completing the final rounds of tests before the rover is declared flight ready and closed inside the landing platform and descent module that will deliver it safely to the surface of Mars.

The UK's investments in ESA are strengthening the UK's national capability in space, which is fundamental to modern day life, from weather forecasting and satellite TV, to communications and monitoring climate change.

The UK will make ambitious new subscriptions to ESA programmes in November, which will strengthen capabilities further and ensure the UK plays a significant role in global efforts to return humans to the Moon, bring back the first samples from Mars and develop innovative new technologies for life on Earth.

ESA is an international organisation with 22 Member States. By coordinating the financial and intellectual resources of its members, it can undertake

space programmes and activities far beyond the scope of any single European country.

ESA's Ministerial Councils bring together ESA's Member States every two to three years to decide on new proposals and funding for ESA's next years of work. The next one, called 'Space19+', will be held in November 2019.

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