

# Winners of International Space Pitch Day revealed

The winners of the inaugural International Space Pitch Day were today announced marking several world firsts.

Ten tech start-ups successfully secured same-day contracts worth up to £53,000 (\$66,000) to fast-track the development of their innovations after pitching direct to UK, US and NATO military leaders.

Air Vice-Marshal Harvey Smyth, UK Director Space, unveiled the winners following an afternoon of pitches in front of a global audience during the first day of the Defence Space Conference hosted from London.

It is the first time two nations anywhere in the world have come together to award defence contracts based around a pitch-style event, similar to Dragon's Den/Shark Tank.

It is also the first time two nations have awarded joint defence innovation contracts to an overseas-based enterprise in this way.

And it is the first time same-day contracts have been awarded in this way to industry by the UK Ministry of Defence.

Air Vice-Marshal Smyth said:

Congratulations to the winners and all those that took part in the first International Space Pitch Day – it has captured the imagination of innovators and militaries not just across the UK and US, but all over the world.

It has achieved several world firsts and we look forward to building on its success as we seek to fast-track innovation and cutting-edge technology to the front line quicker than ever before with fresh ways of working with industry to make sure we stay ahead of our shared adversaries and the threats they pose.

Dr Will Roper, Assistant Secretary of the Air Force for Acquisition, Technology and Logistics, said:

Pitch Days open the government's aperture to work with commercially-focused companies.

Competing for technology outside of our fence lines has been a major U.S. Air Force and Space Force theme. Partnering with our allies to compete globally is the natural evolution.

Space is especially exciting with so many ideas brought to the table by these firms, and I'm confident international space cooperation has a bright future.

Gary Aitkenhead, Dstl chief executive, said:

International Space Pitch Day represents an innovative way of working, ensuring that UK and US Defence are able to keep up with the rapid pace of commercial technology development.

We aim to connect world-class space innovation to military end-users at pace, supported by business and commercialisation training.

The winning companies are:

- 114 AI Innovation Ltd (India)
- Clearbox Systems Pty Ltd (Australia)
- Clutch Space Systems Ltd (UK)
- Cognitive Space, Inc. (US)
- precursor SPC (US)
- Riskaware Ltd and Telespazio Vega UK (UK)
- Rocket Communications (US)
- Slingshot Aerospace, Inc. (US)
- Spire Global UK (UK)
- Swim.ai, Inc. (US)

Fifteen proposals from tech start-ups and innovators battled it out to win funding by pitching to UK, US and NATO military leaders after being selected to take part in International Space Pitch Day from scores of entries from across the world.

#### **Notes to editors:**

International Space Pitch Day is a joint UK-US initiative that aims to find, fund and fast-track innovation and technology that gives advantage to military personnel and operations in the space domain.

[The competition](#) was open to innovators and entrepreneurs from all over the world delivered through the UK [Defence and Security Accelerator \(DASA\)](#), assisted by [Starburst Accelerator](#).

It is specifically designed to bolster tech start-ups and small and medium-sized enterprises (SMEs) and harness the power of their ingenuity and innovation.

The endeavour is jointly funded by the UK's [Defence Science and Technology Laboratory \(Dstl\)](#), [Royal Air Force](#) and the [US Air Force](#).

A grand coalition of Dstl, DASA, Royal Air Force, UK Strategic Command, the

US Air Force, US Space Force, and the North Atlantic Treaty Organisation (NATO) has been assembled to find, fund, and fast-track the best ideas from start-up innovators to the front line.

Starburst Aerospace is acting as an industry partner to the International Space Pitch Day and carry out specialist training and mentoring on its behalf through an Allied Defence Accelerator. More details can be found at the International Space Pitch Day [Virtual Learning Environment](#).

The format is the first of its kind in an international collaboration between two international allies.

#### **Winning proposal summaries:**

##### **114 AI Innovation LLP (India)**

Title: Spacewise

Exploitation toolset to visualise, access and analyse multiple input streams of Data for advanced Space Command and Control using Cognitive AI. This toolset enables space operations with allies and commercial partners by allowing visualization and analysis of multiple different sources of data in real time.

##### **Clearbox Systems Pty Ltd (Australia)**

Title: AI-enabled decision support for satellite service selection

To enhance a distributed satellite spectrum monitoring tool to incorporate AI-enabled decision support for satellite service selection. Applying AI techniques to the data and decision space can assist in improving prioritisation and selection of satellite services based on the Radio Frequency environment.

##### **Clutch Space Systems Limited (United Kingdom)**

Title: Space Resources Operational Availability Tool (SROAT)

The tool will be provided to operators to enable efficient and autonomous utilisation and assessment of the space assets for planning, and during operations. A prototype will include weather forecast interfaces, and orbit propagation, provide the satellite and payload simulations, automated mission planning code to support advanced queries, and provide the visualisation and AI modules.

##### **Cognitive Space, Inc. (United States)**

Title: Multi-Level Security through Partitioned Blockchain

Extending an AI-driven cloud satellite mission planning solution to include segregated access for multi-level security through the use of blockchain technology. This solution will provide a common operational picture of space assets across multiple security levels while providing means of filtering

accessible data and actions based on security clearance and need to know basis.

### **precursor SPC (United States)**

Title: 4D Space Weather Impact Tool

A Space Weather Impact Tool that delivers high-fidelity visualization of current, near-real time Space Weather conditions and forecasts of Space Weather conditions utilizing beacon satellites, multiple data sources, and ionospheric calibration systems to add the time dimension to Space Weather observations with an AI platform for forecasting. This novel approach improves ionospheric observation granularity by +10X while enabling Space Weather forecasting, and, delivering asset availability and management knowledge for mission readiness.

### **Riskaware Limited and Telespazio Vega UK (United Kingdom)**

Title: SpaceAware Resilience

A comprehensive multi-tier modelling and visualisation tool aimed at supporting battlefield and business operations with risk and threat analysis to mission critical space assets and the impact on the operational theatre.

### **Rocket Communications (United States)**

Title: Space:ACME – 4D Visualization Solution for Space Awareness, Communication, and Manoeuvre Evaluation

SpaceACME will provide intuitive and visual system for operators to envision system status, orbits, and predicted events; easily create multiple manoeuvre options and view/compare them to help decision-makers quickly grasp implications and improve decisions. Standardised visual language/formats will enable communication of status/alternatives across operation centres.

### **Slingshot Aerospace, Inc. (United States)**

Title: Slingshot Orbital Ensemble Catalogue

Slingshot Aerospace and its partner CGI Federal, propose to deliver an active data curation capability that uses machine learning to create an ensemble catalogue using all individual provider catalogues. This proposed solution will enable space warfighters to build and maintain data trust for space safety and sustainability.

### **Spire Global UK (United Kingdom)**

Title: Space Weather as a Service

The ability to produce a space weather recognised environmental picture and to convert that into operational action requires an underpinning sensor/modelling capability and a well-defined machine-to-machine Application Programming Interface (API). This project will demonstrate a new ionospheric

scintillation service targeted at Global Navigation Satellite System (GNSS), satcom and missile defence users.

**Swim.ai, Inc. (United States)**

Title: Real-Time Orbital Situational Awareness Platform (ROSA)

ROSA will analyse multiple real-time and relational-data sources, create live digital twin models of all satellites, and provide real-time situational awareness including location, attributes, trajectories, and impact of space weather. Alerts will notify operators and commanders of threats of intercept, weather risks, changes in pattern of life, overflights, and resources available for battle-planning. Both will see results in real-time on a common operating picture, tailored for mission.