New proposals put forward to strengthen drone regulation and boost UK aviation sector

A new report published today (Monday 1 November) by the Regulatory Horizons Council has set out how the UK could support the rapid and safe commercialisation of drones as the technology develops.

The Regulatory Horizons Council (RHC) is an independent expert committee which identifies the regulation needed to foster technological innovation and provides government with impartial, expert advice on the regulatory reform required to support its rapid and safe introduction.

Drones have been used to deliver vital supplies throughout the pandemic and this report outlines how innovation-friendly regulation could further unlock the benefits of drones, which have the potential to enable the delivery of medical supplies, aid search and rescue services or inspect infrastructure.

The report expands on the opportunities for remote parts of the UK such as the Hebrides to act as a testbed for the commercial deployment of drones. This would enable a shift away from experimentation to commercial operations, particularly for flights beyond the visual line of sight of the operator.

It also highlights regulatory lessons that the UK can learn from engagement with countries including the United States, Rwanda, Singapore, and Ireland, building on existing strengths in the wider aviation sector such as the skilled workforce and technology base.

Furthermore, the report outlines several other regulatory challenges and how the government and the Civil Aviation Authority (CAA) could help to address them, ensuring that the UK's regulatory framework continues to enable new technologies and business models to thrive.

Professor Iain Gray, Chair of the Drones Industry Action Group, said:

This is an exciting time for the UK's drone sector, as new technologies are solving real commercial problems and helping save lives. Government is making game-changing investments through the Future Flight Challenge, but to reap the full benefits, innovators need clear, forward-thinking and responsive regulatory regimes to operate within.

I would like to thank the RHC for their work producing this welcome report, and look forward to government's response in due course.

The Business Secretary Kwasi Kwarteng has written to the Regulatory Horizons Council welcoming the report, and the Department for Transport will respond

in detail to its recommendations after the live consultation on the future of transport regulatory review.

Read the report and government response:

<u>Dstl grasps telexistence potential to</u> <u>reduce risk to personnel</u>

The Defence Science and Technology Laboratory (Dstl) has demonstrated innovative telexistence concepts that could give military personnel, emergency services, or humanitarian workers the capability to undertake dangerous tasks in hazardous environments without physically being present.

An array of different technologies were displayed by industry suppliers to potential military and government users at a presentation event organised by the Defence and Security Accelerator (DASA) in October and co-funded by the Nuclear Decommissioning Authority (NDA).

Telexistence

Telexistence combines 3 separate technologies to allow a user to experience being in a location many miles away as if they were there along with the ability to sense, touch, feel, and interact with objects. This is achieved using a remotely-operated system, and relies on the integration of:

- telepresence, which enables the operator to see and hear as though in the remote environment
- robotics or wearable assistive technologies, which enable the operator to interact with the remote environment
- haptic feedback or sensors which enable the operator to touch and feel the remote environment

Telexistence offers a future generation of technology to mitigate the human risk associated with operating in hazardous environments by removing personnel from dangerous areas. Examples include:

- explosive ordnance disposal (EOD)
- nuclear decommissioning
- casualty extraction
- fire scene investigation
- chemical, biological, radiological, disaster response and decontamination
- ocean floor and naval damage exploration
- space exploration

As well as reducing risk, telexistence has the potential to reduce logistical

burden and increase the speed that users can be deployed. This would offer advantages to capabilities where there are a limited number of specialists, such as EOD, telemedicine and training. Telexistence would allow these specialists to support several operations as and when needed, rather than being deployed to a specific operation in case their skills are required.

Pictured: the 'Haptic Bimanual Telexistence System' or HaBiTS technology project developed by Netherlands Organisation for applied scientific research (TNO) and SenseGlove demonstrating an EOD inspired scenario in which an operator is able to open an 'unattended' bag delicately and remotely using the zipper through a haptic bimanual telemanipulation setup (a remotely operated pair of robot hands and arms) in a telepresence context.

Dr Nicky Armstrong, Dstl's technical lead, said:

The project aims to help us understand where telexistence may improve defence capabilities, shaping user requirements to influence future technology development. By exploiting the technology early, we will grasp the possibilities and limitations of the concept, enabling us to identify and rectify gaps that would hinder its adoption.

Lt Col Gareth Walker, a Dstl Military Adviser, said:

The event was a great example of industry and the UK's armed forces working in partnership to help solve our future challenges. Through the demonstration of emerging technology and sharing of experiences, we have taken the first steps required to accelerate these novel and innovative ideas into battle-winning capabilities.

Jen Mcara, DASA Associate Delivery Manager, added:

It was fantastic to see the prototypes in action after all the hard work and development by the suppliers. Seeing the technology first hand, gives potential military and government users a real feel for how the innovations could help them tackle a range of defence and security challenges from a safe distance. This collaboration between Dstl, NDA and innovators is a key part of DASA's work to pull through next generation defence technology.

Companies involved in the DASA competition were L3 Harris, Teleman, Cyberselves Holoxica, Createc, Digital Kinematics, Centric, Netherlands Organisation for applied scientific research (TNO), Cyberselves and Createc.

Over a million jobseekers to benefit from new training opportunities

Across Great Britain, Universal Credit claimants can attend full-time work-related training courses for up to 12 weeks while still receiving benefit payments, following an extension to the rule changes around the Department for Work and Pensions' Train and Progress (TaP) initiative.

Before the DWP Train and Progress initiative started in April 2021 claimants were limited to training lasting just eight weeks, but since the rules were changed, jobseekers have benefited from the improved training opportunities, part of building a higher skilled, higher paid economy.

The announcement follows the government's recent £500 million expansion to its multi-billion-pound Plan for Jobs, ensuring even more people will be helped back into work and to progress in their careers as the economy continues to bounce back from the impact of the pandemic.

Minister for Employment Mims Davies MP said:

A higher skilled, higher paid jobs market is in everyone's interests — and this change can help us get there. It means jobseekers across Great Britain can build their skills and progress, seizing new opportunities as we bounce back from the pandemic.

At last week's Budget, the Chancellor announced the most ambitious funding package for adult education in England since 2015, with the government set to invest £3.8 billion in skills by 2025.

At the heart of these plans is the government's ambition to level up and reduce regional inequality so that no matter where in the UK someone lives, they have the opportunity to reach their full potential, find rewarding work and take pride in their local area.

The extension to DWP Train and Progress means those receiving Universal Credit who are in the intensive work search group can take advantage of more sector-specific training — from digital skills to social care and engineering — while continuing to receive financial support.

In England, customers can also take part in the free Department for Education Skills Bootcamps for up to 16 weeks, and will be able to access the planned HGV Bootcamps.

People of all ages can make the most of the opportunities, with Work Coaches matching jobseekers to the best courses for them. People can also search for

free courses for jobs in their local area using the <u>Find a Course</u> website in England, <u>World of Work</u> in Scotland and <u>Careers Wales</u>, or can talk to their Work Coach to find out more.

Media enquiries for this press release - 0115 965 8781

Follow DWP on:

<u>IPO's first AI-powered tool improves</u> <u>quality of TM applications</u>

In the year since the IPO's trade mark pre-apply service was launched, the average number of trade mark applications rejected due to unsuitable Nice classification terms has dropped by 14%.

Pre-apply is the IPO's first service powered by AI. The AI tool identifies similar trade marks that already exist, and presents these to the customer, which helps improve the chances of successfully registering a trade mark. Additionally, by helping customers identify the right groups of goods and services for their proposed trade mark, using the pre-apply service means applications are more likely to be accepted.

The IPO has seen a 70% drop in the length of goods and services lists since the service was launched. This means customers will have more suitable trade marks that are more likely to only protect the right goods and services, leaving them less open to challenge. It could also save applicants money, because there is a fee payable for each additional category of goods and services that is selected.

The service has introduced an improved customer interface and Nice classification picker, shorter and more relevant lists of goods and services, and has removed the option for customers to select all classifications listed on the page.

These improvements mean:

- 1. Examining trade marks is quicker examiners no longer need to trawl through long lists of goods and services and it's easier to search and compare.
- Better quality applications applications are less likely to be rejected due to unsuitable Nice classification terms, saving customers time and money

The service is proving popular and has been used over 15,000 times in the last 3 months alone. This equates to around two thirds of all applications submitted by customers who don't have an attorney.

The service:

- uses AI to perform relative and some absolute grounds checks
- provides guidance on choosing the right classifications of goods and services
- introduced an improved classification picker containing a pre-approved list of terms
- gives an estimate of application costs

The IPO has actively sought feedback from customers, and this suggests the office's first use of AI within its services is delivering what was hoped for.

One customer said:

As a first timer applying for a trade mark, I found this tool very beneficial. It helped me understand my chances of being rejected, and also what grounds a rejection can be given on.

The IPO's application <u>guidance video</u> helps explain what classes of goods and services are, which ones they should select and why they are important. It has been well received, generating 12,295 views in the last 90 days.

Future AI powered services

The IPO is planning to make further use of the opportunities brought by AI, and build this technology into future services, as part of the One IPO Transformation Programme.

Potential opportunities making further use of AI could include:

- improved automated text searches using Natural Language Processing
- automated help and guidance, such as pre-apply services across all rights, and chatbots that could, for example, suggest classifications of goods and services
- advanced validation and authentication features across customer accounts and application processes to help improve the quality of applications we receive

David Holdsworth, Deputy CEO and Director of Operations, gave his view on what this means for IPO's future services:

It's great to see the positive impact our first AI powered tool is making. More importantly, it's a statement of intent for our future digital services. Through our One IPO Transformation Programme, we're looking to bring the same innovative thinking to all of our

customer interactions. We want to bring our digital services up to a level of quality that matches our reputation for world leading customer service.

The tool has been designed around customer feedback. To help the IPO build services around the needs of those using them, the IPO is calling for more customers to take part in its transformation user research and help make its One IPO transformation programme a success.

To take part in the research, or find more about how your input can help shape the future of the IPO's services, simply drop an email to usertesting@ipo.gov.uk.

Notes to Editors:

- 1) The Nice Classification (NCL), established by the <u>Nice Agreement</u> 1957, is an international classification of goods and services applied for the registration of marks." (Source: WIPO)
- 2) When we examine a trade mark's suitability we consider:

Relative grounds: the trade mark is already in use or similar to one that is already in use; Absolute grounds: the trade mark is unsuitable because of its intrinsic qualities (eg it isn't distinctive, or uses prohibited names or symbols)

- 3) To access the tool, go to the first page of the <u>trade mark application</u> <u>form</u>, select the first option 'trade mark owner or the authorised person within their business' and click 'continue'.
- 4) More information about the One IPO Transformation Programme is available.
- 5) Artificial intelligence (AI) is a transformative technology and is already revolutionising many areas of our lives. It can be a powerful tool for scientists, entrepreneurs, and artists, enabling new inventions and creations. The Government wants the UK to be at the forefront of this revolution, to encourage innovation in AI technology and promote its use for the public good.
- 6) In October 2021, the IPO launched a consultation on how the copyright and patent system should deal with Artificial Intelligence (AI). This consultation is seeking evidence and views on the extent to which patents and copyright should protect inventions and creative works made by AI, and measures to make it easier to use copyright protected material in AI development, supporting innovation and research.

Singapore skyline lights up for COP26

As world leaders gather in Glasgow UK to participate in the 26th UN FCC Conference of Parties Climate Summit or COP26, here in Singapore, two of the most iconic landmarks — the Gardens by the Bay and Marina Bay Sands — are turning blue and green to mark the momentous occasion.

From Sat 30th October 2021, Marina Bay Sands will illuminate the entire property, which spans across the three iconic hotel towers joined by the Sands SkyPark, ArtScience Museum and Sands Expo and Convention Centre, in the official COP26 colours. In addition, ArtScience Museum will also project the distinctive blue/green globe of the COP26 logo on its facade, reflecting the call for a greener, bluer world.

Singapore's Marina Bay Sands and ArtScience Museum lit up in COP26 colours

Gardens by the Bay has come to epitomise sustainable technology and innovation not just across Southeast Asia but world over. In support of COP26, the world-famous 18 giant Supertrees will light up in official COP26 colours from 31 Oct to 4 Nov 2021, daily from 7pm till 12am. Details are available on the Gardens by the Bay website.

The COP26 light-ups at both venues will run every evening until the 4th of November, coinciding with the crucial World Leaders Summit that will kick of the Glasgow proceedings.

Said Her Excellency Kara Owen, British High Commissioner to Singapore:

As the IPPC report laid it out so starkly, our world is dangerously close to running out of time to stop a climate catastrophe. The COP26 Summit taking place in Glasgow is our chance to come together for our planet, ensuring the transition to a cleaner future is fair and inclusive. I'm delighted that Singapore landmarks such as the Marina Bay Sands and the Gardens by the Bay are joining us in urging world leaders to make the right decisions, for our planet and all humanity.

Gardens by the Bay Chief Operations Officer, Thomas Seow said:

As a garden founded on the principles of sustainability, we are happy to support this environmental initiative by the British High Commission in Singapore. The solar-powered Supertrees at Gardens by the Bay have come to be recognised as a showcase of green technology. By lighting them up on the occasion of COP26, we hope to encourage everyone to join in and create a more sustainable future for generations to come.

Paul Town, Chief Operating Officer, Marina Bay Sands, said:

Even though the Summit is taking place in Glasgow, we believe that helping the environment is a collective effort that everyone can participate in even from miles away. We hope that our light-up can ignite larger conversations about the growing threats of climate change, and spur others to take action towards a more sustainable future here in Singapore.

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