Cyprus Information Day – 7th October 2024



EIGHT BELLS LTD

Activities and lessons learnt

True colour image acquired by Copernicus Sentinel-2 July 16, 2024

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Name: EIGHT BELLS LTD

Creation date: 7/10/2024

Number of employees: 9

Core competences: 5G-6G Communications, AI/ML, Cybersecurity and Data Privacy, Cloud Computing and Networking

% Space Revenue: 5% space related revenue vs 95% non-space related revenue.

Key customers: Horizon Europe, EDF, ESA, Cyprus Government (50%-35%-5%-10%).

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EIGHTBELLS

Independent Research & Consultancy

Space project(s) with ESA overview



Highlighted Space Project: Mobile Optical Ground Station - Cyprus eXperimental (MOGS-CyX)

Purpose/ Goal of the project: Possible locations in Cyprus where an OGS can be installed and operate and establish an optical satellitee-to-ground optical link

Keywords and key technologies: *Optical satellite-to-ground link, Free Space Optics, Atmospheric conditions*

Target customers: Satellite Operators, Network Operators

Key successes to date: Specific locations in Cyprus have been selected that offer good atmospheric condition for optical satellite-to-ground link and additionally can support terrestrial services (networks, comms). FSO Channel Modeling and Irradiance Statistics analysis. Conceptual design for experimental set-up and list of final requirements. From the market analysis, there are use cases and potential customers who can benefit from such satellite links (QKD, 5G etc). Key difficulties to date: Other Space projects: MOGS-CyX-2

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Lessons Learnt/ Best Practices/ Shared Advice



Writing proposals:

- 1. Tailor the Proposal to the Client's Priorities
- 2. Be Clear and Concise
- 3. Demonstrate a Proven Track Record

Running ESA Activities:

- 1. Adhere Strictly to ESA Standards and Documentation Requirements
- 2. Foster Open and Proactive Communication
- 3. Plan for Extensive Testing and Validation

Finding and Working with international Partners:

- 1. Choose Partners with Complementary Expertise
- 2. Align on Communication and Cultural Practices Early
- 3. Ensure Legal and Regulatory Compliance

Finding Customers and commercialisation:

- 1. Understand the Market and Its Pain Points
- 2. Leverage Industry Networks and Partnerships
- 3. Focus on Scalability and Adaptability when commercializing a technology

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Future plans – towards sustainable commercial services **@esa**

Vision of the future for the company and the product (10yrs from now) *Product Goals:*

- Lead in Ground-to-Satellite Optical Communication Technology: Become the go-to solution provider for high-speed, reliable optical communications systems for space and satellite applications.
- Expand Product Applications Across Industries: Adapt the optical communication technology for use in telecommunications, defense, and remote sensing industries, offering versatile solutions for various market needs.
- Achieve Unparalleled Reliability and Performance: Ensure that our products set new standards for low-latency, high-bandwidth, and secure data transmission, outperforming competitors in all operating environments, including adverse weather conditions.

Company Goals:

- Become a Leader in Space Technology: Establish the company as a recognized leader in the space technology sector, known for innovation, quality, and collaboration with leading space agencies and commercial entities.
- Grow a Diverse International Customer Base: Expand our market reach to include customers and partners from different countries and industries, becoming a trusted global supplier for space communications solutions.
- Foster a Culture of Innovation and Excellence: Cultivate an environment that encourages cutting-edge research and development, attracting top talent and positioning the company as a driver of technological breakthroughs in space communications.

Key next steps to achieve this:

- 1. Invest in R&D for Optical Communication Advancements:
- 2. Expand Testing and Validation Efforts:
- 3. Develop Scalable Manufacturing Processes
- 4. Identify and Pursue Strategic Partnerships
- 5. Conduct Targeted Marketing and Sales Efforts: