

# **BBBS & Israel's Foresight Awarded USD 5 Million to Build & Commercialize Rugged Autonomous Drones for Hazardous Industrial Environments**

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Big Bang Boom Solutions Pvt. Ltd. (BBBS), a leading Indian DeepTech startup, today announced the formal approval of a \$5 million joint research, development, and commercialization project with Israel-based Foresight Autonomous Holdings Ltd. (Nasdaq and TASE: FRSX). The project, funded under the India-Israel Industrial R&D and Technological Innovation Fund (I4F), will focus on developing rugged autonomous drones designed specifically for GPS-denied, hazardous industrial environments.

The India-Israel Industrial R&D and Technological Innovation Fund (I4F) is a joint initiative by India's Department of Science and Technology (DST) and the Israel Innovation Authority which supports technological innovation in healthcare, energy, water, agriculture, and industrial technologies.

Starting in September 2025, the 24-month project will leverage BBBS's strengths in autonomous UAV platforms and Foresight's advanced 3D perception and multi-spectral vision systems. The funding approval from I4F, for 50% of the projects budget, marks a significant step forward in supporting the development and commercialization of next generation drones capable of navigating complex, cluttered, and dangerous industrial

environments without human pilots or GPS support. These drones are expected to improve safety, reduce operational costs, and enhance efficiency by performing inspections in hazardous and hard-to-reach environments in industries such as oil and gas, mining, chemical processing, power generation, and critical infrastructure.

Speaking on the significance of the joint project, **Dr. Shivaraman Ramaswamy, Director & CTO, BBBS**, stated, *"This collaboration is a leap forward for autonomous industrial inspection. We are building drones that go where humans and traditional UAVs cannot – safer, faster, and with real intelligence on board."*

*"This partnership isn't just about integrating technologies – it's about redefining what's possible in industrial inspection,"* emphasized **Praveen Dwarakanath, Director & CEO, BBBS**. *"By integrating Foresight's cutting-edge vision systems into our autonomous UAV platforms, we're enabling machines to think, adapt, and operate where human access ends. It's a bold step toward shaping the future of autonomous infrastructure intelligence on a global scale."*

### **Solving Problems Where Traditional Drones Fail**

Traditional GPS-dependent drones often underperform or become inoperable in industrial spaces such as tunnels, power plants, and chemical refineries, where GPS signal loss, high heat, dust, electromagnetic interference, or corrosive conditions present real risks.

The jointly developed system will address these limitations with AI-based navigation algorithms, sensor fusion for real-time situational awareness, and ruggedized hardware for performance in confined and thermally unstable spaces. This makes the autonomous platform ideally suited for critical applications across the oil & gas, mining, energy, transportation, and chemical industries.

Use cases include tank and pipeline inspections in oil refineries, underground mine mapping, predictive maintenance in power generation facilities, tunnel surveillance in metro systems, and hazard detection in chemical plants. In all these environments, the autonomous drone system will reduce human exposure, increase operational uptime, and offer real-time decision support through onboard analytics and thermal-visible light sensor integration.

### **Tapping into a \$21B+ Market Opportunity**

According to industry projections, the global drone inspection and monitoring market is expected to grow to \$21.3 billion by 2027. BBBS estimates that the jointly developed autonomous drone solution could generate over \$32 million in revenue by 2031, through deployments in high-value, safety-critical industrial operations.

The approval of this project further builds on the Memorandum of Understanding, signed between BBBS and Foresight in April 2025, and marks a milestone in cross-border DeepTech cooperation under the India-Israel Industrial R&D and Technological Innovation Fund (I4F) program.

### **Foresight's Deep Technology Advantage**

Foresight brings unmatched capabilities in multi-spectral 3D vision, stereo imaging, depth perception, and real-time scene reconstruction – technologies already proven in the automotive ADAS and autonomous vehicle sectors.

Their team of highly specialized engineers in Israel has deep expertise in embedded vision systems, computer vision, and machine learning. Operating from the Weizmann Science Park in Ness Ziona, Israel, Foresights R&D facilities include advanced testing labs, autonomous vehicle testbeds, and simulation environments that enable rigorous validation of perception algorithms and sensor systems.

For more information about Foresight, visit [www.foresightauto.com](http://www.foresightauto.com).

## **About Big Bang Boom Solutions**

Big Bang Boom Solutions Pvt. Ltd. (BBBS) is one of India's leading DeepTech startups, focused on developing indigenous, next-generation defence, aerospace, and dual-use technologies. Founded with a mission to solve high-impact national and industrial challenges through innovation, BBBS blends scientific research, advanced engineering, and user-centric design to create cutting-edge solutions across Autonomous systems, Counter UAS systems, UAVs, smart surveillance, and tactical platforms.

With strong R&D roots, BBBS has rapidly emerged as a trusted technology partner to the Indian Armed Forces, homeland security agencies, and strategic industrial sectors. The company's autonomous drone systems, anti-drone solutions, wearable soldier tech, portable shooting ranges and AI-driven situational awareness platforms are being developed for deployment in some of the world's most demanding environments.

BBBS has been recognized for its innovation by multiple government and defence bodies, including being selected for prestigious programs under iDEX (Innovations for Defence Excellence), DRDO, and Make in India. Its multidisciplinary team brings together experts in robotics, AI, embedded systems, and mission-critical electronics to deliver scalable, field-ready solutions.

Headquartered in Chennai, India, BBBS continues to expand its technological footprint globally through collaborations with international OEMs, research institutions, and public-private R&D partnerships, all while maintaining a strong commitment to Atmanirbhar Bharat and strategic technological self-reliance.

For more information, visit [www.bigbangboom.com](http://www.bigbangboom.com).

