

# EXCELSIOR

ERATOSTHENES:

Excellence Research Centre for Earth Surveillance  
& Space-Based Monitoring of the Environment

@excelsior2020eu



## STAKEHOLDER MEETING

### *“Space technologies and Earth observation’s benefits for Cyprus and Eastern Mediterranean”*

24 November 2017, Nicosia

*The Department of Electronic Communications (DEC) of the Ministry of Transport, Communications and Works (MTCW) of the Republic of Cyprus and the Cyprus University of Technology co-organized a Stakeholder Meeting on ‘Space technologies and Earth observation’s benefits for Cyprus and Eastern Mediterranean’, on Friday the 24<sup>th</sup> of November, 2017 at Nicosia.*



*EXCELSIOR envisions the establishment of a Centre of Excellence for conducting basic and applied research and innovation in the areas of the integrated use of remote sensing and space-based techniques for monitoring the environment. It also aspires to create 200 new job positions and placing Cyprus on the international map for the study of the Environment through space technologies. EXCELSIOR is based on the existing infrastructure in research and innovation that has been developed during the last 10 years by the ERATOSTHENES Research Centre at the Department of Civil Engineering and Geomatics at the Cyprus University of Technology which is based in Limassol with related infrastructure in all the coastal municipalities the island.*



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The National Stakeholders meeting of EXCELSIOR project was organized on Friday the 24th November, 2017 in Cleopatra Hotel at Nicosia. More than 100 National Stakeholders attended the meeting which was intended to showcase the opportunities of the EXCELSIOR project and the benefits of Space technologies and Earth Observation for Cyprus and the Eastern Mediterranean. During the meeting, the EXCELSIOR team explored options for extending partnerships and common actions with National Stakeholders from the Public and Private Sectors, the Academia and the Industry with the ERATOSTHENES Centre of Excellence (CoE) which will be established through the realization of the EXCELSIOR project. This meeting was under the auspices of the Honorable Minister of Transport, Communications and Works, Mr Marios Demetriades. On his behalf, the Chief Administrative Officer Mrs Aphrodite Koufterou greeted the meeting and stressed the vehement support of the Ministry towards the EXCELSIOR project. The meeting was also addressed by Mrs Ioanna Kleanthous, Director of Planning, Directorate General for European Programmes, Coordination and Development.



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1. **Professor Diofantos G. Hadjimitsis**, the Coordinator of the EXCELSIOR project, Cyprus University of Technology (CUT).
2. **Georgios Komodromos**, Director of Department of Electronic Communications (DEC), Ministry of Transport, Communications and Works (MTCW) of the Republic of Cyprus.
3. **Dr Rosa Lasaponara** from CNR.
4. **Dr Gunter Schreier**, German Aerospace Centre (DLR).
5. **Dr Albert Ansmann**, German Leibniz Institute for Tropospheric Research (TROPOS).
6. **Dr Haris Kontoes**, Research Director, National Observatory of Athens (NOA).

Also, addresses to the meeting were delivered by the Vice-Rector of Economic Planning and Development of Cyprus University of Technology Professor Christis Chrysostomou and Mrs Constantina Makri, Scientific Officer at the Research Promotion Foundation (RPF).

During the meeting, presentations were made regarding the action objectives of the project from all partners: Cyprus University of Technology, acting as the coordinator, the German Aerospace Centre (DLR), the National Observatory of Athens (NOA), the German Leibniz Institute for Tropospheric Research (TROPOS) and the Ministry of Transport, Communications and Works (MTCW) of the Republic of Cyprus, through its Department of Electronic Communications (DEC). Also, important players in the Industrial and Entrepreneurship Sector presented the benefits resulting from their collaboration with the EXCELSIOR project, placing the ERATOSTHENES Centre of Excellence as a strategic partner in their action and strategic planning.



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6. **Mrs Aphrodite Koufterou** , Chief Administrative Officer, Ministry of Transport, Communications and Works (MTCW).
7. **Professor Christis Chrysostomou**, Vice-Rector of Economic Planning and Development of Cyprus University of Technology.
8. **Mrs Ioanna Kleanthous**, Director of Planning, Directorate General for European Programmes, Coordination and Development.
9. **Dr Panayiotis Philimis**, President of the Cyprus Association of Research and Innovation Enterprises.
10. **Mrs Constantina Makri**, Scientific Officer at the Research Promotion Foundation (RPF).
11. **Mr. Vincent Kerbaol**, Head of CLS (Collecte Localisation Satellite)
12. **Mr.Kendeas Karantonis**, Satellite Engineering-Hellas Sat4 Program Manager.

The EXCELSIOR project aims also at creating an inspiring environment for conducting basic and applied research and innovation in the areas of the integrated use of remote sensing and space-based techniques for monitoring the environment. Environment has been recognized by the Smart Specialization Strategy for Cyprus (S3Cy) as the first horizontal priority for future growth of the island. The project is fully aligned with the Smart Specialization Strategy for Cyprus in many areas, significantly enhancing the impact of the targeted regional and national investments, namely, Environment and ICT. The ERATOSTHENES CoE, with its expertise and infrastructure, could be a hub for the Earth Observation activities in the eastern Mediterranean area, due to the key geostrategic position of Cyprus. The EXCELSIOR Teaming proposal was ranked 1st (attaining full marks 15/15, “Excellent”) on a pan-European scale, among 208 proposals submitted to Programme “Teaming for Excellence” Phase 1, which is part of the European Union’s (EU) Horizon 2020 Framework for Research and Innovation.



**EXCELSIOR’s Phase 1 is supported by more than 25 Public Sector organizations, including Ministries and Municipalities, also organizations and networks at a national level (e.g., ETEK) and at an international level (e.g., NASA, ISPRS, NEREUS, DLR, GEO, ACTRIS), as well as by Research and Innovation companies. The Ministry of Transport, Communication and Works strongly supports the EXCELSIOR Project by any means and shares a common perspective in the establishment of the ERATOSTHENES Centre of Excellence.**



<http://www.excelsior2020.eu/23-november-2017-stakeholder-meeting-nicosia-cyprus/>

## FEATURED INTERVIEWS

### STELIOS ACHNIOTIS, President of Cyprus Scientific and Technical Chamber (ETEK)

Interview to Dr Georgia Kouta, *Post-Doctoral Researcher, ERC*



*How do you perceive the impact of the establishment of an Earth Observation Centre of Excellence in Cyprus, on both the domestic and international level?*

I believe this is a very innovative endeavor, as such a Centre is much needed in Cyprus. The establishment of an Earth Observation Centre of Excellence in Cyprus will have tremendous impact not only in Cyprus but also in Europe, the Middle East and globally. The Centre of Excellence will be ideally suited to encourage innovation in both research and industry through the use of Earth Observation. This is an excellent opportunity to create more jobs in which Earth Observation techniques can be applied to resolve issues. The integration of different Earth Observation techniques for a better understanding, monitoring and consequently better exploitation and protection of the physical, built and human environment provide critical information through end user products that are crucial for more informed decision making oriented towards protection and management of environment and resources.

**The Government of Cyprus and many semi government agencies, as well as industry and our members, will definitely benefit from the establishment of the Centre of Excellence, as it will provide them with resources to ensure public health and safety.**

It is my opinion that such a Centre can also prove invaluable to engineers and other professionals, as it will provide them with new data that they can incorporate into their practices. This will also have a positive impact on the economy, as it will provide new jobs and opportunities to young professionals in the fields of engineering.



*Considering that the ERATOSTHENES CoE objectives fully comply with the Smart Specialisation Strategy for Cyprus, which would you consider to be the economic benefits from the establishment of this CoE for Cyprus in the forthcoming years?*

The economic benefits of the Centre of Excellence are quite substantial, considering that the Centre is in full compliance with the Smart Specialisation Strategy for Cyprus, which includes Tourism, Energy, Agriculture & Food Industry, Built Environment & Construction Industry, Transportation & Maritime Industry and Health.

**As engineers, we are primarily focused on the Built Environment/Construction industry and the Transportation/Maritime industry, which in turn affect the Tourism industry, which is the main industry in Cyprus.**

Earth Observation applications that can be developed for the Built Environment & Construction industry and the Transportation & Maritime industry will significantly affect the productivity of engineers in a positive way, by providing them with the necessary information and tools to do their jobs more efficiently and ensure public safety.

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## FEATURED INTERVIEWS

### STELIOS ACHNIOTIS, President of Cyprus Scientific and Technical Chamber (ETEK)

*How can a collaboration between ETEK and ERATOSTHENES CoE help to tackle important scientific and societal challenges in Cyprus?*

**I believe that a collaboration between ETEK and the ERATOSTHENES Centre of Excellence will contribute greatly to public safety and quality of life. Some of the ways that we can work together include:**

- Identification and monitoring of natural hazards, especially earthquakes, landslides, floods and droughts that are affecting different areas of Cyprus.
- Sustainable urban development and planning of infrastructures by examining urban sprawl and land use/changes.
- Development of construction material with reduced environmental impact.
- Incorporating data regarding car emissions and air pollution in road design to minimize dangerous clusters of air pollution.
- Incorporating information regarding air quality, such as dust intrusion, high temperatures and high pollen concentrations to minimize poor air quality.
- The use of new construction methods in road transportation that result in the reduction of construction costs, improved maintenance of transportation networks and infrastructure and enhanced safety.
- The conservation, restoration, integration, enhancement and re-use of heritage buildings in the modern built environment and life can be achieved through the monitoring, preservation and promotion of Cultural Heritage.

*The Centre of Excellence will be ideally suited to encourage innovation in both research and industry through the use of Earth Observation. This is an excellent opportunity to create more jobs in which Earth Observation techniques can be applied to resolve issues.*

*What do you think should be changed to improve the use of Earth Observation data especially in Cyprus?*

I believe that engineers are unaware of how Earth Observation data can be used in their daily work-load and that education is necessary to maximize the potential use of Earth Observation data. As Cyprus is located between Europe, Africa and Asia, there is a wealth of environmental, geographical, geological, marine and atmospheric data that can be used by professionals in order to do their job better and to provide appropriate information to make informed decisions regarding the protection and management of environment and resources.

*Are there any limitations in the acquired Earth Observation data/services that prevent you from carrying out productively your tasks?.*

The main limitation, in my opinion, is that engineers don't know how Earth Observation data and services can assist them in being more productive. Education about Earth Observation data and relevant applications, that are explained in a manner that is geared towards the engineering profession, is absolutely necessary so that engineers can access the wealth of Earth Observation data available and enhance their work performance. Also, tools need to be developed in order to assist the engineers to fully incorporate Earth Observation data in their daily work.

## FEATURED INTERVIEWS

### Dr PANAYIOTIS PHILIMIS, President of Cyprus Association of Research and Innovation Enterprises (CARIE)

#### Interview to Dr Georgia Kouta, *Post-Doctoral Researcher, ERC*

*How do you perceive the impact of the establishment of an Earth Observation Center of Excellence in Cyprus on both the domestic and international level?*

Earth Observation (EO) has demonstrated a growing scientific, social, economic and political importance in recent years. With Cyprus strategic position located in an area with a geographical and political significance, we strongly believe that a Center of Excellence (CoE) will have a huge impact both at national and international level. Our association has a number of innovative SMEs operating in the Earth Observation and data services industry; taking into account the high increase of research and innovation potential of Cyprus in the recent years, we highly recommend the creation of a CoE for Earth Observation and Spaced based Applications

*Considering that the ERATOSTHENES CoE objectives fully comply with the Smart Specialisation Strategy for Cyprus, which would you consider to be the economic benefits from the establishment of the CoE for Cyprus in the forthcoming years?*

The number of useful applications both in public and private sectors are numerous. We envisage the creation of new innovative SMEs and startups while existing SMEs and related industry can benefit from new technological innovations and infrastructure offered by ERATOSTHENES CoE. All smart specialization sectors such as Energy, Health, Tourism, Maritime etc. are directly linked with services in EO and space based applications.

**We estimate that the impact on Cyprus economy within the next decade could lead to an increase of GDP by 2%.**



*ERATOSTHENES CoE envisions the establishment of a modern, innovative and autonomous research Centre in Cyprus which can bridge the gap between academic research and entrepreneurial innovation. How would you consider the role of CARIE to be in this objective?*

CARIE association is the ultimate link between Cyprus academia and industry since our members are focused in producing innovative products and services by investing in research and development.

CARIE could take the role of bridging this gap by ensuring constant transfer of knowledge and technology from ERATOSTHENES to both CARIE members but also other relevant industries.

**Our members are the most active SMEs in the European research and innovation competitive funding programs, being ranked first in EU with a 40% share of SMEs in the country's R&I budget.**

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## FEATURED INTERVIEWS

### Dr PANAYIOTIS PHILIMIS, President of Cyprus Association of Research and Innovation Enterprises (CARIE)

Collaborations for development of technological advanced products and services could lead to several type of collaborations for the joint execution of both research and commercial projects. We envisage that government will promote the public-private partnerships so that enterprises can join forces with ERATOSTHENES CoE to implement large public and private projects

*Considering the current impact of industrialization and entrepreneurship on the economy of Cyprus, as well as the existing entrepreneurial culture, which are the most important aspects of the business model to be promoted through this Centre according to your opinion?*

We strongly believe that ERATOSTHENES can be the first CoE to offer an open innovation collaboration platform where industry, government, startups and other interested parties could have access to knowledge, technologies and infrastructure which can be offered based on a licensing/royalties model. In addition, the open platform could contribute in generating new innovations with participation of several interested parties into common interest areas, challenges or missions.

Sharing of resources and knowledge by all stakeholders could have a huge impact on the process effectiveness in creating business opportunities based on ERATOSTHENES' technological and infrastructural capacities.

*A few words on the current status of the entrepreneurship and innovation-led growth in Cyprus, the prospects and possible opportunities for development.*

Cyprus entrepreneurial ecosystem, although is at an early stage, it has been dramatically changed the last few years with the current government introducing new policies based on innovation. Eventhough we are still at the beginning of the implementation, ERATOSTHENES could be the CoE that can play a key role in the ecosystem, contributing to the creation of spin offs, startups and assist SMEs and large enterprises in developing new and innovative products and services.



## ERATOSTHENES JOINS FABSPACE 2.0 SERVICE



### What is FABSPACE 2.0

An open-innovation network for geodata-based innovation – by leveraging Space data particularly in Universities; A one-stop shop-access to Space data and a wide range of other data as well as free software and data processing tools to develop new digital applications.

<https://www.fabspace.eu/>

The ERATOSTHENES Research Center is pleased to announce that it has become an associated partner to the FabSpace 2.0 Project, led by Université Paul Sabatier, which aims at fostering co-creation of innovative Earth Observation applications by enabling Universities to become Open Innovation Centres for their region.

The FABSPACE and EXCELSIOR project can work together to foster innovation EO solutions, support further business development, as well as exploit, sustain and disseminate EO applications and services.

ERATOSTHENES strongly supports the concept of creating a network of partnering Universities in many European countries for sharing good practices regarding educational programs and business mentoring as well as innovative application ideas developed by interdisciplinary project teams, based on using a free geo-information platform to access and process Earth Observation data and geo-spatial data.

We believe that the FabSpace approach brings a significant added-value to the promotion of new Earth Observation based applications and paves the way for the creation of new start-ups, providing job opportunities and professional growth for students and researchers, establishing mutually beneficial relationships in Europe and beyond.

THE OPEN-INNOVATION NETWORK FOR GEODATA-DRIVEN INNOVATION

BY LEVERAGING SPACE DATA IN UNIVERSITIES 2.0.



## LATEST EVENTS

# ETEK InfoDay – Technical Stakeholder Meeting for the EXCELSIOR

13<sup>th</sup> December, Limassol



**The Department of Electronic Communications (DEC) of the Ministry of Transport, Communications and Works (MTCW) of the Republic of Cyprus, the Cyprus Scientific and Technical Chamber (ETEK) and the Cyprus University of Technology co-organized a Stakeholder Meeting on “Space technologies and Earth observation’s benefits for Cyprus and Eastern Mediterranean”, on Wednesday 13<sup>th</sup> December, in the Senate Room at the University of Technology Cyprus, in Limassol.**

*The National Stakeholders meeting of EXCELSIOR project was organized on Wednesday, 13<sup>th</sup> December, 2017 in the Senate Room. The meeting which was attended by representatives from the Public and Private Sectors, the Academia and the Industry, covering multiple sectors such as Engineering, Technology, Topography, Architecture but also Culture and the Environment. The aim of the meeting was to discuss the benefits of the establishment of the ERATOSTHENES Centre of Excellence (CoE) which will be established through the realization of the EXCELSIOR project for Cyprus and the Eastern Mediterranean, as well as to map the needs and limitations in the use of space technologies.*

*The meeting which forms part of more elaborate and specific meetings that will be co-organized from the EXCELSIOR and supporting partners, was addressed by Georgios Komodromos, the Director of the Department of Electronic Communications (DEC), Ministry of Transport, Communications and Works (MTCW) of the Republic of Cyprus. Mr. Komodromos stated the full support demonstrated by the Ministry towards the objectives and goals of EXCELSIOR and its importance for the future of the Electronic Communications in Cyprus. With the contribution of the CoE in the fields of Research and in the creation of new innovative services and products, the Centre will place Cyprus on the international map for Earth Observation*

## LATEST EVENTS



The Rector of the Cyprus University of Technology, Prof. Andreas Anayiotos, greeted the collaboration between the ETEK, the statutory Technical Advisor to the State and the umbrella organization for all Cypriot Engineers, with the ERATOSTHENES Research Centre and the EXCELSIOR project, since members of the ETEK can benefit from the multiple integrated uses of remote sensing and space-based techniques for monitoring the environment. Moreover, Prof. Anayiotos stressed that the University has already committed to support the Centre of Excellence which will be established during Phase 2, by providing infrastructure and both financial and in-kind contributions, so that all of its objectives are met. Professor Christis Chrysostomou, Vice-Rector of Economic Planning and Development of Cyprus University of Technology was also present at the meeting and expressed his satisfaction with the progress of the stakeholder engagement.

On behalf of ETEK, the member of the Administrative Committee, Mr Ntinos Nicolaides, congratulated EXCELSIOR and the members of the ERATOSTHENES Research Centre for their work and contribution in highlighting the significance of Earth Observation for Cyprus. Regarding the collaboration between his organization and ERATOSTHENES, he mentioned that ETEK fully supports the effort that has been initiated for the establishment of an autonomous and dynamic Centre of Excellence in Cyprus which will benefit all Cypriot Engineers with the provision of information, data and the development of new products and services.

Finally, a short address was delivered on behalf of the Limassol Municipality, by the Vice-Mayor Mr. Nikos Sykas, who stressed the support to EXCELSIOR from the early beginning and its benefits for the city where the new Centre will be established, mentioning the development opportunities and the job openings for more than 200 researchers, scientists, engineers and administrative staff.



## LATEST EVENTS

During the Meeting, Dr Kyriacos Themistocleous, Stakeholder Manager of EXCELSIOR, presented the ways in which interested parties can be affiliated with the new Centre, offering a variety of opportunities for collaboration. The Coordinator of the project, Prof. Diofantos G. Hadjimitsis, made a presentation of the fields of activity that the new Centre will focus on, which include, inter alia, the Environment, Agriculture, Archaeology, Defense and Security, Water Management, Meteorology, Atmosphere, Electronic Communications, Forestry, Civil Defense etc. He also spoke about the importance of Open Data, like the SENTINEL from Copernicus and underlined that the project is fully aligned with the Smart Specialization Strategy for Cyprus in many areas, significantly enhancing the impact of the targeted regional and national investments, namely, Environment and ICT.

The Senior Researcher of CUT, Dr Kyriacos Neocleous and the Project Manager of EXCELSIOR, Dr Rodanthi-Elisavet Mamouri, presented the EXCELSIOR questionnaire to the participants which aimed at mapping the current needs and limitations in using space technologies. The participants discussed their organizations' needs and conversed with the ERATOSTHENES researchers for the benefits of their collaboration with the Centre.



## LATEST EVENTS



### EXCELSIOR at Teaming Phase 1 Coordinators Meeting

9<sup>th</sup> November 2017, Brussels

Professor Diofantos Hadjimitsis (EXCELSIOR's coordinator) and Dr Kyriacos Neocleous (member of EXCELSIOR's quality assurance team) attended the Teaming Phase 1 Coordinators Meeting, an event organised on 9<sup>th</sup> November 2017 by the EC's Research Executive Agency in Brussels (Covent Garden Building). The meeting included welcome speeches by Marc Bellens (Head of Department REA-B) and Mr. Peter van De Zandt (Head of Unit REA-B5) as well as presentations on a range of aspects relating to Phase 1 and Phase 2 Teaming projects. Professor Andreja Kutnar (Director of the ongoing InnoRenew Centre of Excellence) also made a presentation on her experience as coordinator of a Teaming Phase 2 project, while Inka Vaverkova (representative of the Czech Ministry of Education) made a presentation on the role of managing authorities in Teaming projects. At the end of the meeting, Professor Hadjimitsis and Dr Neocleous had a bilateral meeting with Mr Yiannis Vacondios (EXCELSIOR's EC project officer) to discuss the progress of the EXCELSIOR project. During the event, the EXCELSIOR team also had the opportunity to meet the coordinators of other ongoing Teaming Phase 1 projects



## LATEST EVENTS

### The EXCELSIOR meets Professor of Physics, Dimitris Nanopoulos

12 December 2017

During the Ten Years Celebration of the Cyprus University of Technology, Prof. Hadjimitsis had the opportunity to introduce the EXCELSIOR project and bring to Prof. Nanopoulos' attention the work that ERATOSTHENES Research Centre has been doing the past ten years. Prof. Nanopoulos was specifically informed for the benefits of the establishment of a Centre of Excellence for Earth Observation in Cyprus and wished the team, the best of luck during the Phase 2 of the project.



### EXCELSIOR at DECATASTROPHIZE Command Post / Table Top Exercise

4-5 December 2017, Paphos, Cyprus



1. Attendees of the DECATASTROPHIZE exercise and workshop

Professor Diofantos G. Hadjimitsis provided a thorough presentation of the EXCELSIOR project during the final meeting of the DECATASTROPHIZE project on 4<sup>th</sup> and 5<sup>th</sup> of December 2017. The DECATASTROPHIZE demonstrated a Command Post / Table Top Exercise in Aloe hotel, in Paphos, while in the following day a workshop was organized. Both the exercise and the workshop concerned the use / demonstration of the final product of the EU co-funded project (DECATASTROPHIZE) which is an online platform to be used in preparation and prevention multi-hazards, i.e., natural disasters.

This project deals with the creation of an online platform for the early warning, preparation and prevention of natural disasters. The use of the platform helps the decision makers (e.g., Civil Defence, Fire Brigade, Department of Forests, etc.) to take the right decisions in disaster management and which are required to take thorough decisions under the pressure of time.

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## LATEST EVENTS

The partners involved in the project are: Cyprus University of Technology (Coordinator), Cyprus Civil Defence, Atlantis Consulting Company (Cyprus), French Geological Survey (Bureau de Recherches Géologiques et Minières), Foundation for Research & Technology (Greece), Technical University of Crete (Greece), Geoview Systems Számítástechnikai Kft. (Hungary), European Research Institute (Italy), Geosolutions (Italy) and University of Alcalá (Spain).

Prof. Hadjimitsis, Dr Kouta, Dr Papoutsas and Mr Mettas had the opportunity to promote EXCELSIOR during the workshop and the final exercise. Prof. Hadjimitsis presented the 10 years activities of the ERATOSTHENES R.C in the areas of space, remote sensing and geoinformatics. He demonstrated the importance of using Copernicus data for the disaster management.

DECATASTROPHIZE's budget amounts to € 875,000 and is co-funded by 75% of the European Commission's Humanitarian Aid and Civil Protection (ECHO) and 25% by own contribution.



**2. Attendees of the DECATASTROPHIZE during EXCELSIOR presentation**



**3. Mr Costas Papageorgiou from the Department of Forests, Dr Christiana Papoutsas and Prof. Diofantos G. Hadjimitsis**



**4. Prof. Diofantos G. Hadjimitsis presenting the EXCELSIOR**

## EXCELSIOR at the 2nd Pan-Hellenic Conference on Digital Cultural Heritage (EUROMED 2017)

**1-3 December 2017 Volos, Greece**

The EXCELSIOR project was presented at the 2nd Pan-Hellenic Conference on Digital Cultural Heritage (EUROMED 2017) that took place in Volos, Greece from 1-3 December, 2017. Dr Kyriacos Themistocleous presented a paper on "Earth Observation and Space-based applied to Cultural Heritage: current capabilities and future perspectives", which included a poster presentation and discussion on the EXCELSIOR project and future collaboration. During the EUROMED 2017 Conference, Dr Themistocleous presented also other running projects of the ERATOSTHENES Research Centre in which Earth observation is used for cultural heritage such as the ATHENA Twinning Project 'From space to ground. Digital techniques for the investigation of monuments and sites', the CLIMA 'Cultural Landscape risk Identification, Management and Assessment' and PROTHEGO, 'PROtection of European Cultural Heritage from Geo-hazards'.



### Paper presentation

*The Establishment of the Excellence Research Centre for Earth Surveillance and Space-Based Monitoring of the Environment (EXCELSIOR) for the eastern Mediterranean Region*

<http://euromed2017.eu/euromed2017-conference-proceedingsboa/>

## LATEST EVENTS

### Launch Ceremony of RISE: Research Centre on Interactive Media, Smart Systems and Emerging Technologies

29 November 2017 Nicosia, Cyprus

The largest research project in Cyprus, RISE, a Research Centre on Interactive Media, Smart Systems and Emerging Technologies has officially been launched (Phase 2), during a well-attended event that was held on the 29th November 2017. The event was greeted by the Rector of the Cyprus University of Technology Prof. Andreas Anayiotos who mentioned in his speech that :

“The Cyprus University of Technology is very proud to be part of this effort and have a substantial contribution with its knowhow. Our University is committed to the funding of the project with a significant cash contribution as well as an in kind contribution. The project’s aims to have great impact through excellence in research and innovation, are aligned with the vision of our institution to promote excellence in research and innovation and acquire international recognition.



1. Rector of CUT Prof. Andreas Anayiotos

Our recent international ranking in The Times Higher Education World University Rankings 2018, in the top position among the local institutions in Cyprus and between the 350 and 400 best Universities in the world, is a vindication of our relentless efforts to implement our vision.” The Rector also mentioned that CUT supports EXCELSIOR which has received full marks in the overall evaluation at the pan-European level. Specifically, he mentioned that “we are confident that all these efforts will boost our country’s performance in research and expand its innovation ecosystem.”

Among the invited guests, Prof. Diofantos G. Hadjimitsis had the opportunity to discuss with the participants the benefits of the ERATOSTHENES Centre of Excellence for Cyprus and the wider Eastern Mediterranean Region.



2. The Rector Prof. Anayiotos with Vice Rectors Prof. Hadjimitsis and Prof. Chrysostomou



3. The President of the Republic of Cyprus, Mr Nikos Anastasiades

## LATEST EVENTS

### EXCELSIOR at the PROTHEGO internal project meeting in Jordan

17-18 November 2017, Petra, Jordan

PROTHEGO workshop and 5th consortium meeting — Petra, Jordan. The EXCELSIOR project was presented at the 5th Internal meeting of the PROTHEGO project in Petra, Jordan. The participants included representatives from Al – Hussein Bin Talal University, Petra archeological park, CH European Joint Program Initiative on Cultural Heritage, the Italian scientific attaché II Cairo Embassy, the Institute for Environmental Protection and Research in Italy, the British Geological Survey, Natural Environment Research Council in the UK, the University of Milano-Bicocca in Italy and the Geological Survey of Spain. The PROTHEGO project is funded in the framework of the Joint Programming Initiative on Cultural Heritage and Global Change (JPICH) – HERITAGE PLUS, under ERA-NET Plus and the Seventh Framework Programme (FP7) of the European Commission and aims to make an innovative contribution towards the analysis of geohazards in areas of cultural heritage in Europe.



#### Paper presentation

The Establishment of the Excellence Research Centre for Earth Surveillance and Space-Based Monitoring of the Environment (EXCELSIOR) for the eastern Mediterranean Region

<http://euromed2017.eu/euromed2017-conference-proceedingsboa/>



### EXCELSIOR project presented during CLIMA project meeting in Italy

14 November 2017, Viterbo, Italy

Mr. Marios Tzouvaras, Research Associate at the ERATOSTHENES Research Centre (CUT) presented the current activities of the ERATOSTHENES Research Centre and described the vision to upgrade the existing Research Centre into a sustainable and autonomous Centre of Excellence in the field of Earth Observation and Space-Based Monitoring of the Environment, in the framework of EXCELSIOR project. The importance of collaboration with acknowledged research centres was also highlighted. Participants were from the Università degli Studi della Tuscia, University of Stirling, University of Copenhagen and Alma Sistemi SAS.



## LATEST EVENTS

### EXCELSIOR meets the Laboratory for Scientific Computing in Cambridge University in UK

7 November 2017, Cambridge, UK

Dr Christiana Papoutsas from the ERATOSTHENES Research Centre, Cyprus University of Technology visited the Maxwell Centre where she met with the Head of the Laboratory for Scientific Computing, Cambridge University, Dr Nikos Nikiforakis and his team members. During this meeting, Dr Papoutsas presented the existing activities of the ERATOSTHENES Research Centre and described the vision of the EXCELSIOR project to upgrade the existing ERATOSTHENES Research Centre into a sustainable and autonomous Centre of Excellence in the field of Earth Observation and Space-Based Monitoring of the Environment. She focused on the importance of collaborating with acknowledged research centres which have an extensive experience in working with partners from the industrial sector. During this meeting, Dr Nikos Nikiforakis gave helpful comments and insightful suggestions based on his broad experience.



Prof. Nikos Nikiforakis, Head of the Laboratory for Scientific Computing and Dr Christiana Papoutsas

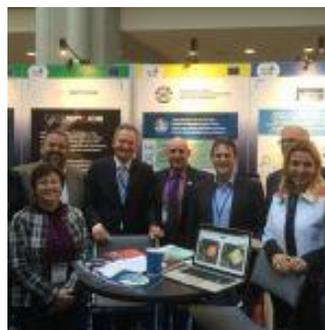


The team from the Laboratory for Scientific Computing with Dr Christiana Papoutsas

### EXCELSIOR at the GEO-XIV Plenary, Washington D.C. through the GEO-CRADLE Stand, USA

23- 27 October 2017, Washington, USA

EXCELSIOR has been presented at the GEO-CRADLE stand and session at the GEO-XIV Plenary in Washington D.C. through the NOAA team (coordinated by Dr Haris Kontoes)



## LATEST EVENTS

### EXCELSIOR Project at the 17th International Scientific and Technical Conference FROM IMAGERY TO DIGITAL REALITY: ERS & Photogrammetry in Israel

16- 19 October 2017, Hadera, Israel

George Melillos from Cyprus University of Technology presented The EXCELSIOR Project at the 17th International Scientific and Technical Conference FROM IMAGERY TO DIGITAL REALITY: ERS & Photogrammetry in Hadera, Israel on Monday, 16 October 2017. During the presentation, he had the opportunity to present the project to the conference participants and address the potential impact of the EXCELSIOR project for remote sensing applications in Europe and the eastern Mediterranean region. During the conference, a wide range of topics were presented which addressed the latest developments in Earth Observing systems, technologies and applications. Further, Mr Melillos met with Professor Ammatzia Peled who is with the University of Haifa, in the Department of Geography and Environmental Studies and Head of the GIS and Remote Sensing Laboratories.

#### Paper presentation

1/ ERATOSTHENES: Excellence Research Centre for Earth Surveillance and Space-Based Monitoring of the Environment The EXCELSIOR Horizon 2020 Teaming Project <https://goo.gl/vJvWcg>



1. George Melillos with Prof. Ammatzia Peled, University of Haifa



2. The launching of the Technical Conference in Hadera.

### EXCELSIOR meets Professor Eugene Kandel, CEO of the Start-Up Nation Central of Israel in the Cyprus University of Technology Premises.

20 October 2017, Limassol, Cyprus

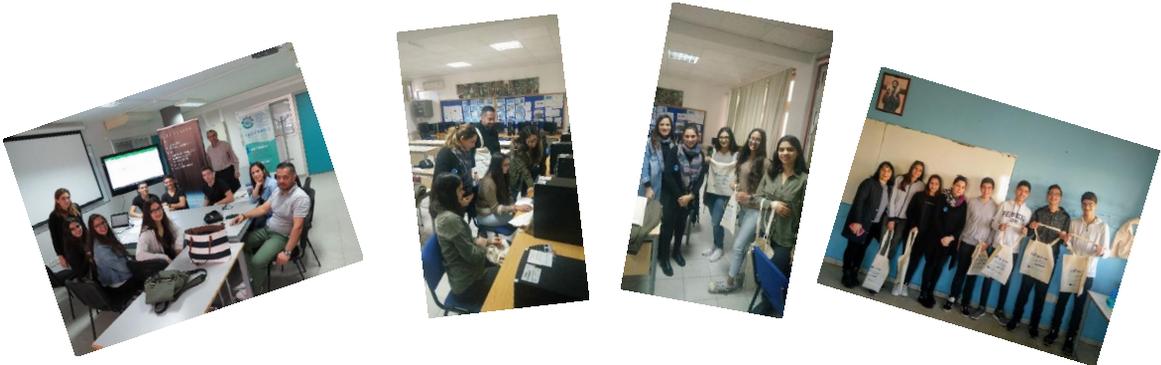
During the visit of Professor Eugene Kandel, CEO of the Start-Up Nation Central of Israel, which has been supported by the Cyprus Ministry of Foreign Affairs, Professor Andreas Anayiotos the Rector of the Cyprus University of Technology (CUT) highlighted the importance of promoting further the Research and innovation collaborations between Cyprus and Israel in several areas such as Earth observation and Space Technologies, Public Health, Agriculture Technology. The Rector, Prof. Andreas Anayiotos leads the innovation management activities of EXCELSIOR. The Vice-Rector of Academic Affairs and Coordinator of EXCELSIOR had the opportunity to discuss with Professor Eugene Kandel and the Israel Embassy representatives about the importance of promoting further the Israel-Cyprus R & D activities in Earth Observation through EXCELSIOR.



## STUDENTS, SCHOOLS AND EXCELSIOR

# ERATOSTHENES Research Centre supports schools participating in research competitions through EXCELSIOR

ERATOSTHENES Research Centre, under the EXCELSIOR project's activities, supports schools participating in national and European research competitions. Our aim is to support students during their first contact with research, science and technology and encourage them to become young researchers. Students participate in research competitions by forming working groups and are guided by their teachers. In addition, researchers from the ERATOSTHENES Research Centre are also involved to guide the group through meetings and communication and assist them during all stages of their research work. These include the study of relative publications (literature review), set the question/hypothesis, design the experimental methodology, observation and analysis of the results and finally, conclusions and dissemination of the outcomes of the study. Currently, we are working with three research groups. Two groups at the lyceum 'Apostolon Petrou kai Paulou' are assisted by our researchers, Dr Christiana Papoutsas and Dr Kyriacos Themistocleous in close collaboration with their teachers, Mrs Sofia Kazeli, Mr Michalis Ioannou, Mr Nicolas Stratis, and Mr Nikos Nikolaou. The first group will participate in the 'Stockholm Junior Water Prize' aiming to build a spectral library for monitoring litter pollution over coastal areas in Limassol. The second group will participate in the 'Competition for Young Researchers 2017-2018' organised by the Cycys aiming to study the urban heat effect using Earth Observation. The third group is at the 'Gymnasium of Agios Neophytos Kato Polemidia' and is supported by researcher Dr Christiana Papoutsas and teacher Mrs Alexandra Perdiou. This group aims to study the effect of microwave radiation on seed germination and will participate in the contest 'Technology and Innovation in the Education TEKE 2017-2018' organised by the Cyprus Research Promotion Foundation. All the activities fall under the umbrella of the EXCELSIOR project.



A glimpse of School activities related with the EXCELSIOR thematic areas



## MEET EXCELSIOR AT THE FORTHCOMING EVENTS

### Session AS5.1: Earth surveillance and space-based monitoring of the environment: Integrated approaches, during EGU General Assembly in Austria.

8–13 April 2018, Vienna, Austria



A Session entitled “AS5.1 Earth surveillance and space-based monitoring of the environment: Integrated approaches” will be organized at the next European Geosciences Union General Assembly in Vienna, Austria, 8–13 April 2018. The Session will be held under the Atmospheric Sciences Discipline Sessions. To submit an abstract, use the link <https://www.egu2018.eu/>; choose “Call-for-abstracts” and then from “Selected programme groups”, select “Atmospheric Sciences” and submit your abstract to Session “AS5.1”.

Alternatively, you can go directly to:

<https://meetingorganizer.copernicus.org/EGU2018/sessionprogramme>

Select “Atmospheric Sciences” and then submit your paper to Session “AS5.1”.

More info is available at:

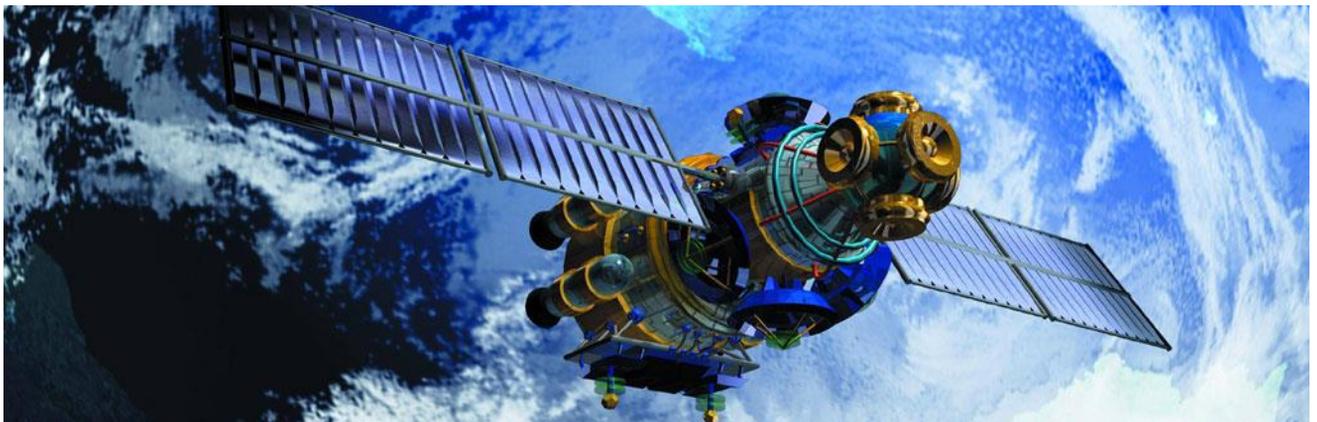
<http://www.excelsior2020.eu/timeline/08-13-april-2018-european-geosciences-union-general-assembly-2018-vienna-austria/>

### Sixth International Conference on Remote Sensing and Geoinformation of Environment 26-29 March, 2018 - Cyprus

26-29 March, 2018, Paphos, Cyprus

The Organizing Committee of the ‘Sixth International Conference on Remote Sensing and Geoinformation of Environment’ invites you to join us in Cyprus on March 26-29, 2018 to network with leading experts in the field of Remote Sensing and Geoinformation. The Conference will take place at the Aliathon Holiday Village in Paphos, Cyprus. The Technical Program is open to all topics in Remote Sensing and Geoinformation of Environment and related techniques and applications. We look forward to seeing you in Paphos, the European Capital of Culture 2017!

Please visit our website: <http://www.cyprusremotesensing.com/rscy2018/>



# Get in touch

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