ALTITUDE ANGEL

NEWS SUMMARY

Trust | Safety | Respect | Innovation

DISCLAIMER

All information in this document is correct at the time of writing.

About Altitude Angel:

Altitude Angel was founded by Richard Parker in December 2014, with a singular vision: **integrate drones into the airspace, safely, securely, using cloud technology**.

Altitude Angel is an aviation technology company which creates global-scale solutions to enable the safe integration and use of highly automated drones into global airspace. Its purpose-built **cloud platform**, supports both **U-Space and Unified Traffic Management (UTM)**, and delivers market-leading services to drone operators, manufacturers, and software developers. Altitude Angel's innovative solutions enable users to access a rich source of real-time airspace, environmental and regulator data.

Altitude Angel's **core technology platform is GuardianUTM**. It provides an integrated portfolio of scalable and robust digital communications services to aviation stakeholders, national drone registration solutions and integrated identification services to deliver comprehensive protected airspace management solutions.

Altitude Angel is also leading the advancement of **drone superhighways** in the sky, enabling deconflicted automated drone flight to build a scalable drone solution to benefit society, businesses, and industry, on level and fair terms, **accessible to everyone**.

July 18th 2022

UK Government gives the green light for World's longest drone 'superhighway'

Revolutionary technology will enable automated 'pilotless' drones to be flown beyond-visual-line-of-sight (BVLOS).

London, UK: The UK government has today announced it has given the go-ahead to for the world's largest and longest network of drone superhighways to be built in the UK. The drone superhighway will link cities and towns throughout the midlands to the southeast of the country, with the option to expand the corridor to any other locations in the country.

This ambitious new transport capability will be achieved thanks to a consortium led by Reading-based UTM (Unified Traffic Management) solution provider, Altitude Angel, alongside BT, supplying expertise and connectivity through its mobile network, EE, and a number of UK tech start-ups. Together, the group will build and develop 165 miles (265km) of 'drone superhighways' connecting airspace above Reading, Oxford, Milton Keynes, Cambridge, Coventry, and Rugby over the next two years.

The plans for the superhighway, submitted under the moniker 'Project Skyway', were proposed as part of the Department for Business, Energy & Strategy (BEIS) InnovateUK programme which aims to support business growth through the development and commercialisation of new products, processes, and services.

The government will officially announce the project at Farnborough Air Show on Monday, 18 July.

The Skyway superhighway network will help unlock the huge potential offered by unmanned aerial vehicles and be a catalyst to enable growth in the urban air mobility industry.

Richard Parker, Altitude Angel, CEO and founder said: "**The capability we are deploying and proving through Skyway can revolutionise the way we transport goods and travel in a way not experienced since the advent of the railways did in the 18th century: the last 'transport revolution'. The ARROW® technology we are building here is transformative – it is the basis of Skyway and the only scalable, viable mechanism to start integration of drones into our everyday lives, safely and**

fairly, ensuring that airspace can remain open, and crewed and uncrewed aviation from any party can safely coexist.

"Skyway gives us not just the opportunity to 'level up' access to green transportation across Britain, but we can benefit first and export it globally. We are therefore thrilled to be flying the flag on the global stage for UK Plc."

Dave Pankhurst, BT's Director of Drones, said: "**The social and economic potential of drones is immense and requires close industry collaboration to fully unlock these opportunities in a safe and responsible way. It's an exciting time to be part of such a powerful consortium. Project Skyway will be crucial to showcase how the UK can not only lead the creation of new jobs and public services, but form the backbone of how we integrate drones into our daily lives.**

"Cellular connectivity, and a secure, resilient 4G and 5G mobile network, will continue to enable the rapid growth of the drone market. Through our EE network, BT is providing the UK's largest and most reliable network to Project Skyway, to keep drones connected to ARROW® so they can receive greater situational awareness and tactical collision avoidance instructions from the autopilot system, and stream key video feeds such as search and rescue footage back to control rooms."

Skyway partners will collaborate to deploy a ground-based, networked DAA solution, where possible on existing infrastructure, which is hooked up to Altitude Angel's global UTM system, which 'stitches' data from multiple sources together in real-time to create an ultra-high-resolution moving map of the low-altitude sky.

Towns and cities along the superhighways and the businesses, and organisations within them will be able to benefit from automated drones at just the touch of a button: all flown safely and alongside other aviation.

What will Skyway achieve?

Drones today cannot be flown without a human pilot, except in rare circumstances usually involving a flight ban to other aircraft. The power of drones to transform lives and revolutionise business is inhibited by this situation since every drone requires a human pilot, and Skyway will obliterate the obstacle by enabling any drone manufacturer to connect a drone's guidance and communication systems into a virtual superhighway system which takes care of guiding drones safely through 'corridors', onward to their destinations, using only a software integration.

Simply put, this system will ensure any company can safely get airborne and build a scalable drone solution to benefit society, businesses, and industry, on level and fair terms, accessible to everyone.

This innovation is possible because Skyway doesn't rely on drones carrying specific onboard sensors

to 'see' other aerial traffic: instead, it proposes to put higher-power, better sensors from multiple manufacturers on the ground, along a sensor network, which in turn is then processed in real-time to provide guidance. This means drones don't need to compromise payload, range or efficiency and can 'tap into' even higher resolution data, from multiple sensors, from the ground-based network.

You can watch a video of the Skyway superhighway on our website.

See coverage in:

- BBC
- Financial Times
- Daily Mail
- Economist

For further information or to arrange an interview, please contact:

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About Skyway

Project Skyway is an ambitious plan to put Britain once again at the forefront of a transport revolution the likes of which it has not seen since the advent of the steam railway in the 18th century.

Then, short lengths of track sprang up around the country allowing steam-powered locomotives to take coal from northern mines or wool and cotton from mill towns to near-by docks to be shipped around the world. But within just a few years those independent miles of track were part of a railway network which spanned the nation, allowing goods and people to travel distances in times hitherto unheard of. This transport revolution and the efficiencies it brought was key in Britain showing itself as an industrial powerhouse on a global scale for the next century.

Two centuries on, Britain is on the point of another transport revolution. Drones shave the potential to transport in a way our ancestors could never have imagined, but would have surely understood. Just as trains reduced transport times from days to hours, drones will reduce them from hours to minutes, using energy from renewable sources. This will allow efficient and timely inspection of roads and railways, airport, and port operators to review infrastructure without dangerous or costly closures and provide lanes 'which will enable delivery drones operated by the likes of DHL, Amazon, and FedEx.

The consortium:

- Altitude Angel
- Connected Places Catapult
- HeroTech8
- BT Group Plc
- ARPAS-UK Ltd
- Reading Borough Council
- Oxfordshire County Council
- Coventry County Council
- Angorka Limited
- Vizgard Limited
- Skyfarer Limited
- Skyports

About BT:

BT Group is the UK's leading provider of fixed and mobile telecommunications and related secure digital products, solutions and services. We also provide managed telecommunications, security and network and IT infrastructure services to customers across 180 countries.

BT Group consists of four customer-facing units: Consumer serves individuals and families in the UK; Enterprise and Global are our UK and international business-focused units respectively; Openreach is an independently governed, wholly owned subsidiary, which wholesales fixed access infrastructure services to its customers - over 650 communication providers across the UK.

For the year ended 31 March 2022, BT Group's reported revenue was £20,850m with reported profit before taxation of £1,963m.

British Telecommunications plc is a wholly-owned subsidiary of BT Group plc and encompasses virtually all businesses and assets of the BT Group. BT Group plc is listed on the London Stock Exchange.

For more information, visit www.bt.com/about.

June 9th 2022

London Biggin Hill Airport becomes the latest to deploy Altitude Angel's GuardianUTM Enterprise Platform

London, UK: Altitude Angel, the world's leading UTM (Unified Traffic Management) technology provider, today announced London Biggin Hill has become the latest airport to deploy its GuardianUTM Enterprise platform.

London Biggin Hill is the only dedicated business-aviation airport which sits inside the M25 and strives to be a leading centre for aviation technology and enterprise within the Capital. The airport is also home to more than 70 resident aviation businesses, and offers award-winning VIP handling, a choice of FBOs, extensive hangarage, support and maintenance services for all ranges of business jets.

Launched in March 2021, GuardianUTM Enterprise is an intuitive, cost-effective platform which has been developed to support international, regional, and local airports & airfields to manage on and off-site drone operations.

GuardianUTM Enterprise will provide Biggin Hill with a combined view of the airspace in the vicinity of its FRZ (flight restriction zone), enabling the airport to start designing and providing UTM services for drone companies and drone operators, using Altitude Angel's proven digital authorisation and flight management technology.

Karim Cosslett, Altitude Angel, Regional Sales & Partner Manager, said: "**Biggin Hill has a special place in the history of aviation and Altitude Angel is incredibly proud to be part of a new chapter in the airfield's continued development. The drone and urban air mobility industries will be part of a new generation of aviators to use Biggin Hill and take advantage of its proximity to central London**."

Ben Spiers, Head of Safety and Compliance at London Biggin Hill Airport, said: "**Altitude Angel's intuitive user interface provides real time information to improve situational awareness whilst ensuring the aerodrome is fully safeguarded from risks faced to aircraft. The product ensures continuity throughout the drone community making it easier to fly and obtaining the required approvals when operating in Aerodromes Flight Restricted Zones**."

Find out more about Enterpise here.

May 18th 2022

Altitude Angel to expedite and expand rollout of UK's most comprehensive private ADS-B sensor network

London, UK: Altitude Angel, the world's most trusted UTM (Unified Traffic Management) technology provider, has today announced it is to accelerate and expand its planned deployment of aviation-grade ADS-B sensors to create the most comprehensive private, secure, and trusted source of ADS-B in the UK.

Altitude Angel's focus is on building technologies that are incorporated into solutions which enable the safe integration of automated drones into the airspace. ADS-B is commonly used by general aviation and other air users to broadcast aircraft location and sometimes carried by drones.

Existing ADS-B networks – from well-established suppliers to new entrants – have been neither designed or built to support automated flight, and typically aren't optimised for low altitude, low-latency applications; two characteristics which are key to enabling automated flight at scale. Many such suppliers have built their systems up using data from non-certified equipment, including hobbyists using low-cost hardware such as 'Raspberry Pi' computers and deployed 'randomly' in locations supported by enthusiasts. Whilst still very useful analytically, it doesn't meet the quality bar for real-time use in navigation systems at low altitude.

The ADS-B sensor network Altitude Angel is expanding, in contrast, will be optimised for coverage at low altitude, provide for low-latency, and – critically – capable of 'blending' or 'fusing' data from those sensors with other large amounts of sensor data in real-time. This last step is key, because it enables correlation; when fused with Altitude Angel's other sensor information, it is possible to 'highlight' aircraft which aren't visible on any single channel, such as ADS-B, or to provide enhanced assurance to those seeking to rely on position data when multiple sources of data corroborate each other.

This enhanced capability contributes to Altitude Angel's already extensive air-surveillance picture and enables the firm and its customers to have even greater confidence in its ability to help get them airborne without a pilot - truly automated flight. In such scenarios, data is key. But ***good data*** is critical.

With proposals to expand the adoption of ADS-B for drone and general aviation emerging in the UK, it

is more important than ever to find ways to be able to trust that information within the emerging UTM sector. A reliance on ADS-B is, by its very definition (Automatic ***Dependent*** Surveillance – Broadcast), dependent on the aircraft operator equipping **and** switching-on their transponder. Anybody who wishes to fly incognito, particularly at low altitude, need simply not comply with the requirement and if the UTM company was solely dependent on ADS-B, they would be 'blind' to those aircraft.

Which is why Altitude Angel is investing in expanding its dedicated coverage with a purpose-built and strategically deployed ADS-B network which also has the vast and significant benefit of being combined with all the other information on its platform, to establish the most accurate 'moving map' of the UK's low altitude skies.

"**We've taken the step to expand our dedicated ADS-B network which has been purpose-built from the ground-up (literally) to focus on solving for low-latency, fusion, and corroboration – to enhance trust and utility for low-altitude airspace users**," said David Walters, Altitude Angel, Special Projects Lead. "**There are still many examples of aircraft which don't carry an ADS-B transponder, but even if it were a requirement for all aircraft to carry them, there's no guarantee everyone would comply, the equipment would always work, signals could be detected (particularly at low altitudes), nor the signal could be verified. To a UTM company focused on safety and airspace integration, non-compliant actors are as important as compliant actors and existing solutions today only solve for those that are compliant**."

While ADS-B has other challenges associated with its use, particularly for uncrewed aviation, from spectrum to scale, a UTM company can still benefit from its use – but only when it can be combined with a system with the scale of our UTM.

Companies wishing to utilise the enhanced situation feed offered by Altitude Angel will be able to benefit from the enhanced ADS-B network from late summer this year, via its existing Developer Platform.

March 24th 2022

UK consortium reveal blueprint to build 165 mile drone 'Superhighway'

London, UK: A consortium led by Reading-based UTM (Unified Traffic Management) software provider Altitude Angel, are planning to build the world's largest and longest network of 'drone superhighways' which would link towns and cities across the UK – initially connecting the Midlands with the Southeast and those urban conurbations along the UK's south coast.

The consortium has submitted plans for a '165 miles (265km) drone superhighway' connecting airspace above cities including Reading, Oxford, Milton Keynes, Cambridge, Coventry, and Rugby.

If the plans are approved there is an option to extend the superhighway to Southampton on the south coast and Ipswich on the east coast.

The blueprint for the superhighway, known as Project Skyway, will enable businesses to develop and grow through the commercialisation of new and innovative drone-based products, processes, and services.

A decision on whether to green light the project is expected in the coming weeks.

"**This is the most ambitious transport project proposed for the country since the advent of the railway network in the 18th century**," said Richard Parker, Altitude Angel, CEO and founder. "**Britain is at the forefront of a second transport revolution. Drones have the potential to transport goods in a way our ancestors could never have imagined but would have surely understood. Britain can lead the world in these innovative and life-saving technologies, we have the skills and ambition to open our skies to safe and secure drone and air-taxi flights.**

"**With the government's support, using this technology as its foundation, we can create networks spanning the length and breadth of Britain, a super-highway-network-in-the-sky, providing a critical digital infrastructure which will, in-turn, enable the world's first truly national drone economy**."

Using detect and avoid (DAA) technology developed on the five-mile (8km) Arrow Drone Zone built by Altitude Angel south of Reading, the Skyway superhighway network will help unlock the huge potential offered by unmanned aerial vehicles and be a catalyst to enable growth in the urban air mobility industry.

Unlike existing drone corridors or research facilities which restrict access to operators by imposing punitive financial barriers to fly, the superhighway will be able to support fully automated drone flights beyond visual line-of-sight (BVLOS) from any drone company which completes a series of basic technical integrations which, crucially, don't require specialist hardware on-board the drone.

Congestion in the first 1000ft is predicted to increase, becoming the densest area of airspace as it evolves through the use of unmanned, General Aviation (GA) and other civil aviation. Project Skyway technology will permit ease of access, while monitoring deconfliction, without the need to close airspace as is the case today.

Skyway partners will collaborate to deploy the DAA solution, where possible on existing infrastructure, in combination with Unified Traffic Management (UTM) software-as-a-service, to enable greater awareness of manned and unmanned traffic to all stakeholders.

By connecting the towns and cities along the superhighways, businesses, and organisations within them will be able to utilise and adopt the technology, empowering them to grow, and deploy drones in a safe and repeatable manner.

The UTM will enable flight requests, approvals, deconfliction and provides a single-source-point-of-truth for all traffic on the Project Skyway corridors through combined manned and unmanned situational awareness. Project Skyway makes this combined air picture available to larger groups of airspace users through existing solution providers, such as those providing existing planning and tracking products to, e.g., GA and commercial air transport.

Once the initial UK highway is established, Altitude Angel will make available the technology to allow any organisation, airport, town, or city in the UK or beyond, which wants to establish and operate a 'superhighway' to do so quickly, easily, and cost-effectively through a simple licensing agreement.

Featured in: Daily Mail, Financial Times

February 24th 2022

Ordnance Survey incorporates GuardianUTM Cloud into its in-house flight planning platform

London, UK: Altitude Angel has today announced the world's most revered geospatial experts Ordnance Survey, are to incorporate Altitude Angel's market leading aeronautical data to its in-house survey planning platform.

Mapping Britain since 1791, Ordnance Survey (OS) are the benchmark in the collection and presentation of mapping and geospatial data, recording and maintaining over 500 million geospatial features to keep the OS national geographic database up to date.

OS will be incorporating Altitude Angel's GuardianUTM Cloud platform into its in-house survey planning software which is used to determine whether it is suitable for their Unmanned Aerial System (UAS) team to carry out a survey using a UAS, or whether it is more appropriate for one of the OS's 230 surveyors to 'get their boots on the ground.'

The benefit to OS of incorporating the GuardianUTM Cloud platform will be considerable savings in time and resource through the survey planning phase. GuardianUTM Cloud will provide the OS survey team with the most up-to-date and relevant aeronautical information as well as ground hazard data.

A detailed area report and hazard score can be generated through Altitude Angel's innovative Area Report API, providing further information crucial for ensuring safety and mitigating risk.

On OS choosing Altitude Angel as one of its trusted geospatial data suppliers, Richard Parker, Altitude Angel, CEO, said: "**Within the field of mapping, there are few organisations to rival Ordnance Survey. As such, it is true testament to the quality of GuardianUTM Cloud that it will be an integral part of the Ordnance Survey's in-house flight planning platform. Like OS, we understand the importance of detail, and *getting it right*. By taking a meticulous approach to our data and delivering to the highest standards, we allow our customers to make the best possible evidence-based decisions.**"

Matt Farthing, Technical Consultant with Ordnance Survey, added: "**At Ordnance Survey, we probably have a better understanding than anyone of the topology of Great Britain. Combining this with Altitude Angel's detailed temporal and regulatory view of the potential impediments to flying UAS offers significant benefits to our capture operation.**

"**The GuardianUTM Cloud platform supports our national surveying activity and will further enhance the speed in which we capture change and update the database ultimately benefiting the thousands of customers who use and rely on OS data.**"

Nearly 7 in 10 Brits believe drones will positively impact their future

- Human safety was named the biggest benefit of drone technology (49%)
- Under 30s view environmental benefits of equal importance to human safety
- 47% of people don't know drones operate under strict regulation
- Privacy and deliberate misuse are the UK's top concerns of drone use

New research from the BT and Altitude Angel-led "Project XCelerate" Consortium[1] has found over two thirds (68%) of the British public believe drones will have a positive impact on their life in the future, with almost half (49%) saying they are optimistic or excited about the potential drone technology holds.

The public is most positive about the impact drones can have on society for the greater good. Research found that 49% want to see drones used for risky jobs in place of people, such as firefighting (76%) and inspecting infrastructure (70%), while two in five were keen to see drones extending human capabilities and reaching otherwise inaccessible areas (42%), such as tracking criminals (65%) or investigating crime scenes (73%).

Human safety was particularly important to the over 65s, who agreed it was the biggest benefit of drone use, while the environmental benefits of drones were deemed equally important to human safety by the under 30s (36%) to support reduction in air pollution.

Despite this positivity surrounding this emerging technology, 38% of people still have concerns about drone use in the UK. Almost half of all adults said drone misuse (46%) and public safety, along with privacy (48%) around personal data and private property, were their main worries. Much of this concern could stem from some public misconceptions, with 47% of Brits believing drone usage remains unregulated, when in fact, strict regulations for drone operating are in place across the UK and continue to be developed and implemented by the Civil Aviation Authority as usage expands.

The report comes as part of Project XCelerate's wider work on the UK Government's Future Flight Programme and will be used to identify how the consortium will work to overcome some of the

challenges around the public acceptance of drones.

Dave Pankhurst, Head of drone solutions at BT, said: "**It's encouraging to see that broadly the public recognise the future opportunities of drone technology, and the positive impact drones can have on society through providing potentially life-saving services. But the findings also highlight the need to better inform the public to help address any concerns they might have around the acceleration of drones in our everyday lives.**

"**To unlock the potential of drones, close collaboration with a number of key stakeholders, from the public, government, regulators, and the industry is needed. Through Project XCelerate we aim to help contribute to safely opening up the skies, creating new opportunities for the future of drone flight**."

Richard Parker, Altitude Angel CEO and founder, added: "**We're seeing drones save lives and change the way we live and work on an almost daily basis. The technology we're developing and deploying with partners, like BT, will be the foundation on which the UK builds and enables its drone economy**."

Project XCelerate will demonstrate how drones can support ground-breaking use cases such as search and rescue missions, infrastructure inspection, and even the delivery of medical supplies to help improve access to healthcare in remote communities. By demonstrating the positive impact of drones through real world use cases, the project aims to help influence existing airspace restrictions to safely unlock the potential of drone technology.

Note to editors

Research conducted on behalf of BT and Project XCelerate by Strive Insight during 2021 of 2000 UK nationally representative respondents. The full report, ***The Future of Flight: Public attitudes towards the increasing use of drone technology in the UK***, can be found here.

About Project XCelerate

BT, together with Altitude Angel and a number of UK tech start-ups, have been selected by UK Research and Innovation to deliver a Future Flight Challenge project called Project XCelerate. The consortium plans to establish a commercial drone zone in open and unrestricted airspace, located south of Reading, Berkshire. Joining BT, the consortium includes drone technology experts from Altitude Angel, Dronecloud, HEROTECH8 and Skyports, cyber-security provider Angoka, and end user experts SkyBound Rescuer and DroneStream.

[1]"Project XCelerate" is a BT led Future Flight Challenge project, backed by UK Research and Innovation (UKRI).

November 9th 2021

Altitude Angel joins Urban Air Mobility Division of Hyundai Motor Group's Airspace Management Consortium

London, UK and Seoul, South Korea: The Urban Air Mobility Division of Hyundai Motor Group (the Group) has announced Altitude Angel, the world's leading UTM (Unified Traffic Management) technology provider, has joined its Airspace Management Consortium in effort to co-develop and advance the air mobility operating environment.

Hyundai Motor Group launched the Consortium in June to serve as a resource for the wider industry and policymakers in the United States and internationally as they begin to shape common operating and design standards for the advanced air mobility (AAM) industry.

Hyundai Motor Group convenes the consortium quarterly to facilitate sharing of key learnings and best practices and to receive strategic insight on its concept of operations (ConOps) for AAM airspace management and ground mobility integration. Looking ahead, the Group will work with the members to simulate the operation of the unmanned traffic management (UTM) and AAM network and ultimately flight test the Group's ConOps.

"**AAM will operate at the intersection of today's busiest and most complex transportation routes, particularly in the skies**," said Pamela Cohn, global chief operating officer and U.S. general manager, Urban Air Mobility Division of Hyundai Motor Group. "**Expanding digital infrastructure to accommodate new modes of aerial mobility is a challenge given all of the disparate airspace operating standards and geographies involved. It's important we convene diverse parties to explore safe and efficient integration of AAM and, more broadly, equitable access to airspace.**"

Richard Ellis, Altitude Angel, Chief Business Officer, added: "**Altitude Angel, like Hyundai Motor Group, is committed to bringing to market the technologies which will make safe and secure urban air mobility a day-to-day reality. We're very excited to be part of this consortium and together tackling and overcoming the challenges ahead.**"

October 27th 2021

Altitude Angel First Company to Join Inmarsat's New Partner Network for Ground-Breaking Velaris Connectivity Solution

Madrid, Spain: Altitude Angel, the world's most trusted Unmanned Traffic Management (UTM) technology provider and Inmarsat, the world leader in global, mobile satellite communications announced that Altitude Angel is confirmed as the first member of a new partnership network for Inmarsat's ground-breaking Velaris connectivity solution.

As part of a Memorandum of Understanding (MoU) signed this week, the two companies will explore opportunities to further integrate Inmarsat's recently-launched Velaris connectivity solution for Unmanned Aerial Vehicles (UAVs) with Altitude Angel's market-leading UTM technology. Together, they will offer secure communications for commercial UAVs – commonly known as drones – to fly beyond visual line of sight (BVLOS) on long distance flights and access applications, including real-time monitoring, to ensure safe integration with aircraft in commercial airspace.

The new agreement will strengthen the existing partnership between Inmarsat and Altitude Angel, which has initially focused on the development of a Pop-Up UTM platform that delivers advanced flight tracking and management capability for UAVs. The solution has already been successfully demonstrated on a number of flights, offering full situational awareness to the operator team and preventing any potential conflicts with commercial aircraft. In addition, the Pop-Up UTM was crowned winner of Air Traffic Management Magazine's UTM Service Supplier Award earlier this year and has been shortlisted in the prestigious Maverick Awards innovation category at World ATM Congress 2021.

Anthony Spouncer, Inmarsat's Senior Director of UAVs and UTM, said: "**Inmarsat's Velaris Partner Network (VPN) allows us to develop an unparalleled array of end-to-end UAV solutions and capabilities, working alongside a world-class ecosystem of leading players from across the industry. We are delighted that Altitude Angel has been announced as the first member and look forward to expanding the network further, with the additional of both new and well-established companies expected in the near future**."

Phil Binks, Altitude Angel's Head of UTM, said: "**Our Pop-Up UTM platform has received an**

outstanding response from the UAV industry, showing the immense potential for unmanned traffic management to enable safe, highly-automated UAV flights in both urban and rural environments. As the inaugural member of Inmarsat's Velaris Partner Network, we will build on this momentum together by developing cutting-edge new innovations for this fast growing market that combine our unique individual strengths."

The announcement comes a day after Inmarsat and Cranfield University published a new report, titled 'UAVs: Unlocking positive transformation in the world', which examines the wealth of new possibilities and applications unlocked by commercial UAVs. A key finding was the potential of UAVs to almost half the CO2 emissions of urban freight transport compared to small light commercial vehicles (LCVs), providing an unprecedented opportunity to reduce the logistics industry's environmental impact.

The report, which analyses both new and existing research, also identifies the many other commercial advantages provided by UAVs to organisations that embrace the technology and adopt new operational methods, with cost and time savings leading to enhanced supply chain and business efficiencies. In addition, it explores the considerable benefits that extend beyond those driven by commercial gain, such as delivering humanitarian and medical aid to remote communities and conflict zones, surveillance to protect endangered animals from poachers, and monitoring for illegal deforestation or mining operations.

Velaris is powered by Inmarsat's ELERA global satellite network, which delivers the world's most reliable and flexible global connectivity, with full global redundancy and unique resilience in all conditions. ELERA capabilities will be enhanced further with the upcoming addition of Inmarsat-6 satellites, the largest and most sophisticated commercial communications satellites ever built, the first of which (I-6F1) is scheduled to launch before the end of the year. The L-band capacity on each I-6 satellite will be substantially greater than Inmarsat's 4th generation spacecraft and, among other enhancements, delivers 50% more capacity per beam in addition to unlimited beam routing flexibility.

October 25th 2021

Dublin Air Traffic Services to Deploy Altitude Angel's GuardianUTM Enterprise Platform

Madrid, Spain: Altitude Angel, the world's most trusted UTM (Unified Traffic Management) technology provider, chose the CANSO Executive Summit taking place in Madrid to announce Dublin Airport is to become the latest airport to date to deploy its next-generation airspace management solution - GuardianUTM Enterprise.

Launched in March of this year, GuardianUTM Enterprise is an intuitive, cost-effective platform which has been developed to support national, regional and local airports and airfields.

GuardianUTM Enterprise will provide the Irish Aviation Authority Air Navigation Service Provider (ANSP), who provide Air Traffic Services (ATS) at Dublin Airport, with a combined view of the airspace in the vicinity of its FRZ (flight restricted zone), enabling ATS to enhance and provide UTM Services for drone companies and drone operators, using Altitude Angel's proven digital authorisation and flight management technology.

Dublin Airport is the largest and busiest airport in Ireland and is the tenth largest airport in the European Union. In 2019, Dublin Airport flew to more than 190 destinations in 42 countries operated by almost 50 airlines.

On Dublin Airport being the latest airport to deploy GuardianUTM, Richard Ellis, Altitude Angel, Chief Business Officer, said: "**We're thrilled to be working with the Irish Aviation Authority at Dublin Airport. GuardianUTM Enterprise will allow the IAA ANSP and the airport to unlock the potential of drone operations within the FRZ in a safe and secure way – providing the tower with a single-source-point-of truth.**

"**The use of drones, whether to inspect airframes on stand, or conduct runway and infrastructure inspections, are increasingly being used because of the efficiencies in time, money and accuracy their use bring. As our partnership with the IAA ANSP develops, we hope to be able to extend the use of GuardianUTM Enterprise to other airports around Ireland**."

The project has also received firm support from the UAAI (Unmanned Aircraft Association of Ireland) whose Chair, Julie Garland, said: "**We are delighted to work with the IAA ANSP and Altitude Angel. We see this trial as the way forward and a stepping stone towards full digitisation of the processes around airspace permissions and applications enhancing the flexible use of airspace.**"

Cathal Mac Criostail, Irish Aviation Authority ANSP, IAA ANSP Manager Airspace and Navigation, added: "**I have been very impressed by the way Altitude Angel has worked with the team at Dublin Airport to deploy GuardianUTM Enterprise. Within five years we expect drone and Urban Air Mobility (UAM) activity to surpass manned flight as regard number of movements. By working with Altitude Angel, as well with other partners in this arena, we're preparing Ireland for its exciting digital airspace future**."

June 26th 2020

Cranfield Airport To Deploy Altitude Angel's GuardianUTM Platform

London, UK: Altitude Angel today announced it is to deploy its market leading UTM technology platform at Cranfield Global Research Airport in collaboration with Cranfield Airport Operations Limited, enabling evaluation of GuardianUTM in a rich traffic environment including research institutes, students and private enterprises.

Cranfield is unique in its global research airport offers an environment for transformational research into the aerospace sector. As one of the few universities in the world with its own airport and Air Navigation Service Provider (ANSP), Cranfield is at the forefront of aerospace and aviation technology, working to address the challenges of digital aviation and rethink the airports, airlines, airspace management and aircraft of the future.

The joint initiative will see Altitude Angel deploy its GuardianUTM O/S into the digital tower at Cranfield Airport, allowing research institutes, students and other key stakeholders, to interface via Altitude Angel's APIs and request flight authorisations digitally.

David Walters, Altitude Angel, Head of Strategic Programmes, said: "**Cranfield Global Research Airport is one of the institutions leading the world in the development of unmanned aerial vehicles, so combined with Altitude Angel's world leading GuardianUTM platform, we'll be able to demonstrate how routine drone operations can be safely and securely carried out within a real-life airport environment**."

Robert Abbott, Cranfield Airport, Director of Aviation Operations, added: "**In Altitude Angel Cranfield Airport can partner with the provider of a leading UTM platform in order to evaluate a system in a unique and traffic rich airspace environment. In harmony with the capability the Remote Tower gives us, Guardian UTM is an ideal and vital information tool as we support research on behalf of the University and its partners**."**We see this trial as the way forward and a stepping stone towards full digitisation of the processes around airspace permissions and applications enhancing the flexible use of airspace.**"

For further information about the articles, or to arrange an interview, please contact:

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