



si·cluster  
a corallia initiative

In Orbit...



Space Technologies and  
Applications Cluster

# The si-Cluster

The **si-Cluster** (Hellenic Space Technologies and Applications Cluster) brings together private and public actors in the field of space technologies and applications in Greece and provides an efficient framework around themes of common interest, in order to reinforce the competitive advantage of its members.

More information at: [www.si-Cluster.gr](http://www.si-Cluster.gr).

## Our Vision

To create a world class cluster on space technologies and applications

## Our Mission

To place **Greece** amid the countries which currently **develop cutting-edge space technologies and applications** with high international visibility, capable of developing and attracting high impact research, development and innovation and business activities,

**Established** in 2008, si-Cluster consists of a total of **30 members** of which **21** from **industry** and **7** from **academia and research**.

**Over 80%** of its members are located in the Attica Region, while some members reside in Western Greece and Central Macedonia.

**Employing** locally over **1000** professionals of which **35%** are holding a PhD or MSc degree.

# Our Facilities & Services

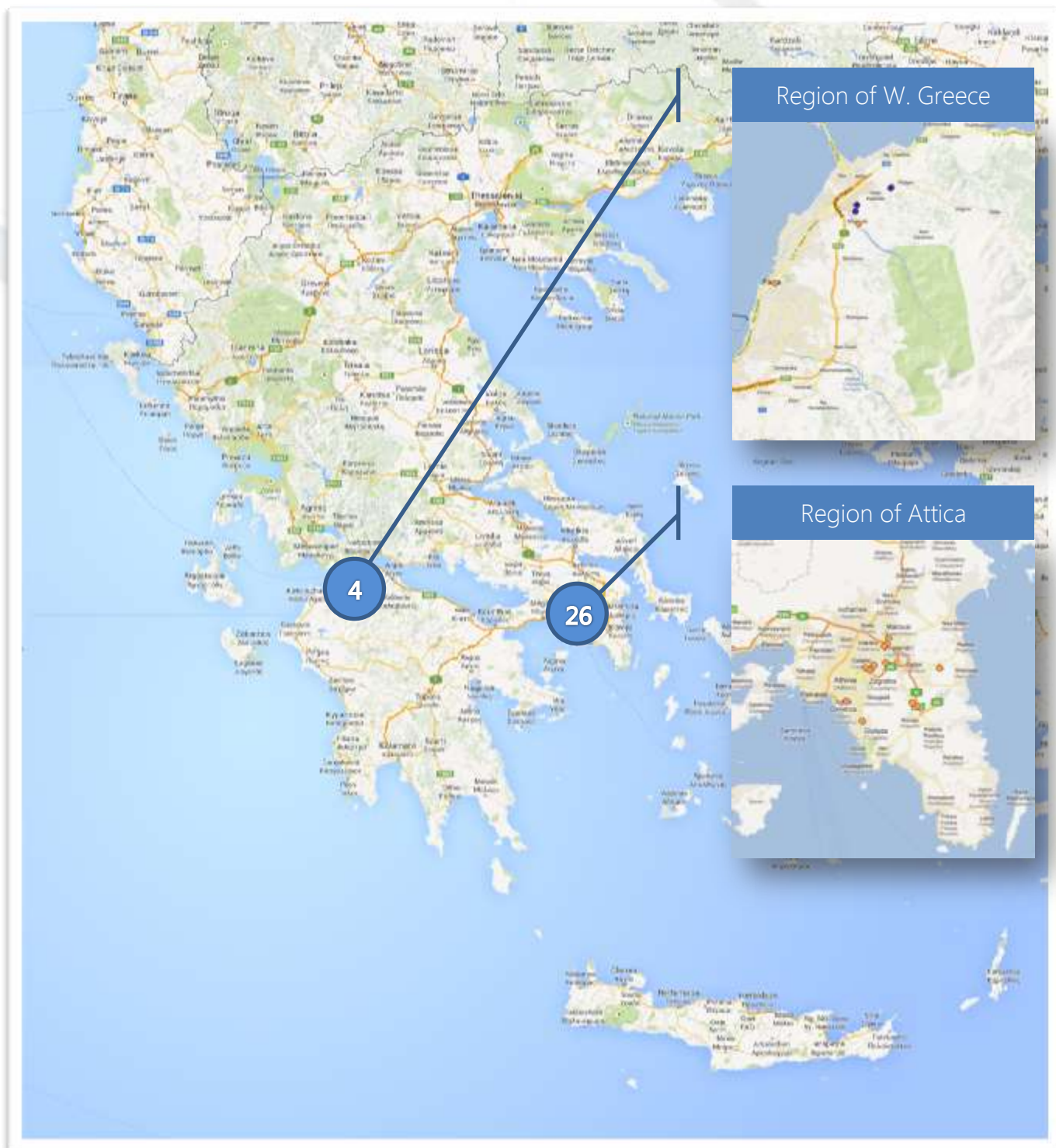
**We provide a wide range of Services to our members, in our newly established state-of-the-art facilities:**

- Relocation of si-Cluster members on our premises
- Fully equipped business center
- Space R&D laboratory for product & services development
- Business Incubation Area (collaborative space for up to 26 startups/entrepreneurs)
- Product Exhibition Area



# Regional focus

The Cluster Members span through two main regions



# Thematic focus

## **Sensors**

MEMs based sensors for aerospace applications

## **ASICS Designs**

Analogue and Digital ASICS for aerospace applications

## **Special Materials / Propulsion Technologies**

Composites and ceramics for engine thruster hauls and re-entry missions

## **Electrical Ground Support Equipment**

AOCS, TM/TC, CDMU SCOEs

SpW, MIL-STD-1553, CAN recorders

## **On board Software**

Development of AOCS, Central Software, Power Control

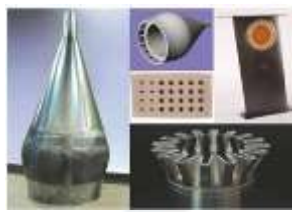
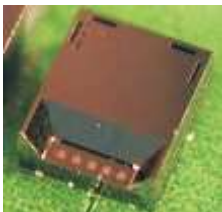
ISVV, Software Validation, Engineering services

## **Remote Sensing Applications**

Synthetic Aperture Radar (SAR) core signal processing

Optical images processing

Data Fusion for automatic classification



# The Members

ALMA



ANALOGIES



APEL



CONSTELEX



CORALLIA



CSE



EMTECH



EPOS



ESS



GEO SYSTEMS HELLAS



HASI



HERON ENGINEERING



INACCESS



INASCO



IRIDA LABS



ISI/Athena



ISI HELLAS



LOGIKON LABS



MFOL/NTUA



MicroLab/NTUA



NEUROPUBLIC



PLANETEK HELLAS



PRISMA



SPACE HELLAS



MILTECH



MRC/ICCS-NTUA



SPU/RC ATHENA



TERRA SPATIUM



THEON



VLSI Lab



# Collaborative Projects

---



Space Technologies for  
Surveillance and Monitoring  
Integrated Applications

---



An Inertial Measurement Unit  
(IMU) – Designed in Greece

---



Intellectual Property on Image  
Data Compression

---

Design and Development of the  
**NFOFRAS** : National Forest Fire Risk  
Assessment System

---

**BLISS** : Photonic Integrated Circuits Based  
on Rad-hard Fiber Optics

---



# Members Capabilities, Products and Services



**Alma Technologies** develops sophisticated, cutting-edge technology IP cores for integration in ASIC and FPGA devices and offers them to customers lacking the necessary know-how or resources to develop them from scratch. Alma Technologies products address various applications from consumer electronics, to specialized applications such as medical imaging, industrial and military or space applications. Alma was one of the first companies to introduce a JPEG 2000 image compression IP core in 2002. Today, Alma Technologies offers the only hardware engine supporting the functionalities provisioned by the BIIF/NTSIF01.00 profile of the standard. Alma Technologies JPEG cores are probably the fastest and among the smallest available. Alma is the only provider for the Lossless JPEG and JPEG-LS compression cores. The most recent addition to the product line is the compact H264 encoder core, a standalone solution targeted for applications where video coding quality is a major concern. Alma Technologies is also expanding on memory controllers and cryptographic functions. After 12 years of proven designs and over 150 satisfied customers, Alma Technologies is recognized worldwide as a leading supplier for image and video compression silicon IP cores and is constantly refining the available products and adding newer innovative solutions in the product portfolio. Alma Technologies is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

[www.alma-tech.com](http://www.alma-tech.com)



**Analogies** is a semiconductor intellectual property (SIP) design company that provides high-speed wired and wireless interface and signal processing cores. The company was founded in 2006 from an expert team of engineers and circuit designers with long standing expertise in high speed design. Analogies is based on a team of highly skilled engineers in mixed signal and digital designs with most of them holding post graduate degrees and PhDs. Members of the team have extensive expertise and industrial experience having worked for several years in high speed design in GiGA A/S and Intel (after GIGA's acquisition in 2000). Analogies has formed strong ties with distinguished Electrical and Electronic Engineering Departments of Academic Institutions, moreover draws senior technical scientific advice from distinguished persons from Industry and Academia that bring extensive industrial and scientific experience. The company is focused on the development and implementation of IP products targeting to high speed circuit structures/interfaces at the PHY level and/or efficient signal processing solutions for advanced FEC schemes and baseband functionality for wired and wireless applications that are tailor-made to the customer needs and offers a significant time to market and risk mitigation benefits. Analogies is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

[www.analogies.eu](http://www.analogies.eu)



The Applied Electronics Laboratory (APEL) is a major, institute-like, laboratory in the Department of Electrical and Computer Engineering in the University of Patras. It was founded in 1975 and is responsible for courses and research in the area of : Electronics, Microelectronics, RF Electronics, Advanced Wireless (Sensor/Actor) Networks, Microprocessors, Embedded Systems, Real-Time Networked Embedded Systems, Industrial Communications, Enterprise Systems, and Advanced Communication Systems Over 150 Masters and over 30 Ph.D. theses have been completed in the past twenty years. Many more are, currently, in the stage of execution or completion. APEL has a strong and proven expertise in the above fields and it adheres, with consistency, to the philosophy of applying its designs in advanced and challenging applications.

[www.apel.upatras.gr](http://www.apel.upatras.gr)



**Constelex Technology Enablers** is part of Gooch & Housego (G&H), a global business specializing in photonic components and systems. With a mission to become a world-leading design-house and solution provider for photonic systems with applications in Aerospace and Defence, Constelex has built up a strong reputation for technical excellence since it was founded in 2009. As a result, Constelex has enjoyed considerable success in securing product development contracts by the European Space Agency (ESA) to develop complex photonic systems for predominantly space and satellite communications. Constelex is part of the Systems Technology Group (STG) of G&H, a separate business unit with a remit to design, develop and prototype systems-level products. The STG involves a multi-disciplinary team with expertise in mechanical, electronic and software design and modelling that enables integration of these technologies with G&H's expertise in photonics. Constelex is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

[www.constelex.eu](http://www.constelex.eu)



**Corallia Clusters Initiative (Corallia)** is the si-Cluster Facilitator with a long tradition in Greece in the management and development of innovation clusters, in specific sectors and regions of the country, within which actors operate in a coordinated manner. In those clusters, Corallia acts as Cluster Facilitator implementing specific support actions, which involve all innovation ecosystem actors, including industry, universities, research centres, financial institutions, regional and national authorities, infrastructure providers, suppliers and buyers, media, etc. Corallia has supported, up to date, the development of highly-specialised clusters in other knowledge-intensive thematic sectors. More so, Corallia pushed forward the hyper-concentration of industrial members of clusters in thematic InnoHubs in order to accelerate the bonds of cluster members and establish reference points for the sectors. Corallia operates two the Athens InnoHub and the Patras InnoHub. Last but not least, Corallia, implements an extensive Youth Entrepreneurship Acceleration Programme.

[www.corallia.org](http://www.corallia.org)



**Creative Systems Engineering (CSE) Ltd** is a self-funded SME, established in 2009 in Athens, Greece. CSE is a modern, dynamic engineering firm that targets the provision of state-of-the-art products and services for Telecommunication, Defence/Space, Industrial Control and Automation, ATE. The company's strength is based on its experienced staff that has twenty years of proven experience in project & engineering management, design and development of diverse products and provision of high-end engineering services, with the use of state-of-the-art design & development tools (CAE/CAD) and high performance laboratory T&M equipment.

The company is continuously exploring commercial interest of the international and domestic market in the demanding areas of Telecommunications, Defence, Space and Automated Test Equipment. CSE continuously invests in R&D activities through EU (FP-7, H2020) and government funded programs. As a newcomer in the Space industry, the company also aims to be involved in ESA funded projects.

CSE is a member of the of the si-cluster (Hellenic Space Technologies and Applications Cluster), the ACCI (Athens Chamber of Commerce and Industry) and the HASI (Hellenic Association of Space Industry).

[www.creativese.com](http://www.creativese.com)



**EMTech** is a company that researches and develops innovative technology solutions for international markets. EMTech has developed products for real-time embedded systems supporting reactive-load compensation in power distribution substations and software applications for space. EMTech has been awarded two ESA/ESOC projects regarding the enhancement of the existing operational spacecraft simulation infrastructure and selected as an ESA/ESOC Qualified Partner for Ground System Software Related Activities. EMTEch is built upon a culture of respect, honesty, teamwork that ensures the provision of value and quality in every task we perform. In EMTech "We are what we repeatedly do. Excellence is not an act, but a habit." (Aristotle) EMTech is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

[www.emtech.gr](http://www.emtech.gr)



**EPOS** designs, develops and produces high performance electronic systems for advanced signal processing applications. The company was founded in 2002 by a group of Greek electronic engineers with the aim of exploiting local know how on analog and digital electronic systems. The main objective of EPOS is to acquire a share in the market of specialised digital signal processing products for space, military and public domain applications. EPOS designs, produces and markets high performance and high complexity electronic systems for filtering, amplification, digitization, processing and synthesis of signals in the IF, RF and microwave frequencies such as wideband digital receivers, analog to digital converters, FFT digital signal processors, digital IF/RF synthesizers and digital radio frequency memories. EPOS is the manufacturer of DARE-J, an integrated direction finding, analysis, recording and jamming system which is designed for tactical and strategic passive surveillance of the telecommunication environment and instantaneous jamming of any threat signal upon request. EPOS is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

[www.epos.gr](http://www.epos.gr)



**European Sensor Systems (ESS)** is a global developer and manufacturer of high quality sensors based on micro-electronics technologies. ESS commenced operations in 2012 by a group of experienced executives and professionals, who accumulate decades of experience in the design, development, fabrication and integration of sensor based systems. ESS MEMS based sensors and sensor systems, which are produced via qualified industrial processes, measure pressure, fluid properties, acceleration and temperature. Combining multiple discipline capabilities, ESS delivers technologically advanced sensor solutions in a fast and efficient way starting from the concept to prototyping and full production. Our flexibility along with the dedication to the client ensures a high end custom made product within a limited timeframe ready to be installed to the application without any additional modifications. ESS products are employed in sophisticated control and monitoring applications in the industrial, medical, aerospace and consumer good markets either as stand-alone components or being integrated within equipment's. ESS is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

[www.esenssys.com](http://www.esenssys.com)



**Geosystems Hellas (GSH)** was established in November 2009 as an Geosystems EU Group Member, commercially providing ERDAS/INTERGRAPH and e-GEOS (Telespazio Group) solutions, as a distributor and consultant in Greece and Cyprus, covering Photogrammetrical, Remote Sensing and R&D projects. GSH is a pioneer in introducing Information Technology using extensively modern, digital geodata capturing and data processing techniques for production of maps and geographic information systems. The firm has also gained considerable experience in land information systems through its extensive involvement in the preparation of several projects of Geographical Information System (GIS) and Remote Sensing: Application Development, Sites Establishment, Remote Sensing, Data Collections, GIS Database design and implementation and field surveying data collection. In the field of Geodetic and Environmental Monitoring is working with the affiliate company Metrica S.A taking advantage of the use of high accuracy surveying and environmental equipment and the established GNSS Reference Network MetricaNet (Smartnet Greece). GSH's business model is solution-based and committed to vertical products; cost effective and timely solutions, added-value services, training and support. The success of the company is based on the qualified staff with over 15 years of experience of at least working in the fields of Geosciences', Geo- Informatics in numerous European and national projects. Geosystems Hellas is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

[www.geosystems-hellas.gr](http://www.geosystems-hellas.gr)



**The Hellenic Association of Space Industry (HASI)** was established in 2008 as a representative organisation, acting as an intermediary and interface with the public administration and national and international organizations in all matters relating to the Hellenic space industry, with the goal to extend and strengthen cooperation among companies towards developing new technologies and products for use in space. The members of the association represent the majority of the country's R&D capacity in the field of space technologies and applications, comprising of more than 1000 highly skilled professionals with high scientific training.

[www.hellenic-asi.org](http://www.hellenic-asi.org)



Heron Engineering Mechanical Structural Analysis LLC is a young small company based in Athens, established in 2013 by three experienced engineers. The company is active mainly in the aeronautical / space domain covering all the stages of a project, from preliminary studies to certification reports. Company's mission is to provide high quality services regarding analysis and structural integrity verification, in aerospace industry as well as in the wider construction sector. Heron's Engineering staff with many years of working experience and having in depth knowledge of structural analysis both using analytical methods and Finite Element Analysis, guarantee the validity of the studies. The core activities of the company are: the structural stress analysis of assemblies and components e.g. static and dynamic analysis, non linear analysis, fatigue, heat transfer etc. the structural optimization, the modeling and analysis of composite structures, the development of special purpose computational tools and software and the documentation of studies i.e. stress reports, user manuals and guidelines, concession reports. Heron Engineering is geared to participate in aerospace development projects, aiming the tasks of the ESA projects. Heron Engineering is a member of the Hellenic Association of Space Industries (HASI) and the si-cluster (Hellenic Space Technologies and Applications Cluster).

[www.heron-engineering.gr](http://www.heron-engineering.gr)



**InAccess** was established in 2000, with the vision to constantly reinvent, develop and deliver the most advanced infrastructure management systems. The company provides monitoring and control solutions for the renewable energy and telecom infrastructure management. We design and develop state-of-the-art products and solutions, which give our partners invaluable access to information, enabling them to maximize the viability and effectiveness of their investments through performance optimization and OPEX reduction. The company is well-established through long term cooperation with major global energy producers and European telecom operators and manufacturers. InAccess is headquartered in London, UK, with US operations in San Jose, California, regional offices in Italy, India and Japan and its R&D center in Athens, Greece. InAccess is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

More information at: [www.inaccess.com](http://www.inaccess.com)



**INASCO** is a high-tech industrial firm active in the international markets of aerospace and composites. The company was established in 1989 and has acquired core capabilities in composite processing technologies, aerostructures prototyping, high performance reinforced alloys, nano-composite components with enhanced sensing/actuating capabilities, sensor networks for structural health monitoring, embedded FBG networks and intelligent distributed embedded systems. INASCO has a proven track record in offering its innovative high technology solutions, to a number of OEM & Tier-1 corporations and industrial groups of the aerospace and composites sector, like Airbus, European Space Agency, EADS, Bombardier, Dassault Aviation, Safran, Snecma, Rolls-Royce, Premium Aerotec, MOMENTIVE, Volvo, Alenia Aeronautica, Eurocopter, Israeli Aircraft Industries, DLR and others. INASCO has received a number of international awards for its in-house developed technological solutions and products. INASCO is staffed with the highest level of scientists and engineers, with significant experience and specialized skills, over a wide range of practices (aerospace, mechanical, electrical-electronics, chemical engineers, materials scientists, software engineers). The company is ISO 9001 certified and has a high precision workshop to support its prototyping activities and electronics lab. INASCO is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

[www.inasco.com](http://www.inasco.com)



**IRIDA Labs** is a high tech company offering services in the fields of security services and embedded systems for computer vision. Irida Labs has a full range of FPGA IP cores for image fusion and customized software for data fusion and ship detection. During the last two years, Irida Labs has achieved significant partnerships in working for large European organizations like ESA (European Space Agency) and EDA (European Defence Agency). Irida is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

[www.iridalabs.gr](http://www.iridalabs.gr)



The **Industrial Systems Institute (ISI)** is a leading R&D institute of excellence conducting basic research and exploratory development on Information and communications technology (ICT) for the Greek and European industry. From the time of its inauguration, the focus of ISI has been involved in cutting edge technologies for industrial operations/enterprise environments, and has a prime concern towards the innovation and the growth in competitiveness of the Greek industry. General goal of ISI has from the outset been to conduct applied research leading to the development of industrial applications and products, as well as the provision of advanced industrial services. ISI was established in Patras, Greece, in 1998, as a non-profit organisation, under the auspices of the General Secretariat for Research & Technology (GSRT) of the Greek Ministry of Development. In 2003, ISI joined the research center for Athena - Research & Innovation Center. ISI carries out fundamental and applied research and contributes to science evolution by currently focusing on industrial fields with exceptional expected rate of development, networked embedded systems, intelligent systems and robotics, enterprise information systems, enterprise interoperability, Security & protection of industrial system

[www.isi.gr](http://www.isi.gr)



**Interoperability Systems International Hellas (ISI Hellas)** is engaged in the aerospace and defense sector and provides high quality systems to both the domestic and international markets. ISI Hellas is mainly involved in the analysis, definition, design, development, integration, testing and installation of tactical data links (NATO, National and customized solutions), tactical data links planning and networking tools, real-time tactical C2/C3 systems, combat management systems, training, testing and simulation systems and management information systems for defence applications. The Greek Ministry of Defense has inspected the company' s facilities and certified them to the "National Secret" and "NATO Secret" levels. The Company's Development Process and Quality Assurance Program have been certified according to ISO 9001-2008. Its competitive edge lies in its highly specialized s/w development teams, which are led by experienced and professional systems, software, hardware and test engineers who have acquired extensive knowledge and expertise in the technical and operational requirements of complex and advanced defence applications. Of the engineering staff, more than 50% have completed post-graduate studies. ISI Hellas is registered in the registry of the Defence Materiel Manufacturers of the Hellenic Ministry of Defence and is a member of the Hellenic Manufacturers of Defence Material Association, a member of AFCEA and a participant to the NATO TDLITS Syndicate and NATO CWID, a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

[www.isihellas.gr](http://www.isihellas.gr)





Logikon Labs is a high-tech micro entity founded in 2012 and based in Athens, Greece, offering innovative design and consulting services in the field of embedded electronics and software. Logikon Labs focuses on developing embedded processing platforms, with particular emphasis in digital acquisition and real-time data processing, as well as in dynamically reconfigurable and adaptive systems. Typical applications include on-board computers, payload data processing units, complex sensor readout, high-speed real-time data acquisition and processing, high-speed communication links and ground support equipment. The company is driven by the desire of its owners to build a small, versatile team of highly skilled and enthusiastic electronic and software engineering professionals in Greece, making use of cutting-edge technologies to provide innovative electronics and software solutions for the most demanding applications and markets. Logikon Labs is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

[www.logikonlabs.com](http://www.logikonlabs.com)



The **Microwave and Fiber Optics Lab (MFOL) of the National Technical University of Athens**, established in 1985, has been active in a large number of European (RACE, ESPRIT, ACTS, IST) projects as well as in national projects in related areas of microwave, fibre optics and millimeter wave systems and technologies as well as applications relevant to telecommunications, sensor systems, biomedical engineering and wireless technologies. MFOL has been certified according to ISO 9001 since 2000. MFOL in parallel with its research and development activities supports an extensive education programme of coursework in engineering diploma studies, master and Ph.D. thesis.

[mfol.ece.ntua.gr](http://mfol.ece.ntua.gr)



The **Microprocessors and Digital Systems Laboratory (MicroLab) of the National Technical University of Athens** carries out research and educational activities on designing and implementing digital and embedded/microprocessor systems. The MicroLab is organised in three groups, the embedded/microprocessor design group, the VLSI design group and the design automation group. It is mainly involved in the implementation of digital systems, from system level up to chip level, using the most advanced and modern technologies and methodologies available, ranging from microprocessors and microcontrollers, embedded systems development boards, signal processors, special purpose ICs and FPGAs, to the actual design of VLSI Application Specific ICs (ASICs). The basic research activities of MicroLab target embedded applications for multimedia applications, wireless/wired network applications, data acquisition, telecommunications, data encryption and compression, medical applications and consumer electronics.

[www.microlab.ntua.gr](http://www.microlab.ntua.gr)



**Miltech Hellas** was established by a team of engineers with outstanding experience in the electronics sector, telecommunication accessories, aircraft harnesses and other special purpose electronics applications. Miltech specializes in products and projects to satisfy the needs of the international defence industry in the areas of aerospace & avionics electronics; tactical communications; thermal imaging products; avionics cables and harnesses; electronic fuses and modernization programs. The main activities of Miltech includes consulting on high technology projects; design and development of technology edge electronic products and systems in-house or using specialized design houses; production of automatic PCB assembly discrete components and SMD technology, aircraft harnesses (laser-marking, overbraiding, testing) soldering, using robotic SMD assembly line, wave jet, no-clean technology, final integration of electro-mechanical and electro-optical products; environmental testing according to international standards and conformance testing to customer or special product requirements. Miltech is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

[www.miltech.gr](http://www.miltech.gr)



**ICCS/Mobile Radio Communications Laboratory (ICCS/MRCL)** belongs to the School of Electrical and Computer Engineering of National Technical University of Athens and it has been established in 1989. MRCL also works under the Institute of Communication and Computer Systems and is certified with ISO 9001 and ISO 17025 and is in the following research areas: Mobile Radio Communication Systems, Fixed and Mobile Satellite Communication Systems (measurements, modeling, simulations, channel characterization), Wireless Broadband Networks (Cooperative and Cognitive), Impact of non-ionizing E/M Radiation and Emissions from Telecommunication Systems, Development of E/M Spectrum Monitoring Systems, Interference Analysis, Impact of the Atmosphere on the Propagation E/M Waves for Satellite and Terrestrial Communications. MRCL has participated in many EU and ESA Projects including SATNEX I, II and III. ICCS/MRCL has numerous publications in IEEE and contributions in ITU-R and some of ICCS/MRCL-NTUA models are already used as ITU-R Recommendations.

[mobile.ntua.gr](http://mobile.ntua.gr)



**NeuroPublic** is one of the most reliable and dynamic IT companies in Greece. It is the first company that developed web based information system for the public sector with innovative integrated design and high standards. NeuroPublic is a leader in IT for the agricultural sector and has many significant customers. NeuroPublic participates in European R&D projects and is specialized in demanding market sectors. Its systems are characterized by the ability to be harmonized with complex and demanding regulatory provisions. They are integrated to innovative technologies and smart techniques and can be provided as Cloud or ASP services. By continuous investments, the company enhances its staff and expands its activity into products and software services focusing on quality, credibility and stability. NeuroPublic maintains and applies successfully and ISO 9001:2008 Quality System and ISO/IEC 27001:2005 Information Security System. NeuroPublic is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI)

[www.neuropublic.gr](http://www.neuropublic.gr)



**Planetek Hellas** is a company of the Planetek Group operating in the fields of earth observation with activities that expand from the elaboration and exploitation of the satellite products themselves to the design and development of INSPIRE compliant spatial data infrastructures and design and development of space software for the ground segments and onboard data processing. Planetek Hellas replicates the successful market approach of the Group leader Planetek Italia s.r.l., whose applications and solutions are incorporated in the most important European programs in the field of space software and integrated systems for the management, analysis and sharing of land-related information. Planetek Hellas has implemented a variety of ESA (ESAC\_SAPS, WEOS, EO\_Data\_Fusion, Coastal\_Outfall, MarCoast2, NTSS, PARC-Archipelago, SIMS, OZONE 3D), FP7 (ITACA, eENVplus, G-NEXT, SAFER, BIO\_SOS) and EEA (GIO\_Land) projects. Planetek is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

[www.planetek.gr](http://www.planetek.gr)



**Prisma Electronics** has modern manufacturing facilities equipped with peak technology equipment and highly trained and experienced personnel, who handle complex electronics assembly and functional tests in electronic devices. Prisma offers technological solutions in smart sensors wireless networks (PrismaSense) and in digital interactive tour guides (Xenagos). Its R&D dept. is heavily involved in the development of innovative solutions, through national and European R&D projects. Prisma Electronics maintains strategic partnerships with Microsoft (Certified Partner), HP (Preferred Partner), CISCO (SMB Select) and Oracle (Partner Network). Since 2004 Prisma Electronics established successful cooperation with ESA and CERN, participating in R&D efforts and supporting electronics manufacturing of small and medium size productions. Prisma Electronics is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

[www.prisma.gr](http://www.prisma.gr)



**Space Hellas** is a leading system integrator and value-added service provider of integrated ICT and security solutions for enterprises, government and defence organizations, certified according to ISO 9001:2008 and ISO/IEC 27001:2005 standards. Space Hellas employees more than 200 persons, has headquarters in Athens, branch offices in the four biggest cities in Greece, and international presence, with subsidiaries in Cyprus, Romania, Serbia, Malta, and with activities in Albania and the Middle East. Space Hellas is listed in the Athens Stock Exchange since 2000. Its total turnover for 2012 was 48.5M€. The primary activities related to space technologies, include: design and implementation of wired, wireless and satellite communication networks; development and provision of GNSS-based telematics applications; implementation of specialized solutions for telecom providers; development and provision of space-based maritime security services; implementation of meteorological radar ICT and application infrastructure; provision of integrated telecom services to multinational and national enterprises, and to private and government organizations; R&D in ICT, security and space domains. Space Hellas has broad experience in the field of technological studies conducted under ESA, EC and National collaborative R&D projects as well as in national large-scale system integration projects related to Space technologies, including Satellite Communications (SatCom), Earth Observation (GMES) and Navigation (GNSS). Space Hellas is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

[www.space.gr](http://www.space.gr)



The **Space Programmes Unit (SPU) of the Research and Innovation Center Athena** has as principal objective to foster participation of Greece in all aspects of the country's membership in the European Space Agency (ESA) and assist the country's competitiveness by advancing the use of leading-edge technologies in space engineering and science in the national, European and international domains. The principal goal of SPU is to marshal the high technology, intellectual, entrepreneurial, and institutional resources available within Greece in pursuit of programs and projects relating to space activities that have the potential of high payoff in the technical, defence, economic and commercial arenas.

[www.athena-spu.gr](http://www.athena-spu.gr)



**Terra Spatium** offers integrated and advanced geospatial solutions for all markets and applications: starting from a proven capacity to provide dedicated imagery data and tailored geo-information products, and building-up towards the establishment of spatial knowledge management systems and user oriented geo-services. In this effort Terra Spatium carries along more than 20 years of focused experience and the wide range of capabilities within the ATESE group. Terra Spatium maintains strategic partnerships with ASTRUM GEO-Information Services and e-GEOS, for quality earth observation products & services; TRIMBLE, for professional geospatial software tools; RIEGL laser measurement systems, for highly specialized LIDAR sensors; and with SCHIEBEL unmanned air systems, for operational and mission adaptable observation platforms. Terra Spatium creates added value mainly through its ability to provide application specific services, structured geospatial solutions, system design studies and specialized functional support to EO infrastructure. Additionally, it is actively involved in national and European funded research and technology activities that aim to define, state of the art, geospatially enabled capabilities in applications for environmental and natural resources management; telecommunication and engineering; monitoring of utility networks and critical infrastructure; border control; cadastral and land use; maritime surveillance; agriculture; defense and security. Terra Spatium is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

[www.terraspatium.gr](http://www.terraspatium.gr)



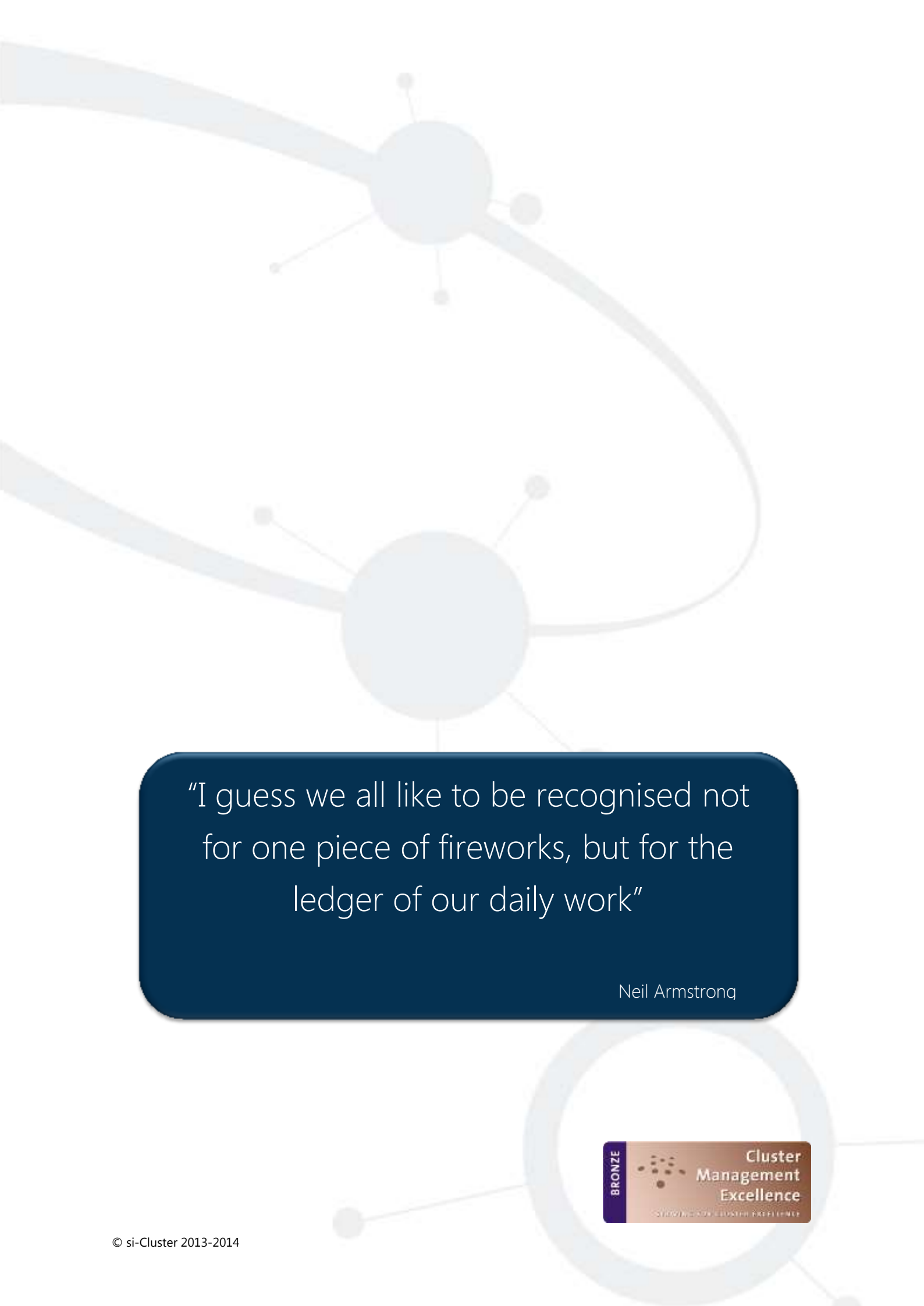
**Theon Sensors** is a privately owned company, incorporated in 1997 and located in Athens. The scope of work is to design, develop and manufacture electro-optical systems and MEMS-based modules. Theon has the capability and the proven experience to develop and fabricate advanced, customized sensing modules for pressure, acceleration and flow applications. All development steps including full custom design of MEMS sensors, integrated electronics and packaging solutions are implemented in house while the fabrication of the silicon dies is outsourced to European foundries. Micro-assembly and integration of the modules are done inside the clean rooms of the privately-owned facilities, supported by highly sophisticated equipment. Full product characterization from wafer level up to module level is also implemented inside Theon facilities. Theon has acquired unique experience the last few years, implementing different ESA activities and undertaking contracts with Prime European Contractors towards the development of Space Qualified Hardware in the area of MEMS sensors and Application Specific Integrated Circuits (ASICs). The developed MEMS components are designed based on European processes; therefore Theon will produce a family of MEMS modules without ITAR restrictions, a key aspect for ESA activities. Theon is a member of the si-cluster (Hellenic Space Technologies and Applications Cluster) and the Hellenic Association of Space Industries (HASI).

[www.theon.com](http://www.theon.com)



The **Very Large Scale Integration Design Laboratory** of the Electrical and Computer Engineering Department of the University of Patras was founded in 1986 and it has been rapidly expanding ever since. Research areas include: microelectronics, integrated circuits, modern electronic design, applications for DSP, CAD tools and parallel processing. The VLSI Laboratory has extensive experience in the research fields of integrated circuits and systems and digital signal and image processing systems. Beyond the postgraduate, educational, and research activities, performed in the context of the doctoral program, the scientists and engineers of the Laboratory also aim to facilitate the proliferation of the use of Application-Specific Integrated Circuits (ASICs) in the Greek industry. The research activities of the Laboratory mainly focus on the following research areas: Embedded systems hardware and software, Low energy and high speed IC design, based on novel technologies, Software optimization for embedded processors, controllers and other CPUs (multi-core architectures, SIMD), Chip Design, Architectures and Hardware Structures, Communication subsystems (algorithms and hardware design), Design of CAD tools and VLSI Digital Signal Processing, Design and implementation of specialized VLSI processors, Design of data security and cryptography systems, Specialised hardware for Wi-Fi networks and error-correction decoders. Additionally, the laboratory has contributed significantly to the development of new high-tech businesses and enterprises, primarily in the area of Patras, a geographic area of intense high-tech activity, which can be attributed, to a certain extent, to the activities of the laboratory.

[www.vlsi.ics.ece.upatras.gr](http://www.vlsi.ics.ece.upatras.gr)



"I guess we all like to be recognised not for one piece of fireworks, but for the ledger of our daily work"

Neil Armstrong





## More information:

A: Sorou 12, GR-15125 Maroussi

T: +30.210.63.00.770

E: [info@si-cluster.gr](mailto:info@si-cluster.gr)

W: [www.si-cluster.gr](http://www.si-cluster.gr)

