



Israel Space Forum Present

# Israel National Pavilion

75<sup>th</sup> International Astronautical Conference 2024 Milan

Booth MN1 – B03, Floor Level +1 NW



Table of contents

<b>Israel Space Forum</b> .....	3
<b>Israel Export Institute</b> .....	4
<b>Ministry of Economy and Industry</b> .....	5
<b>Israel Space Agency</b> .....	6
<b>Rakia Mission</b> [Human Spaceflight Management   Space Art & Education] .....	7
<b>Brain.space</b> [Health Care   In-space R&D] .....	8
<b>Elbit Systems</b> [Earth Observations   Satellite Subcomponents] .....	9
<b>EBN - Erdinast, Ben Nathan, Toledano</b> [Space Law and Policy] .....	10
<b>Israel Aerospace Industries (IAI)</b> [Satellites Manufacturing   Earth Observations].....	11
<b>NSLcomm</b> [Telecommunications   Satellite Subcomponents] .....	12
<b>Rafael Advanced Defense Systems</b> [Propulsion   Satellite Subcomponents].....	13
<b>Sim Dot Space Ltd.</b> [Software Development   Satellite System Simulations] .....	14



## Israel Space Forum

The Israel Space Forum is a collaborative initiative between Rakia Mission and Israel Space Agency at the Ministry of Innovation, Science, and Technology, leading Israel's dynamic space industry, driving innovation, and fostering global partnerships. We connect companies, researchers, and visionaries to promote space exploration and commercialization. By bridging local talent with international collaboration, we aim to shape the future of space technology and inspire the next generation of entrepreneurs. Explore the possibilities with us as we push the boundaries of Israel's presence in the global space ecosystem.

The Forum is a hub for advancing Israel's space capabilities, focusing on:

- ✦ **Innovation and Technology:** Supporting startups and established companies in developing pioneering space technologies.
- ✦ **Global Partnerships:** Facilitating collaborations with international space agencies, industries, and academia to create synergies that fuel global advancements.
- ✦ **Community Building:** Creating a vibrant network of space professionals, enthusiasts, and researchers to promote knowledge sharing and drive the local space ecosystem forward.

Through its activities, the Israel Space Forum is driving significant advancements in the NewSpace economy, positioning Israel as a key player in the global space industry. By promoting collaboration and innovation, the Forum is not only contributing to the economic and technological growth of the Israeli space sector but also inspiring future generations to explore the possibilities of space.

Website: [www.israelspaceforum.com](http://www.israelspaceforum.com)

LinkedIn: [www.linkedin.com/showcase/israelspaceforum](https://www.linkedin.com/showcase/israelspaceforum)

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ISRAEL EXPORT INSTITUTE

## Israel Export Institute

Inspired by Innovation, Connected, and Coordinated...

The Israel Export and International Cooperation Institute, supported by member firms, private sector bodies, and the government of Israel, advances business relationships between Israeli exporters and overseas businesses and organizations. By providing a wide range of export-oriented services to Israeli companies and complementary services to the international business community, the Institute helps build successful joint ventures, strategic alliances, and trade partnerships.

The Israel Export Institute (IEI) represents over 500 exporting companies in the Homeland Security arena. Israeli HLS companies offer technologically advanced, field-proven products and solutions that are among the most innovative anywhere. They are successfully partnering with key world players to ensure public safety, protecting air and seaports, borders, government installations, financial institutions, recreation centers, public venues, and more. The sector works with foreign government ministries and their agencies, as well as with industry bodies, to promote private industry joint ventures and international partnerships.

Website: <https://export.gov.il/en/>

LinkedIn: <https://www.linkedin.com/company/israelexportinstitute/>

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Ministry of Economy and Industry  
Foreign Trade Administration

## Ministry of Economy and Industry

The Foreign Trade Administration (FTA) at the Israeli Ministry of Economy and Industry manages and supports Israel's international trade and trade policy. From our headquarters in Jerusalem together with 50 economic and trade missions in key financial centers throughout the world, the FTA promotes Israel's economy worldwide.

Israel's economic and trade missions are at the forefront of the Israeli government's efforts to advance our industries in foreign markets. Our team of highly experienced economic representatives provide a wide range of services to Israeli companies and to the international business community.

As the Economic and Trade Mission at the Israeli Embassy in Milan, we are the official branch office of the Ministry of Industry and Trade in Jerusalem and represent the Israeli economy in Italy.

Under the leadership of the Commercial Attaché, Min Hadar Shor, we promote economic cooperation and investment between Israel and Italy. Our team works to build bilateral partnerships: we identify exciting new investment opportunities and prospects for cooperation, support Israeli and Italian companies and institutions with information and provide contacts to strengthen economic relations between Italy and Israel.

Feel free to be in touch with us in order to secure your prescheduled agenda of meetings with the participant companies at IAC 2024.

Website: <https://itrade.gov.il/italy/>

LinkedIn: <https://www.linkedin.com/company/israel-economic-trade-mission-to-italy>

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## Israel Space Agency

The Israel Space Agency (ISA), founded in 1983 under the Ministry of Innovation, Science, and Technology, leads Israel's civilian space activities. It focuses on scientific research, technological development, and promoting economic growth, particularly in areas like satellite technologies, communications, and environmental monitoring. ISA fosters innovation through support for startups and collaborations with international space agencies, enhancing Israel's global standing in space exploration.

ISA is dedicated to advancing space education and outreach through professional initiatives such as Israel Space Week, the Ilan Ramon International Space Conference and the Ramon Space Olympics, which engage students and the public in meaningful space-related activities. ISA prioritizes academic research by supporting cutting-edge studies in Earth observation, satellite technology, and planetary sciences, ensuring that Israel remains a global leader in space research and innovation.

Through initiatives, ISA strengthens Israel's space industry by promoting startups and facilitating global partnerships. This strategy advances the nation's technological capabilities and boosts international collaboration.

"Space is not just about exploration; it is about securing our future, enhancing our technological capabilities, and inspiring the next generation." — Uri Oron, Director of the Israel Space Agency.

Website: <https://www.space.gov.il/en>

LinkedIn: <https://www.linkedin.com/company/israel-space-agency/>



## Rakia Mission [Human Spaceflight Management | Space Art & Education]

We aim to expand space access, inspire innovation, and advance the Israeli space ecosystem. Rakia's first stage was successfully completed in April 2022, involving more than 2.5 million people in the Ax-1 commercial space mission to the International Space Station (ISS). Over 18 months of meticulous preparation and training culminated in a 17-day work plan for astronaut Eytan Stibbe, consisting of over 140 activities. These included scientific research, innovative experiments, and a range of educational and artistic activities. A fully coordinated Mission Control Center was set up in Tel Aviv, working in tandem with mission control centers in Houston and Huntsville.

What sets this mission apart is its groundbreaking approach to human spaceflight, with an emphasis on public participation. Educators, students, artists, academics, healthcare professionals, and private companies were all invited to help shape the mission's program. This collaborative, open-source model led to impactful partnerships among international researchers, resulting in new educational materials, innovative developments, and 95 distinct contributions to the United Nations Sustainable Development Goals (UN SDGs).

Building on this momentum, Rakia continues to develop space-related activities in Israel. We advance Israel's space ecosystem by providing a platform accessible to innovators, researchers, students, and the public. This encourages participation in space exploration through suggesting experiments and activities for the ISS. The recently established Israel Space Forum, in affiliation with the Israel Space Agency, plays a key role in connecting companies, researchers, and visionaries committed to space exploration and commercialization.

Moreover, Rakia fosters space communities in academic institutions, collaborating with key players in Israel's space sector. We aim to encourage students to pursue careers in space, reduce access barriers, and promote a holistic involvement in space exploration, ensuring space is truly for all.

Website: [www.rakiamission.com](http://www.rakiamission.com)

LinkedIn: <https://www.linkedin.com/company/rakiamission/>

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## Brain.space [Health Care | In-space R&D]

Brain.space's innovative Large Mental Models (LMMs) – which predict and understand human behavior with exceptional accuracy – are part of a deep tech revolution in neuroscience that is currently underway.

Our brain data-based AI integrates human emotional intelligence with machine learning, standardizing brain data and personalizing digital systems.

The BDaaS system, a cutting-edge technology developed by the company, includes an EEG headset with 115 dry sensors. It operates autonomously and integrates with additional physiological sensors like ECG, GSR, ET, and others, providing a comprehensive understanding of mental states. With a quick 3-minute setup and minimal training required, the system is user-friendly. Data is uploaded to the cloud and immediately processed through a deep network model, quantifying cognitive and mental states, such as cognitive load, stress, and focus.

These models are seamlessly integrated into client systems, enabling precise product development and real-time optimization across sectors such as security, defense, aerospace, and civil industries.

In a significant milestone, brain.space conducted its first experiment with this technology aboard the International Space Station (ISS) in 2022 as part of the Rakia mission. Astronauts operated the helmet with remarkable ease, demonstrating its adaptability and user-friendly design in space.

Website: <https://www.brain.space>

LinkedIn: <https://www.linkedin.com/company/gobrain.space>





## Elbit Systems [Earth Observations | Satellite Subcomponents]

Elbit is an international high-technology company engaged in a wide range of programs throughout the world, primarily in the defense and homeland security arenas. We develop and supply a broad portfolio of airborne, land and naval systems and products for defense, homeland security and commercial applications. Our systems and products are installed on new platforms, and we also perform comprehensive platform modernization programs. In addition, we provide a range of training and support services.

Our major activities include: military aircraft and helicopter systems; commercial aviation systems and aerostructures; unmanned aircraft systems (UAS); flight academy solutions, electro-optic, night vision, high power energy solutions and countermeasures systems; naval systems; land vehicle systems; munitions ; command, control, communications, computer, intelligence, surveillance and reconnaissance (C4ISR) and cyber systems; electronic warfare and signal intelligence systems; and other commercial activities.

Many of these major activities have a number of common and related elements, including common technologies and products, types of programs and customer interface. Therefore, certain of our subsidiaries, divisions or other operating units often jointly conduct marketing, research and development, manufacturing, performance of programs, sales and after sales support among these major activities.

Website: <https://elbitsystems.com/>

LinkedIn: <https://www.linkedin.com/company/elbitsystems/>

# EBN Erdinast Ben Nathan Toledano

## EBN - Erdinast, Ben Nathan, Toledano [Space Law and Policy]

EBN—Erdinast, Ben Nathan, Toledano is a distinguished full-service Israeli law firm recognized for its expertise in managing complex and high-profile domestic and international transactions. With a strong focus on representing technology-based companies and advising on privacy law, artificial intelligence, intellectual property rights, and cybersecurity, we are well-versed in addressing the legal challenges in these rapidly evolving fields. Our deep understanding of providing legal advice to technology companies at all stages and in various fields underscores our capacity to navigate sophisticated legal landscapes, particularly those at the intersection of cutting-edge technology and global industry demands. In addition to representing well-established industry companies, we are also providing ongoing legal advice to space projects, procurement of space-related services and space ventures, namely the Israeli Space Forum since its inception, or the Rakia Mission since its participation in AX-1 Mission to the ISS, and their associated projects, systems, collaborations, and partnerships.

Website: <https://www.ebnlaw.co.il/>

LinkedIn: <https://www.linkedin.com/company/erdinast-ben-nathan-advocates/>



## Israel Aerospace Industries (IAI) [Satellites Manufacturing | Earth Observations]

Israel Aerospace Industries (IAI) is Israel's largest, most capable, and most experienced aerospace company. Established in 1953 as a government-owned company, developing, building, and supplying state-of-the-art solutions for its customers in all fields of operation. IAI is the space house of Israel and the primary contractor to any space-related project for the Israeli MOD for the past 40 years.

Specializing in satellites, IAI has full space capability, including design manufacture, launch, and operate space vehicles.

- ✦ One-stop shop for space projects from 1Kg Nanosatellites to 10 tons communication satellites
- ✦ Only 11 countries have full space independence. IAI puts spacecrafts in space from Low earth orbit to the moon and beyond
- ✦ IAI has more than 40 years of experience in space projects and is the only Israeli company that has in-house proven launch capability
- ✦ The main contractor for the Israeli government
- ✦ Specialized in tailor-made solutions according to customer needs
- ✦ Dozens of successful launches over the years
- ✦ Our satellites far exceed their planned life cycle (The current record is 22 years for a satellite designed for 4 years)
- ✦ Long-term worldwide customers

Website: <https://www.iai.co.il/>

LinkedIn: <https://www.linkedin.com/company/iai/>



## NSLcomm [Telecommunications | Satellite Subcomponents]

The company is a leading developer of high-band communication systems for small satellites. The company has developed full payloads including RF Ka components for small and Nanosatellites such as Software-defined Radio, power amplifiers, transceivers, etc. The company has also developed and successfully used a unique deployable parabolic antenna with a small package when folded for launch. The company has launched 2 satellites to date and is now developing a 2-axis gimbaled antenna system for inter-satellite links, data relay and lunar rovers. NSLComm is also the initiator of the Beetlesat LEO constellation.

Website: <https://www.nslcomm.com>

LinkedIn: <https://www.linkedin.com/company/nslcomm/>



## Rafael Advanced Defense Systems [Propulsion | Satellite Subcomponents]

Established in 1948, RAFAEL Advanced Defense Systems Ltd. develops, manufactures, and sustains combat-proven technologies, products, and systems-of-systems for air, land, naval, space and digital applications.

Leveraging its technological ingenuity, operational experience, and unparalleled understanding of evolving combat requirements, RAFAEL provides global warfighters with today's most advanced technologies and life-saving defense solutions that ensure operational superiority. RAFAEL's strategy includes strategic international partnerships and localization, to ensure customer sovereignty.

Survey large territories from space with near-continuous coverage, leveraging RAFAEL's space-proven systems adopted by the European Space Association. We offer in-orbit propulsion modules, used in over 30 satellites worldwide, solid and mono-propulsion, electric and cold-gas technologies.

Website: <https://www.rafael.co.il/>

LinkedIn: [www.linkedin.com/company/rafael-advanced-defense-systems-official/](http://www.linkedin.com/company/rafael-advanced-defense-systems-official/)



## Sim Dot Space Ltd. [Software Development | Satellite System Simulations]

SIM.SPACE has developed a first-of-its-kind commercial system-level simulations, HIL and Digital Twins infrastructure for scalable heterogenic system-level simulations that harness the power of distributed parallel computing, microservices, and cloud computing architecture to enable the capacity necessary for AI and Machine Learning applications, Large-scale simulations (e.g. UAV swarms or satellite constellations), fast performance analysis (i.e. Monte Carlo), and modern simulation DevOps needs (Kubernetes / OpenShift, Docker, HPC)

**Rapid high-fidelity simulation development:** SIM.SPACE simulator generator tool and field-proven generic high-fidelity space-related algorithmic models library (off-the-shelf models marketplace) will reduce your simulation & modeling development efforts, and increase your productivity, simulation reliability, maintainability, and code consistency.

**Leveraging existing models, algorithms, and simulation assets:** SIM.SPACE facilitates the integration and orchestration of our customers' existing legacy assets. This means that valuable investments made by the customer in simulation software, models, algorithms, and data can be easily integrated and utilized within Sim Dot Space's framework while benefiting from advanced features and scalability.

**Unified Software SIL / HIL / Digital Twins:** SIM.SPACE brings together Software (or Model) In the Loop (SIL/MIL), Hardware in the Loop (HIL) testing, and Digital Twins within a unified dynamic simulation environment. This provides a holistic approach to system testing and validation. With Sim Dot Space, the same scenarios and training methodologies are leveraged in both SIL and HIL, ensuring consistency, and reliability and reducing the learning curve for simulation users and satellite operators

Website: <https://sim.space/>

LinkedIn: <https://www.linkedin.com/company/sim-space>