Industrial Membership Program

The KIOS Innovation Hub, through the Industrial Membership program, promotes the collaboration between academia, industry, operators of critical infrastructure systems, regulators and governmental organizations with the aim to create an ecosystem that spans the entire innovation cycle from conception of an idea to commercialization.

The Industrial Membership Program introduced by KIOS Innovation Hub comprises of two distinct Membership Levels, the Member and Partner levels. These levels have been designed to include several variable components that allow for a certain flexibility to better respond to the specific needs of each organization. Each Membership Level is fee-based, depends on the size of the organization and is realized through an annual cooperation agreement.
The main benefits of the Membership Levels can be found below:

Member organizations enjoy a standard membership package. Benefits include:

- Collaboration with KIOS CoE in EU/National project proposals
- Participation in networking and collaboration events
- Updates regarding national and European funding opportunities
- Immediate access to white papers, technology roadmaps and the KIOS CoE annual report
- Free access for employees to specialized seminars, training and networking events
- Early access to IP
- Access to co-supervision of students' thesis and dissertations

Partner organizations can enjoy tighter collaboration with the KIOS Innovation Hub. With a stronger financial annual commitment, a partnership allows for significant additional benefits and resources, tailored to the needs of the organization:

- R&D support on customized projects
- Assignment of dedicated, highly-qualified, researchers and developers
- Training and access to the KIOS Testbeds for developing new products and services for Critical Infrastructure Systems
- Preferential and exclusive participation in research proposals and consortia (right-of-first-refusal)

Several prominent industrial organizations and governmental bodies have already joined the KIOS Innovation Hub as members or partners.

- Cyprus Ministry of Transport, Communications and Works
- Electricity Authority of Cyprus
- Cyprus Telecommunications Authority (CYTA)
- Water Development Department (Ministry of Agriculture, Rural Development, Natural Resources and Environment)
- Cyprus Police
- Water Board of Limassol
- Cyprus Energy Regulatory Authority
- Cyprus Transmission System Operator

KIOS CoE Entrepreneurial Network

The Entrepreneurship Network facilitates start-ups, venture capital investments and associated translational activities. Collaborators include:

- Cyprus International Institute of Management (CIIM) - Entrepreneurship and Innovation Centre (ENTICE)
- Local leading tech accelerators Chrysalis-LEAP)
- Local angel investor networks (CyBAN)
- Large clusters abroad (e.g. EIT Digital and EIT Climate-KIC)

KIOS Research and Innovation Center of Excellence

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Pioneering High-Impact Innovation & Entrepreneurship in Critical Infrastructure System Applications

KIOS INNOVATION HUB

Research and Innovation in Intelligent Monitoring, Control, Management and Security of Critical Infrastructure Systems

- Established in 2008 and upgraded to Center of Excellence status in 2017.
- Conducts outstanding, multi-disciplinary research and innovation for critical infrastructure systems such as power and energy systems, transportation systems, telecommunication networks, water distribution networks and emergency response systems.
- Produces new knowledge and advanced engineering tools which can be applied to solve real-life problems with significant impact.
- Has an extended network of collaborators including national and international academic, industrial, and governmental organizations.

Key Achievements

- Awarded more than €40 million from EU and national sources to develop a Center of Excellence in Cyprus in partnership with Imperial College, London, as part of the Horizon 2020 Spreading Excellence and Widening Participation -TEAMING program.
- Recipient of the prestigious ERC Advanced Grant on "Fault-Adaptive Monitoring and Control of Complex Distributed Dynamical Systems".
- Coordinated the COST Action IntelliCIS which had more than 30 partners (one of the largest funded by the European Science Foundation).
- Funded by the Strategic Infrastructure Program of the Research Promotion Foundation in Cyprus.
- Coordinated/participated in more than 80 national and international projects, with significant funding participation coming from the EU and the industry.

ProximAid: An indispensable emergency communications service

ProximAid is an award-winning Android app which enables off-the-shelf smartphones to communicate directly between them (e.g., exchange text, pictures, and video), without any telecommunications infrastructure. ProximAid is particularly useful in emergency response situations and has been tagged as a "Communications Technology Changing the World" by IEEE Communications Society.

Electricity generation with zero CO_2 emissions

This patented system allows the generation of clean, green, and regulated electric energy using renewable and fuel cell sources. This is achieved in spite of the intermittent nature of renewable energy sources. Successful deployment of this novel generation system contributes to the targets set by the EU concerning the energy generation from renewable sources and CO_2 emissions.

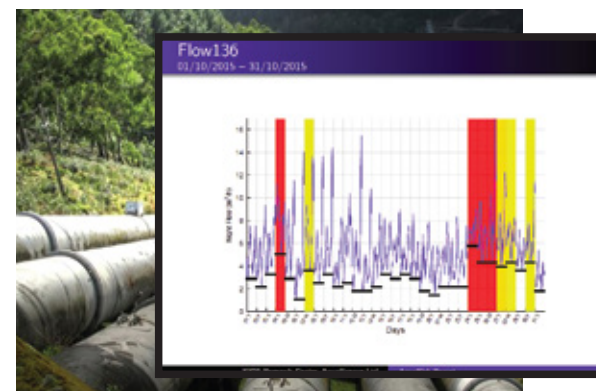### Resilient autonomous estimation of road traffic conditions

This award-winning technology provides autonomous real-time estimation of the traffic conditions of different road links and is resilient to situations where a portion of the available measurement devices is faulty. Reliable real-time traffic state estimation is crucial in a plethora of applications which aim at improving the efficiency of transportation networks and relieving traffic congestion, including route planning and traffic control.

Smartphone technology for indoor localization

This cutting-edge technology allows for real-time geolocation and tracking of mobile devices in large indoor spaces such as shopping malls and hospitals. The technology has won 2nd place in an international Indoor Localization Contest organized by Microsoft Research (USA) and is now being exploited for commercial purposes by a large international hardware and software company in Taiwan.

AquaRisk: Real-time monitoring of smart water networks

AquaRisk is an innovative system for real-time estimation of leakages and quality deterioration risk in water distribution systems. It aims to help water utility companies reduce the time for detecting and localizing an event in their system. This innovation has been awarded an ERC Proof-of-Concept grant for the commercial application of its research results.

Innovation is an integral part of the Europe 2020 strategy to boost economic growth, enterprise competitiveness and job creation. Innovative activities, translated into successful products, are powering Small and Medium Size Enterprises (SMEs) that provide the majority of employment positions in the EU. Innovation is also the main driver to tackle global societal challenges such as climate change, energy scarcity and smart mobility. However, many institutions and organizations, both private and governmental, that stand to gain from innovative new technologies, do not have the expertise or capacity to perform in-house research.

The KIOS Innovation Hub aims to fulfil this role by bringing together research experts, industry, and innovation-focused enterprises to create an ecosystem that spans the entire innovation cycle from the conception of an idea to technology commercialization. The KIOS Innovation Hub, through its Industrial Membership Program, aims to:

- Provide research and innovation services related to monitoring, control, management and security of Critical Infrastructure Systems, based on Information and Communication Technologies
- Stimulate information, technology and talent transfer to and from industry
- Envisage and create innovate products and services jointly with industry

COLLABORATE - INNOVATE