



ΥΦΥΠΟΥΡΓΕΙΟ
ΕΡΕΥΝΑΣ, ΚΑΙΝΟΤΟΜΙΑΣ
ΚΑΙ ΨΗΦΙΑΚΗΣ ΠΟΛΙΤΙΚΗΣ
ΚΥΠΡΙΑΚΗ ΔΗΜΟΚΡΑΤΙΑ

Cyprus Activities In Space

ICAO/JRCC SAR WORKSHOP

JRCC, Larnaka

5 and 6 October 2023



DEC
DEPARTMENT OF ELECTRONIC
COMMUNICATIONS



Overview



ΤΜΗΜΑ ΗΛΕΚΤΡΟΝΙΚΩΝ ΕΠΙΚΟΙΝΩΝΙΩΝ
ΥΠΟΥΡΓΕΙΟ ΕΡΕΥΝΑΣ, ΚΑΙΝΟΤΟΜΙΑΣ ΚΑΙ ΨΗΦΙΑΚΗΣ ΠΟΛΙΤΙΚΗΣ



- **Cyprus' Vision in Space**
- **Space Technologies and National Priorities**
- **Historical Review of Cyprus' course in ESA**
- **Recent developments**
- **Developments related to Search and Rescue in Cyprus**



Cyprus' Vision in Space



ΤΜΗΜΑ ΗΛΕΚΤΡΟΝΙΚΩΝ ΕΠΙΚΟΙΝΩΝΙΩΝ
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Cyprus' Vision in Space



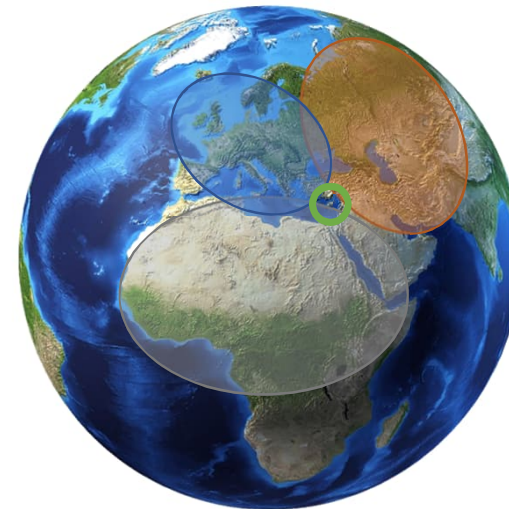
Cyprus' Vision in Space



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Cyprus is in a strategic position in the Eastern Mediterranean at the crossroads of Europe, Asia and Africa.



- So what do we need for Cyprus to become a Regional Digital Hub?
- The answer is easy. First, we need a vision.
- To achieve this ambitious goal, the Government promotes space technologies at all levels of the country's life.



Cyprus' Vision in Space (2)



ΤΜΗΜΑ ΗΛΕΚΤΡΟΝΙΚΩΝ ΕΠΙΚΟΙΝΩΝΙΩΝ
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- The Government of the Republic of Cyprus has verified its political will and commitment for the development of the space technology sector in Cyprus.
- Many synergies can be developed with other national strategies and actions such as the Digital Strategy, the National Strategy for Research and Innovation, the Blue Growth Strategy and the Green Development Strategy.
- Space technologies, data and services have the potential to help achieve this strategic objective of diversification from the traditional sectors of the economy such as tourism, agriculture, and shipping.



Space Technologies and National Priorities



ΤΜΗΜΑ ΗΛΕΚΤΡΟΝΙΚΩΝ ΕΠΙΚΟΙΝΩΝΙΩΝ
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Space Technologies and National Priorities



Space Technologies and National Priorities(1)



ΤΜΗΜΑ ΗΛΕΚΤΡΟΝΙΚΩΝ ΕΠΙΚΟΙΝΩΝΙΩΝ
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- Competent Authority for Space matters → Department of Electronic Communications (DEC), of the Deputy Ministry of Research, Innovation and Digital Policy following a decision of the Council of Ministers dated 17.10.2008.
- DEC is the National Contact Point for EUSPA (European Union Agency for the Space Programme). EUSPA's main mission is to implement the EU Space Program and to provide reliable, safe and secure space-related services.
- Space has become an integral part of our daily life.
- This continuously growing development of the space sector, with commensurate public and private investment, promises to help humanity solve some of its greatest challenges.
- The strategic importance of space technology and its applications for socio-economic prosperity and development, the creation of new jobs, as well as for the promotion of scientific excellence and research, is now indisputable.
- Space is a global business activity.



Technologies and National Priorities(2)



ΤΜΗΜΑ ΗΛΕΚΤΡΟΝΙΚΩΝ ΕΠΙΚΟΙΝΩΝΙΩΝ
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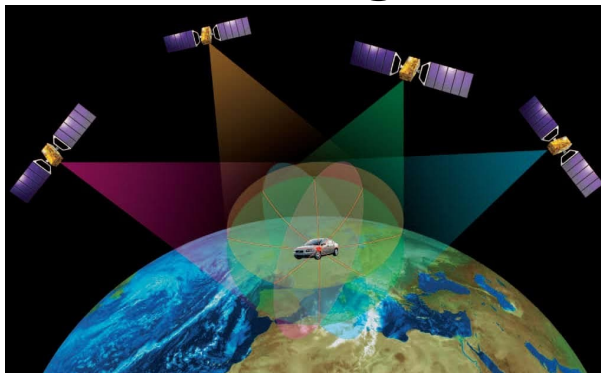
Satellite communications



Earth Observation



Satellite Navigation



Relation with other International Organizations





Space Technologies and National Priorities(3)



ΤΜΗΜΑ ΗΛΕΚΤΡΟΝΙΚΩΝ ΕΠΙΚΟΙΝΩΝΙΩΝ
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Satellite Communications

- Important Infrastructure is deployed in Cyprus
- Eight (8) licenses have been granted to Organizations to launch Telecommunications satellites.

Satellite Navigation and SAR

- GALILEO Infrastructure deployed in Cyprus (MEOLUT SAR System)
- EGNOS infrastructure is being deployed in Cyprus (in progress)-2 EGNOS RIMS

Earth Observation

- This sector that is an important priority since there is expertise and know-how.
- Applications should be developed focusing on coastal/maritime issues as well as illegal activities taking advantage of Cyprus' geographical position in cooperation with Eastern Mediterranean countries, with the aim of making Cyprus a regional digital hub.
- Project EXCELSIOR is part of our EO action plan.



Space Technologies and National Priorities(4)



ΤΜΗΜΑ ΗΛΕΚΤΡΟΝΙΚΩΝ ΕΠΙΚΟΙΝΩΝΙΩΝ
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Cooperation with the European Space Agency (ESA)

- Main mission of ESA → development of EU space programs. as well as ensuring continued investment in this sector so that benefits continue to accrue to the citizens of Europe.
- Signing of the new (second) European Cooperating State Agreement (ECS+/PECS) on 19/11/21 which entered into force in May 2023 and has a duration of 5 Years
- ECS+ provides for an mid-term evaluation, in the third year, in order to examine our readiness to immediately move to the next stage of cooperation with the ESA, as an Associate Member.
- The goal is for Cyprus to initially become an Associate Member and later a full member of ESA.
- Our subscription for 2024 will reach a total of 3,000,000 euros.
- The large number of already successful projects show that there is great potential in Space Technologies and Applications.



Space Technologies and National Priorities (5)



ΤΜΗΜΑ ΗΛΕΚΤΡΟΝΙΚΩΝ ΕΠΙΚΟΙΝΩΝΙΩΝ
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Cooperation with International Organizations and other Countries

- Member of the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS)
- Member of EURISY
- Member of the Satellite Memorandum of Understanding within the framework of CEPT
- A Joint Declaration on Cooperation in the Exploration and Use of Outer Space for Peaceful Purposes has been signed with the State of Israel as well as a Memorandum of Understanding (MoU) with Greece and Israel on Cooperation in the Field of Space Technologies, Satellite Applications and Operations



Recent Developments



Recent Developments



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- Development of the **National Space Strategy 2022-2027**, which was recently approved by the Council of Ministers.
You can download the strategy here → [Download here](#)
 - The Space Strategy for Cyprus 2022-2027 is an operational document that was collectively developed by the Department of Electronic Communications of the Deputy Ministry of Research, Innovation and Digital Policy.
 - Its aim is to structure and coordinate the space policy related matters in Cyprus, as well as to demonstrate the willingness of the stakeholders to work together for the strengthening of the national space ecosystem.
- Development of the **National Space Law**, which is currently under examination by the House of Representatives.
 - The Bill, contains provisions which cover inter alia permits/ authorisation and supervision of national space activities as well as registration of space objects and related hardware.
- **Development and strengthening** of the national space ecosystem, over the last six (6) years, with state funding of approximately €9 million.
- **Installation of two (2) EGNOS RIMS** (Ranging Integrity Monitoring Stations) in Cyprus in progress (EUSPA and AIRBUS visits to CY in May 2022).



Developments related to Search and Rescue in Cyprus



Developments related to SAR in Cyprus (1)



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- Space technologies are of strategic importance for economic growth, social prosperity and cohesion, protection of the environment, **for the enhancement of public security** and civil defense.
- Bearing in mind the above, the Government of the Republic of Cyprus has verified its political will and commitment for the development of the space technology sector in Cyprus and promotes space technologies used for Disaster and Risk Management.
- Therefore, the use of space technologies and Infrastructures, in **Search and Rescue and Disaster Risk Management** is of a high priority in the political agenda of Cyprus.
- As mentioned before a **receiving earth station (MEOLUT)**, part of the Search and Rescue service of the EU Galileo System, is already deployed in Cyprus for detecting and locating emergency beacons.



Developments related to SAR in Cyprus (2)



ΤΜΗΜΑ ΗΛΕΚΤΡΟΝΙΚΩΝ ΕΠΙΚΟΙΝΩΝΙΩΝ
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- **Pillar 4 “ Governmental services for National Security and Socioeconomic Sustainability” of the National Space Strategy 2022-2027 is dedicated, amongst others, to SAR and Disaster Risk Management.**
 - Our **goal** is that based on Cyprus social, economic, security and environmental needs, satellite-based services and applications will be developed and built in Cyprus and these will increasingly integrate within the public sector at local and national level.
 - Space technologies and its applications in the public sector provide valuable contributions to meeting the social needs of our time with a toolbox of innovative technologies, mainly through information on security, **emergency and disaster management and resilience, search and rescue**, land use and other delivered both independently and jointly by Copernicus (Earth Observation) and Galileo (navigation)
 - the national use of space technologies can increase Cyprus’s political influence and image since space is the new frontier and therefore being seen as a spacefaring nation increases the national image.
 - **Strategic Actions which fall under this pillar aim to integrate Space technologies** and its applications in the public sector in order to provide valuable contributions to meet the social, security and economic needs by using Copernicus (Earth Observation) Galileo (navigation) and other EU Space Programmes (**GOVSATCOM and the new Secure Connectivity Programme**).



Developments related to SAR in Cyprus (3)



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• EU GOVSATCOM Programme

- The **EU GOVSATCOM** programme aspires to provide **secure, cost-efficient communication** capabilities to security and safety critical missions, operations, and infrastructure. Its users will include border and maritime authorities, law enforcement agencies, civil protection forces, **search and rescue services**, disaster relief and humanitarian missions, authorized infrastructure operators and military forces.
- **Cyprus, through specific actions**, seeks its active participation in the European Space Program EU GOVSATCOM (Governmental Satellite Communications).
- **The National Security Authority (Cy NSA)** was decided to be the **Cyprus Competent GOVSATCOM Authority (CGA)**.



Developments related to SAR in Cyprus (4)



ΤΜΗΜΑ ΗΛΕΚΤΡΟΝΙΚΩΝ ΕΠΙΚΟΙΝΩΝΙΩΝ
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• IRIS² Programme (Secure Connectivity)

- IRIS² aims to ensure worldwide access to secure and cost-effective satellite communications services, for governmental communications and commercial use.
- The overall objective of this program is to safeguard EU sovereignty and security by increasing the provision of **resilient, global, guaranteed and flexible satellite communications solutions**, building on the **EU GOVSATCOM** and **EuroQCI** programs, providing **higher security, low latency solutions and higher bandwidth**.
- It is mandated to protect critical infrastructures, **support surveillance and crisis management**, as well as enable high-speed broadband everywhere in Europe to best anticipate future challenges of our economy.
- Through this programme **we are also working towards the establishment of an Optical Gateway**, critical for connecting Cyprus to the rest of the European Quantum Communication Infrastructure (QCI) network which will be eventually part of IRIS².



Thank you very much for your
attention!