

**National Infrastructures for Research and Technology**  
**GRNET S.A.**

**CORPORATE PRESENTATION**



# MISSION

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**National Infrastructures for Research and Technology - GRNET's mission is to offer an integrated environment of cutting-edge technologies, model digital solutions, infrastructures and specialized expertise which contributes to the modernization and digital advancement of the overall citizen experience in the fields of Public Administration, Education, Research, Health and Culture.**



# ROLE

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- Design and development of advanced information systems and e-Infrastructures to achieve Greece's Digital Transformation goals
- Design, development and maintenance of advanced information systems, computing- network infrastructures and cloud services
- National Infrastructure Development: 6 data centers
- Operation of the national high performance computing system (HPC-ARIS)
- Operation of GR-IX: The Greek Internet Exchange
- Operation of the national fiber optic network
- Provision of international cross-connectivity through the GEANT pan-European network
- Implementation and management of European, International and National Projects
- Artificial intelligence: formulating a national strategy
- Development of citizens' digital skills

# GRNET at a glance

**Develops advanced information systems and e-Infrastructures to achieve Greece's Digital Transformation goals**



**Develops and operates the single digital gateway Gov.gr**



**Manages a portfolio of 40 advanced Services  
55 National and European Projects**



**Serves hundreds of thousand of users**

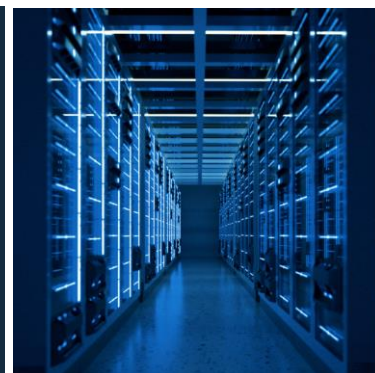


**Operates the optical fiber network 10.000 km**



**Develops and maintains National Infrastructure**

- 6 Data Centers
- National Supercomputing Infrastructure
- National HPC Competence Center
- GR-IX Greek Internet Exchange



**Develops lessons and initiatives for the digital skills of citizens**



**Connects International Research and Academic Communities for the dissemination of research and science**

## GRNET in numbers

- > **150** universities, research centers, hospitals, cultural centers
- > **15.000** schools
- **Nx10 Gbps** dark fiber backbone
- Access **1 || 10 Gbps** per institution
- International connectivity through GÉANT network multiple **10 Gbps**
- **535 TFlops** HPC Tier-1 centre, member of PRACE
- **6** DataCenters (EKT, Ypepth-Marousi, Louros Arta, Heraklio Crete), hosting:
  - **134** racks,
  - **2000+** servers,
  - **11.500** Virtual Machines,
  - **3 PB** disk storage,
  - **5 PB** tape



# GRNET'S Contribution

01

improvement of **citizen's experience in receiving public services** through the implementation of the National Digital Strategy 2020-2025

02

constitution of a more **extroverted Greek Research and Education community,**

03

technology enhancement of the **Health sector**

04

enhancement of the **educational processes**

05

creation of **new models of cooperation** amongst public agencies, research and education communities, citizens and businesses.

# Users

Serving daily users in the sectors of:  
**Public Administration, Education, Research, Health, Culture**



grnet@government



grnet@education



grnet@research



grnet@health



grnet@culture



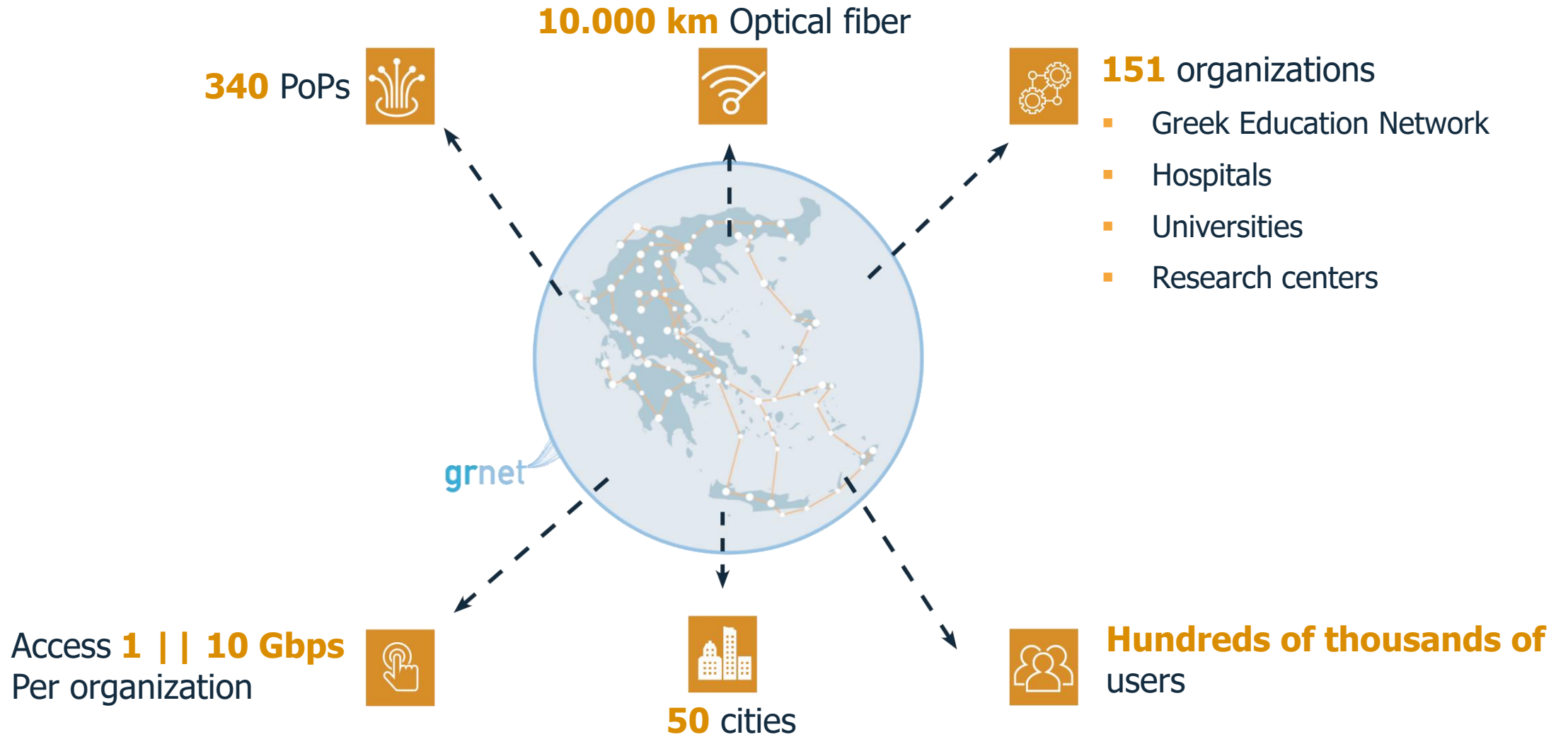
## Organizations and Institutions

- Universities
- Research Centers
- Large Research Infrastructures
- Hellenic School Network
- Public Libraries
- Culture Centers
- Content Providers
- Public Administration sector
- Public Health Sector (Hospitals, Blood Donation/Transfusion Services)

## Users

- **Academic and Research Community users (Students, Professors, Researchers, Academic and Administration Management, Network Operations Centers (NOC), Technical Staff)**
- **Health Sector users**
- **Hospital: Doctors, Administration, Management, NOC, Technical**
- **Blood Donor Volunteers**
- **Public Administration Officers**
- **Citizens**

# Network Connectivity





# e-Infrastructures & Services

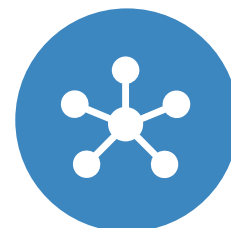
## National optical fiber network

GRNET backbone infrastructure  
Connection to GRNET Network



## GR-IX: National infrastructure

Interconnecting internet companies in Greece:  
Providers of Internet services, content, cloud services



## HPC (High-Performance Computing)

HPC services to the Greek R&E community

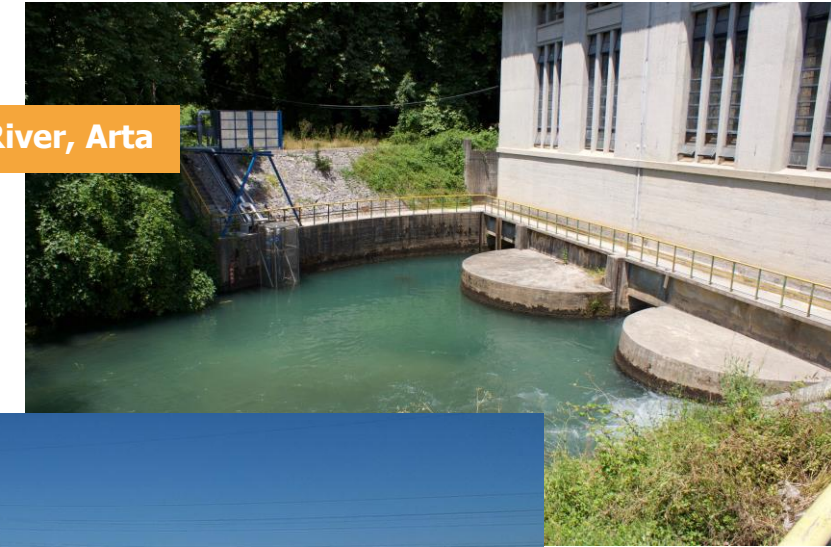
- National Supercomputer Infrastructure HPC - ARIS
- National Competence Center EuroCC@Greece HPC Hub
- Prace Training Center

## e-Infrastructures GRNET

Electronic Infrastructures of high reliability  
for the Research & Academic community  
with advanced and environmentally friendly data  
centers

# Computing Infrastructures

- **33.101** ~okeanos cloud users
- **6** data centers in 3 geographic locations
- **2.000** servers
- **11.500** active VMs
- **5.200** datacenter network ports in total
- **10.000** active cloud users
- An optical network of a maximum capacity of **1 Tbps** for the datacenters



Louros River, Arta



Heraklion, Crete

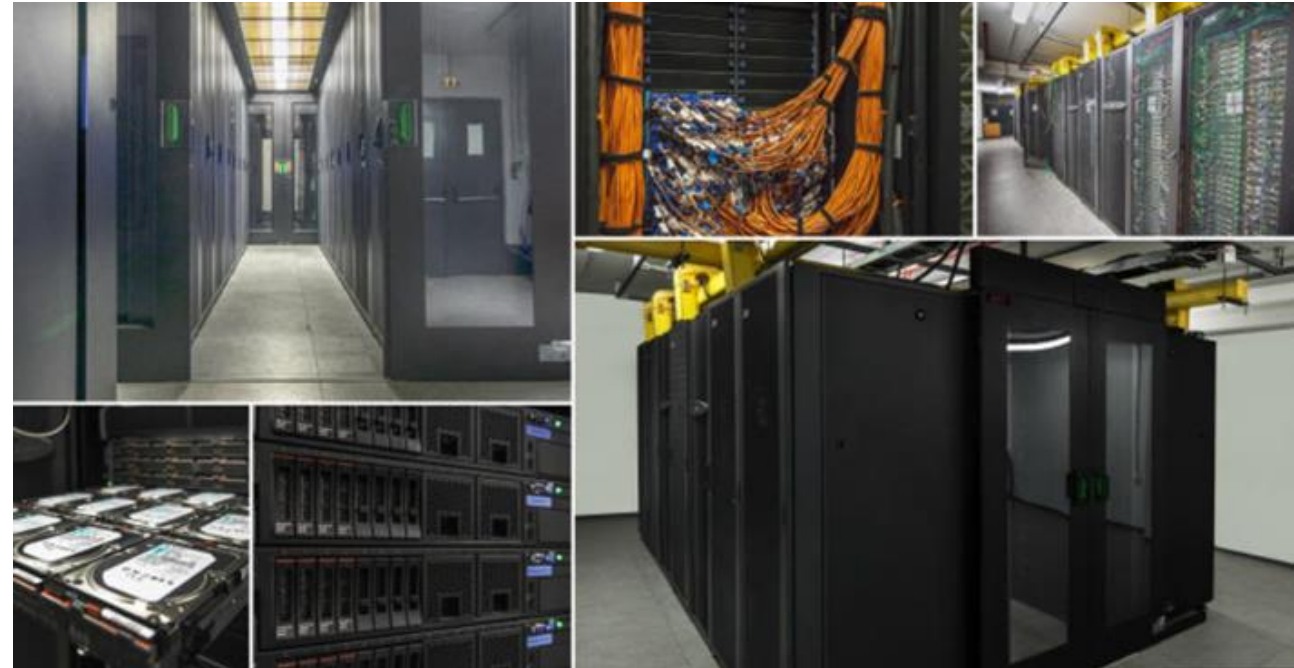


Ministry of Education, Marousi

# National HPC Infrastructure

## ARIS - HPC

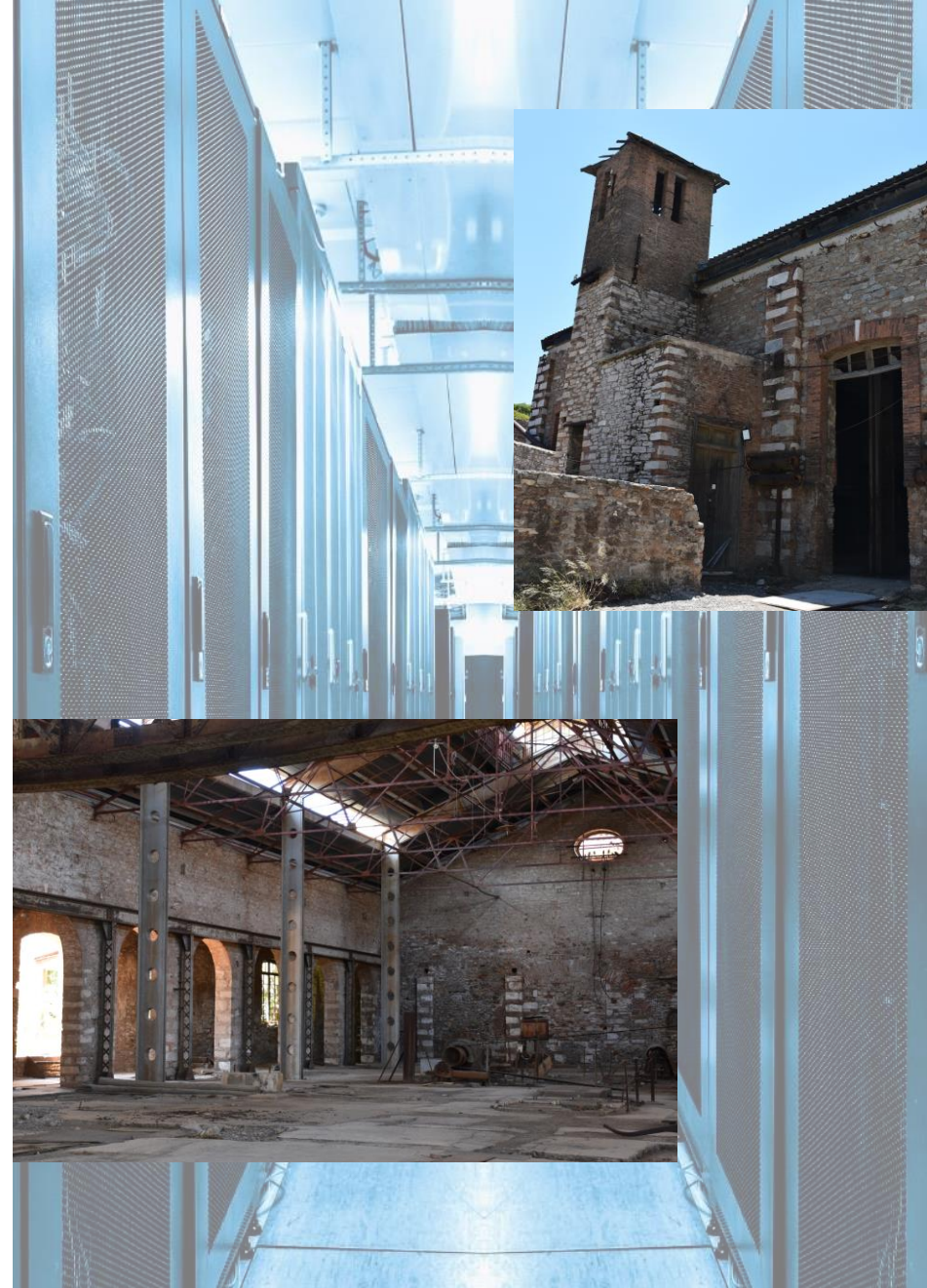
- **5** computational islands, **535** compute nodes
- **2 PB** of storage space
- **535 TFlops** HPC Tier - 1 centre
- **1.100** HPC projects
- **58.200** core Years (510 million core Hours) during the last **7** years
- GRNET is a PRACE Training Center



# New National Supercomputer

## DAEDALUS

- **2024** installation at the Lavrion Technological and Cultural Park
- **41,9M euros** Total Budget
- **60** Petaflops power
- Low energy cost of operation (powered by renewable energy sources and cooled by environmental friendly technology)
- Support of scientific research and innovative SMEs/industry with high computational capacity



# GR-IX The Greek Internet Exchange

**GR-IX is an important national infrastructure that aims to help the growth of the Greek Internet as it interconnects all significant Internet players in Greece.**

With four POPs in Athens and Thessaloniki, GR-IX is the only Internet Exchange in Greece, GR-IX customers enjoy:

- Reduced telecommunication costs;
- Improved network connectivity in terms of speed, capacity, stability and resilience;
- Greater proximity to their traffic producers and consumers;
- New business opportunities and enhanced market position.



**CONNECT. PEER. EXPAND.**

POWERED BY **grnet**

# SERVICES AND PROJECTS

## 40 Services

- Network and Connection Services
- Computational and Storage Services
- Data Services
- Identification & Security Services
- Sound, Voice and Visual Services

## 55 National & European Projects

- Digital Governance
- Infrastructures & Services (Network, Computational, Connection, Storage, Cloud, Digital Content)
- Open Science
- Green Actions

# SERVICES

## INTERNET



- **HPC-ARIS:**
- **~okeanos:**
- **ViMa:**
- **GR-IX:**
- **eduroam:**
- **DIADOSIS:**
- **Harmoni:**
- **Blood Donor Registry:**
- **ZEUS:**
- **Eury-where:**

## SOUND AND IMAGE



- hpc.grnet.gr
- okeanos.grnet.gr
- vima.grnet.gr
- gr-ix.gr
- eduroam.gr
- diadosis.grnet.gr
- harmoni.grnet.gr
- bdr.gr
- zeus.grnet.gr/zeus
- eury-where.gr

## CLOUD COMPUTING



- **e:Presence:**
- **DIAVLOS:**
- **Academic IDs:**
- **FoD:**
- **Security CERT:**
- **Eudoxus:**
- **APELLA:**
- **ATLAS:**
- **PYXIDA:**
- **Single Digital Portal**

## SECURITY



## AUTHENTICATION



- epresence.gr
- diavlos.grnet.gr
- academicid.minedu.gov.gr
- fod.grnet.gr
- cert.grnet.gr
- eudoxus.gr
- apella.minedu.gov.gr
- atlas.grnet.gr
- pyxida.grnet.gr
- gov.gr

# PROJECTS

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GRNET coordinates or actively participates in more than 45 currently ongoing National, European and International projects for the development of infrastructures and services

- **Funding from national resources**, NSRF, RFF (Recovery and Resilience Facility) and European Funds
- Developing **partnerships at national and European level**. The extroversion of GRNET ensures user access to international research and educational technological infrastructure and services for the utilization of Information and Communication Technologies, with mutually beneficial synergies.
- **International recognition of GRNET know-how**



# INTERNATIONAL COLLABORATIONS

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GRNET facilitates the evolution and proliferation of research and technology, by offering opportunities to all its users to develop their academic and scientific activities.

Our teams of professionals collaborate with key partners, through national, European and international partnerships, adopt and advance state-of-the-art digital technologies, with the aim to support continuous growth and excellence for the benefit of the Greek society.

# INTERNATIONAL COLLABORATIONS



European collaboration on e-infrastructures and services for Research and Education



Federated e-Infrastructure set up for the provision of advanced computing services



European Open Science Cloud



Collects, stores and provides access to data from the Sentinel satellites of the Copernicus Earth Observation program



Partnership for Advanced Computing in Europe



European Technology Platform for High Performance Computing



Integrating existing archeological data infrastructure across Europe to explore research methodologies



European Persistent Identifiers Service



The European Internet Exchange Association for strengthen and improve the Internet Exchange Point (IXP) community



Collaborative Data Infrastructure

# Advanced e-Infrastructures & Services for Public Administration



# Digital Transformation



## Digital Transformation Advisor

- Promotion of the **National Strategy for Digital Transformation** with emphasis on the Greek Public Administration
- Creating the **prerequisites for Research & Development** in the field of Digital Governance
- Design of modern **interoperable information systems** and services
- Development of **tool, methodologies and best practices**



## National Academy for Digital Skills

- Implementation of the Digital Governance Ministry Strategy for **Digital Competence Development**
- Development of **education and training activities**
- Development of **initiatives for awareness** and information

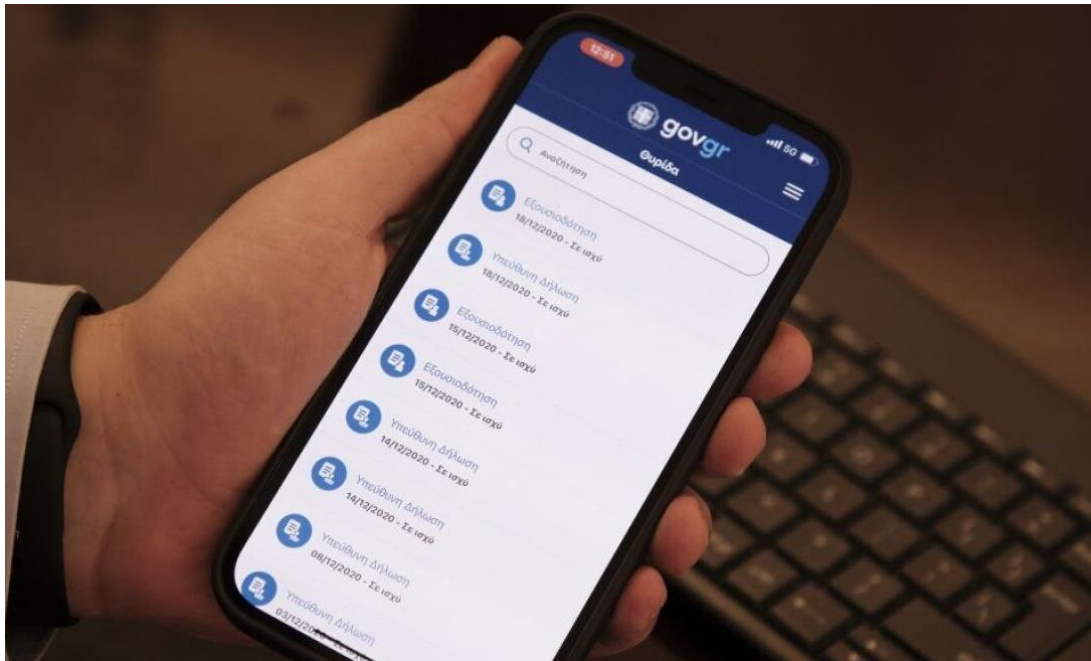


## Artificial Intelligence Strategy

- Drafting the **National Strategy on Artificial Intelligence** for the Public and Private Sectors
- Development of “Harmoni for Covid” Artificial Intelligence/Deep Learning System for rapid and reliable diagnosis of coronavirus-COVID 19 using medical imaging

# Single Digital Portal @gov.gr

**Direct service to citizens and businesses  
in their daily transactions with the public  
sector**

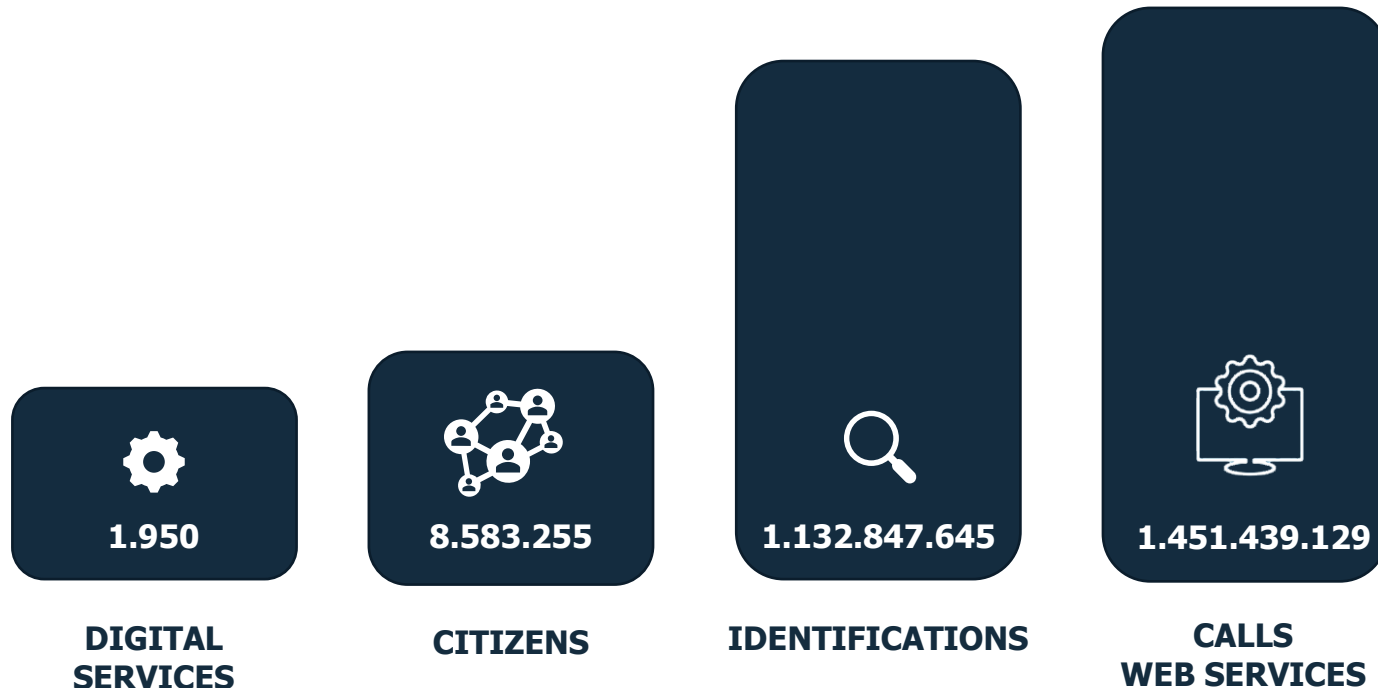


## Indicative Services gov.gr

- Certificate of permanent residence
- Loss of your Greek passport
- Certificate of your family's status
- Civil marriage licence
- Declaration of the naming and baptism of a minor
- Formal Declaration
- Authorization Form
- Digital Signature of Private Contracts
- Naming of Minors (registry)
- Licensed Electrician Certification
  
- Copy of telephone call to the Police Emergency services
- Copy of criminal record
- Appeal against an act of confirmation of an infringement
- Filing Financial Crime Complaints
- Copy of telephone call to the Police Emergency services
- Copy of a certificate of infringement

# Single Digital Portal @gov.gr

Direct service to citizens and businesses  
in their daily transactions with the public  
sector



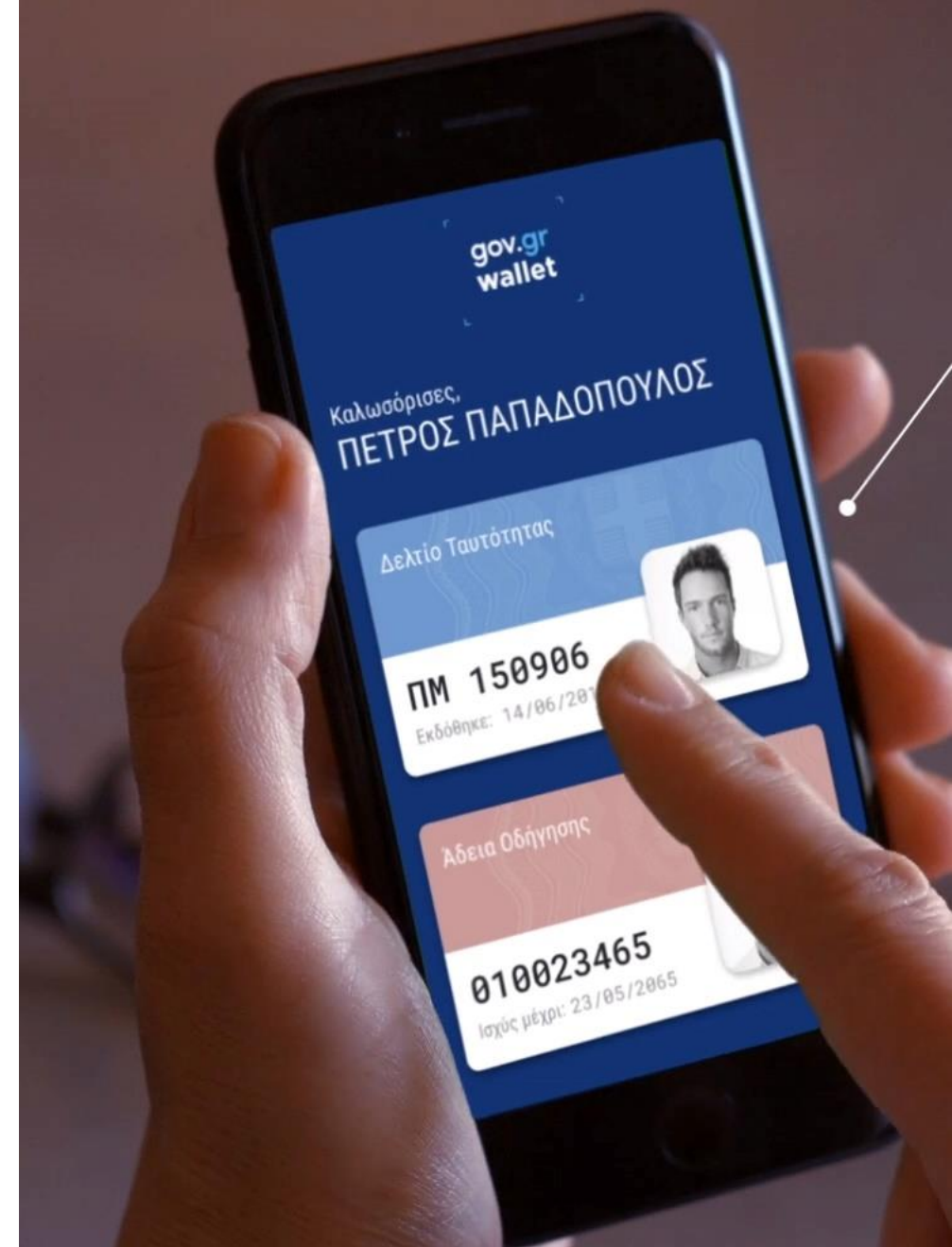
## Indicative Services gov.gr

- School attendance certificate (for students)
- University admission exams: information about the results by sms
- Digital graduation diplomas for graduates of high schools, lyceums and vocational lyceums
- Application for the issuance and control of the validity of e-documents
- Copy of hellenic police daily tickets of vehicles
- Driver Behavior Control System
- Get a copy of a daily vehicle card
- Application for issuing and downloading in e-form, of temporary driving license
- "MyAuto" service provides real-time access to all vehicle details and Open Car for finding information about vehicles
- Certificate of hospitalisation at a public hospital or a private clinic
- EU Digital COVID Certificate

# Applications for citizens

## Gov.gr Wallet

- Gov.gr Wallet enables the creation, storage and control of new digital identity cards and digital driver's licenses.
- The new digital identity cards and driver's license are digital documents issued through gov.gr and are fully equivalent to paper documents, for any legal use within Greece.
- Implementation by GRNET, in cooperation with the Ministry of Digital Governance.



# Applications for citizens

## EU Digital COVID Certificate

- The EU Digital COVID Certificate can be used by citizens as a record of proof for vaccination, a diagnostic test result, or recovery from coronavirus.
- In Greece, the certificate will be issued through the gov.gr portal.
- Implementation by GRNET, in cooperation with IDIKA SA – e-Government Center for Social Security Services and the participation of the General Secretariat of Information Systems for Public Administration.

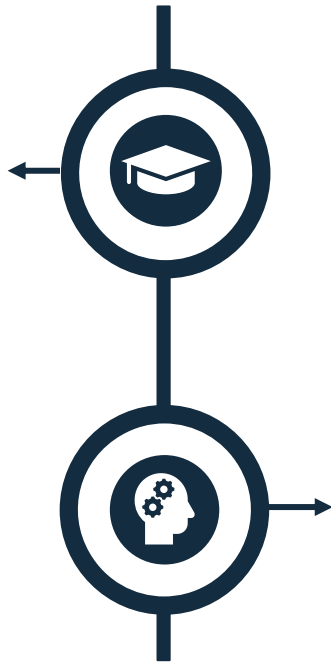




# Development of digital skills

GRNET is responsible for the implementation of the Digital Governance Ministry's strategy for the development of citizens' digital skills. The strategy is realized through 2 pillars:

**Education and training actions**  
aimed at developing all levels of digital skills, through the National Academy of Digital Skills



**Awareness-raising and information initiatives**  
aimed at providing opportunities for citizens to participate in training actions according to their needs and interests



# Development of digital skills

The National Academy for Digital Skills

[www.nationaldigitalacademy.gov.gr](http://www.nationaldigitalacademy.gov.gr) gathers

digital educational content for the development of citizens' digital skills and aims to act as the national portal for digital skills in the country.



**Εθνική Ακαδημία  
Ψηφιακών Ικανοτήτων**

## **299 Available Lessons / 38 Providers**

Courses according to the needs, interests and level of knowledge of each citizen through asynchronous education. Use of a self-evaluation tool and suggestions for personalized thematic chapters.

## **“Digital Citizen” Lessons**

Participation in the series of lessons ‘Digital Citizen’, consisting of five courses for the development of basic digital skills. The courses developed are based on the European Digital Competence Framework (DigiComp).

## **Initiatives**

Participation for citizens in awareness-raising, information and empowerment initiatives to cultivate digital culture and develop computational thinking.

# Awareness-raising initiatives

- Women



## Women in Tech Women in the Technology Sector: Today and in the Future

An initiative that aims to raise awareness, inform and encourage women to pursue a career in the field of technology.

- Elderly



## 3η e-λικία Empowerment of the Elderly

[www.3elikia.gr](http://www.3elikia.gr)

An initiative that aims to digitally empower citizens 65+. The program was launched in the municipalities of Florina, Kavala, Athinaion, Ioannina, Korydallos.

- Parents and children



## Digital Citizenship

[www.cms.nationaldigitalacademy.gov.gr/psifi-aki-politeiotita](http://www.cms.nationaldigitalacademy.gov.gr/psifi-aki-politeiotita)

An initiative to inform parents and children about Digital Citizenship.



# **Advanced e-Infrastructures & Services**

**for Education, Research, Health & Culture**

# Services in Research and Education

## ZEUS e-Voting

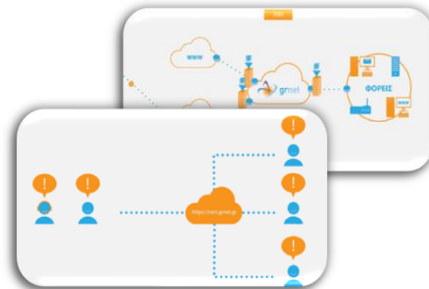


**ZEYΣ**  
POWERED BY grnet

Computing system that ensures the fair conduct of digital private polls carried out remotely.

- **Total number of users:**  
> **37.000**
- **Total number of polls:**  
> **13.000**
- **Total number of institutions using ZEUS**  
**1.696**

## Security Services- Firewall on Demand (FoD)



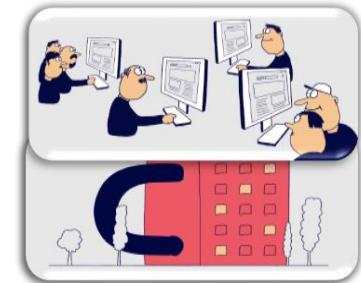
The service enables users to mitigate active attacks aimed at their network equipment  
- Computer Emergency Response Team (CERT)  
GRNET provides incident response and security services, process, correlate and notify end users

## DELOS AAI



GRNET "Delos" Authentication and Authorization Infrastructure enables cross-institutional services by providing federated authentication and authorization among participating organizations.

## DIGITAL CERTIFICATES



Extra security and authentication of people, sites and data transfers

# Services in Research and Education

## ~okeanos Cloud Computing



Cloud Computing  
computational services.

- **Total number of users:** 56.505 (~okeanos), 2.725 (~okeanos knossos)
- **Educational Institutions for ~okeanos and ~okeanos knossos: 50**

## National Academic ID



Service for the acquisition and management of the national academic ID.

- **Total number of users: > 1.7 millions**
- **272.000 user requests**
- **Connected bodies : 67**

## Eudoxus



Electronic book distribution service to students.

- **Total number of users: ~1.200.000**
- **Students per semester: ~250.000**
- **Connected bodies: 51**
- **#Distributions: >29M books to students and 353.769 to academic libraries**

## APELLA



ΑΠΕΛΛΑ

“Apella” facilitates the election and promotion of the faculty members of the Greek Academic Institutions.

- **Total number of users: 40.159**
- **Connected bodies: 93**
- **Number of connected users: 33.521**

# Services in Research, Education and Culture

## ATLAS



Centralized online service that creates a unique internship positions database.

- **Users: ~40.000**
- **Internship Host Organizations: & ~247.000**
- **Connected Organizations: 43**

## Student Housing Allowance



System for submitting and evaluating applications for the granting of the annual student housing allowance.

- **Total applications submitted: 405.840**
- **Total number of users: 311.095 registered beneficiaries, 1,998 institutional employees.**
- **User Requests: 13.700**

## e:Presence



Videoconference service for the official meetings of the Greek R&E community

- **Total number of Teleconferences: >324,429**
- **Participants: > 3.808.253**

## ΔΙΑΥΛΟΣ



Live streaming service broadcasted through the GRNET state of the art e-Infrastructure

- **Registered users: 28.382**
- **Page views of the portal on ΔΙΑΥΛΟΣ Service: >4.0M views from 181 countries**
- **Connected bodies: 37**
- **> 2,651 livestreams**
- **> 1,682 livestreamed e:Presence meetings**

# Services and e-Infrastructures in Health



## **Central Electronic Management Services for the National Registry Of Voluntary Blood Donors**

Managing the registry and issuing volunteer donor IDs through modern, credible and friendly procedures for blood donors, donation services and blood centers in the country.



## **Harmoni**

### **High-Performance Archiving and Retrieval of Medical On-line Imaging Data.**

High-Performance Archiving and Retrieval of Medical On-line Imaging Data.



## **eduroam**

### **World-wide roaming access service developed for the international research and education community**

eduroam allows students, researchers and staff from participating institutions to obtain Internet connectivity across campus and when visiting other participating institutions by simply opening their laptop.



## **DIADOSIS**

### **Inter-loan online library**

Electronic system which provides access to all research and medical publication papers via DELOS- Authentication & Authorization Infrastructure service, to all hospital staff



## **Central Staff Directory Service-DELOS for Hospitals**

"Delos" Authentication and Authorization Infrastructure enables cross-institutional services by providing federated authentication and authorization among participating organizations.





# **National and European Projects**

# EUROPEAN & INTERNATIONAL PROJECTS



## EuroCC -2

[www.eurocc-greece.gr](http://www.eurocc-greece.gr)

**Funding:** EUROHPC JU

**Duration:** 1/1/2023 - 31/12/2025

### National Competence Centers in the framework of EuroHPC

A joint initiative between the EU, European countries and private partners to develop a World Class Supercomputing Ecosystem in Europe, which will be reinforced by a European Network of HPC Expertise.



## EUMaster4HPC: European Master For High Performance Computing

[www.grnet.gr/en/eumaster4hpc-en](http://www.grnet.gr/en/eumaster4hpc-en)

**Funding:** EuroHPC JU

**Duration:** 01/01/2022 – 31/12/2025

The HPC European Consortium Leading Education Activities (EUMaster4HPC) aims to develop a new and innovative Master's program for the education and training in High Performance Computing (HPC). The master programme aims at catalysing various aspects of the HPC ecosystem and its applications into different scientific and industrial domains.



## EU4Digital

[www.grnet.gr/en/eu4digital](http://www.grnet.gr/en/eu4digital)

**Funding:** E.E (Directorate General for Neighbourhood and Enlargement Negotiations - DG NEAR)

**Duration:** 01/01/2023 - 30/06/2025

The aim of the project is to expand connectivity between research and education (R&E) communities in the Eastern Partnership (EaP) and the European research and education network GEANT which is supported by services and strengthened and sustainable organisations in the national research and education network (NREN).

# EUROPEAN & INTERNATIONAL PROJECTS



## GN5-1

[www.grnet.gr/en/gn5-1](http://www.grnet.gr/en/gn5-1)

**Research and Education Networking – GÉANT**

**Funding:** HORIZON 2020

**Duration:** 01/01/2023 – 31/12/2024

GN4-3N's mission is to provide faster, more resilient and secure connectivity infrastructure and collaboration services to enable researchers and students' access to applications that support evidence-based and effective collaboration across virtual research teams, worldwide.



## GN5-IC1

[www.cordis.europa.eu/project](http://www.cordis.europa.eu/project)

**Research and Education Networking – GÉANT**

**Funding:** HORIZON 2020

**Duration:** 01/12/2022 – 30/11/2025

The EU-funded GN5-IC1 project is planning the first phase of a new intercontinental connectivity investment programme. The programme will help meet the ongoing, ever-growing demand for increased network capacity in Europe and lead the network through a paradigm shift in the digital science and computational infrastructures planned during the next 10 to 15 years. GN5-IC1 aims to further extend intercontinental network reach and increase its resilience.

# EUROPEAN & INTERNATIONAL PROJECTS



## GN5-2

<https://geant.org/projects/>

**Funding:** Horizon Europe Framework Programme

The GN5-2 project is a complementary project to other projects being implemented (GN5-IC1), under the Framework Partnership Agreement (FPA) signed by the European Commission with the GÉANT consortium partners.

The aim of the project is to provide scientists, researchers, educators and students with access to connectivity and collaboration services needed to support evidence-based decision making, knowledge transfer and ensure effective collaboration of virtual research and learning communities around the world.



## AARC Technical Revision to Enhance Effectiveness (AARC-TREE)

<https://grnet.gr/en/business-directory/aarc-tree-en/>

**Funding:** HORIZON 2020

**Duration:** 1/3/2024 - 28/2/2026

The aim of the "AARC Technical Revision to Enhance Effectiveness (AARC TREE)" project is to define common strategies for the development of Authentication and Authorisation Infrastructures in pan-European research infrastructures.

# EUROPEAN & INTERNATIONAL PROJECTS



## HellasQCI - Quantum Communication Infrastructure for Greece

[www.grnet.gr/en/hellasqci](http://www.grnet.gr/en/hellasqci)

**Funding:** Digital Europe Programme/Ministry of Digital Governance

**Duration:** 1/1/2023 – 30/6/2026

HellasQCI, part of the European EuroQCI network, will contribute to the safeguarding of sensitive data and infrastructures, such as in government institutions, health structures, banking systems, and many more critical infrastructures. GRNET is the coordinator of the project, in collaboration with 13 partners.



## PETRUS-EUROQCI

[www.petrus-euroqci.eu](http://www.petrus-euroqci.eu)

**Funding:** Digital Europe Programme

**Duration:** 1/10/2022 – 31/3/2025

The Petrus - EuroQCI will safeguard sensitive data and critical infrastructures by integrating quantum-based systems into existing communication infrastructures, providing an additional security layer based on quantum physics. It will reinforce the protection of Europe's governmental institutions, their data centres, hospitals, energy grids, and more, becoming one of the main pillars of the EU's Cybersecurity Strategy for the coming decades.



## Nostradamus

**Funding:** Digital Europe Framework Programme (DEP) and CEF

**Duration:** 1/1/2024 - 31/12/2027

The aim of the project "Nostradamus: Testing and evaluation infrastructure for EuroQCI" is to build an infrastructure in which tests around quantum key distribution (QKD) will be carried out for the European Quantum Communication Infrastructure (EuroQCI) initiative.

# EUROPEAN & INTERNATIONAL PROJECTS



## **LuxQCI** [www.lux4qci.eu](http://www.lux4qci.eu)

**Funding:** 50% χρηματοδότηση από Ε.Ε., 50% από εθνικούς πόρους Λουξεμβούργου  
**Duration:** 1/1/2023 - 30/6/2025

Lux4QCI envisages the design, development, procurement, and deployment of the first experimental quantum communication infrastructure (QCI) network in Luxembourg. Lux4QCI consortium contains academic, industrial, and governmental partners.



## **IrelandQCI** [www.irelandqci.ie](http://www.irelandqci.ie)

**Funding:** 50% χρηματοδότηση από Ε.Ε., 50% από εθνικούς πόρους Ιρλανδίας  
**Duration:** 1/3/2023 – 31/8/2025

IrelandQCI, the 'Building a National Quantum Communication Infrastructure for Ireland' project incorporates integrating innovative and secure quantum devices and systems into conventional communication infrastructures. This will be done by enhancing the ESB Telecoms' optical fibre network with an additional layer of security, all based on quantum physics, in particular quantum key distribution (QKD).

# EUROPEAN & INTERNATIONAL PROJECTS

## Pharos

### **Pharos: The Greek AI Factory for accelerating AI innovation**

<https://grnet.gr/en/business-directory/pharos-ai-factory-en/>

**Funding:** Horizon Europe, EuroHPC JU  
**Duration:** 36 months

The project "Pharos: The Greek AI Factory for Accelerating AI Innovation" is a groundbreaking initiative that establishes a national hub for AI research, development, and application. Designed to harness the capabilities of the upcoming Greek national supercomputer DAEDALUS, Pharos is positioned as a strategic pillar in Greece's and EU's journey towards AI democratisation, sustainability and innovation.

Development of a  
new national HPC  
system  
"DAEDALUS"

## DAEDALUS

<https://grnet.gr/en/business-directory/grant-for-the-development-of-a-new-national-hpc-system-daedalus/>

**Funding:** Joint Undertaking/ EU / Recovery And Resilience Facility (RRF) Greece 2.0 – NextGenerationEU  
**Duration:** 01/06/2022 - 31/12/2029

DAEDALUS will serve a wide range of Greek and European users of the scientific and academic community, the industry and public sector. Anticipated to boost the development of new applications in a wide range of research fields such as Computational Chemistry, Physics, Biology, Biomedicine, Meteorology, Artificial Intelligence.

# EUROPEAN & INTERNATIONAL PROJECTS



## DCoMex

[www.grnet.gr/dcomex](http://www.grnet.gr/dcomex)

**Funding:** Horizon/EuroHPC JU/ General Secretariat of Research and Innovation (GSRI)

**Duration:** 1/6/2021 – 31/5/2024

### Data Driven Computational Mechanics at EXascale

DCoMEX aims to provide unprecedented advances to the field of Computational Mechanics by developing novel numerical methods enhanced by Artificial Intelligence, along with a scalable software framework that enables exascale computing.



## SmartAttica AtHeNAI

[www.grnet.gr/en/smart-attica](http://www.grnet.gr/en/smart-attica)

**Funding:** Horizon/ General Secretariat of Research and Innovation (GSRI)

**Duration:** 1/1/2023 - 31/12/2025

SmartAttica AtHeNAI aims to accelerate the transition to the digital transformation of businesses and public administration through artificial intelligence (AI) technologies.



## IMAGINE

[www.grnet.gr/en/imagine](http://www.grnet.gr/en/imagine)

**Funding:** HORIZON - INFRA

**Duration:** 01/9/2022 - 31/12/2025

iMagine aims to improve the interoperability and analysis of imaging data from different scientific fields as well as the wider use of AI-based image analysis services.



# EUROPEAN & INTERNATIONAL PROJECTS



## CRAFT-OA

[www.grnet.gr/en/craft-oa](http://www.grnet.gr/en/craft-oa)

**Funding:** Horizon

**Duration:** 1/1/2023 - 31/12/2025

CRAFT-OA (Creating a Robust Accessible Federated Technology for Open Access) aims to make the Open Access landscape more resilient by centralising expertise, collaboration and a joint visibility/indexing layer.



## Blue-Cloud 2026

[www.blue-cloud.org](http://www.blue-cloud.org)

**Funding:** HORIZON - INFRA

**Duration:** 1/1/2023 - 30/6/2026

Blue-Cloud project aims to provide a virtual environment with open and seamless access to services for storage, management, analysis and re-use of research data, across borders and disciplines, and the blue research communities by developing a collaborative web-based environment providing simplified access to an unprecedented wealth of multi-disciplinary datasets from observations, analytical services, and computing facilities essential for blue science.



## GraspOS

[www.grnet.gr/en/graspos](http://www.grnet.gr/en/graspos)

**Funding:** HORIZON

**Duration:** 1/1/2023 - 31/12/2025

GraspOS project aims to develop, assess and operate an open and trusted federated infrastructure for next generation research metrics and indicators, offering data, tools, services and guidance.

# EUROPEAN & INTERNATIONAL PROJECTS



## EOSC Future

[www.grnet.gr/en/eosc](http://www.grnet.gr/en/eosc)

**Funding:** HORIZON 2020

**Duration:** 1/4/2021 – 31/3/2024

EOSC Future aims to promote EOOSC portal and unlock the potential of European research via a vision of Open Science for Society. EOOSC Future will interconnect and integrate digital infrastructures, Open Science national initiatives and research communities to EOOSC, aiming to further enhance the EOOSC Portal, EOOSC-Core and EOOSC Exchange.



## FAIRCORE4EOOSC

[www.grnet.gr/en/faircore4eosc](http://www.grnet.gr/en/faircore4eosc)

**Funding:** HORIZON Europe Framework Programme

**Duration:** 1/6/2022 - 31/5/2025

The FAIRCORE4EOOSC project focuses on the development and realisation of core components for the European Open Science Cloud (EOOSC). Supporting a FAIR EOOSC and addressing gaps identified in the Strategic Research and Innovation Agenda (SRIA). Leveraging existing technologies and services, the project will develop nine new EOOSC-Core components aimed to improve the discoverability and interoperability of an increased amount of research outputs.

# EUROPEAN & INTERNATIONAL PROJECTS

The logo for Skills4EOSC, featuring the text "Skills4EOSC" in a sans-serif font. The word "Skills" is in black, "4" is in green, and "EOSC" is in black. There are four small vertical bars of different colors (red, yellow, green, blue) above the "i" in "Skills".

## Skills4EOSC

[www.grnet.gr/en/skills4eosc](http://www.grnet.gr/en/skills4eosc)

**Funding:** Horizon Europe Programme, European Research Executive Agency

**Duration:** 01/09/2022 - 31/08/2025

The Skills4EOSC project aims to create a pan-European network of Competence Centers (CC) in order to accelerate the upskilling of European researchers and harmonise the training of new professionals for managing scientific data.

The logo for EOSC BEYOND, featuring the text "EOSC BEYOND" in a sans-serif font. "EOSC" is in black and "BEYOND" is in orange. There are two small orange arrows pointing right above the "D" in "BEYOND".

## EOSC BEYOND

[www.openaire.eu/eosc-beyond](http://www.openaire.eu/eosc-beyond)

**Funding:** Horizon Europe Programme

**Duration:** 01/01/2024 - 31/03/2027

EOSC Beyond objective is to advance Open Science and innovation in research in the context of the European Open Science Cloud (EOSC) by providing new EOSC Core capabilities allowing scientific applications to find, compose and access multiple Open Science resources and offer them as integrated capabilities to researchers. To do so, EOSC Beyond supports a new concept of EOSC: a federated and integrated network of Nodes operated at different levels, national, regional, international and thematic, to serve the specific scientific missions of their stakeholders.

The logo for EOSC ENTRUST, featuring the text "EOSC ENTRUST" in a sans-serif font. "EOSC" is in black and "ENTRUST" is in black. There is a small orange icon to the left of "EOSC". Below the text, it says "European Network of Trusted Research Environments".

## EOSC ENTRUST

**Funding:** Horizon Europe Programme, European Research Executive Agency

**Duration:** 01/03/2024 - 28/02/2027

The mission of EOSC-ENTRUST is to create a European network of trusted research environments for sensitive data and to drive European interoperability by joint development of a common blueprint for federated data access and analysis..

# EUROPEAN & INTERNATIONAL PROJECTS



## ENVRI-Hub NEXT

<https://grnet.gr/en/business-directory/envri-hub-next-en/>

**Funding:** Horizon Europe Framework Programme

**Duration:** 1/2/2024 - 31/1/2027

The ENVRI-Hub Next project aims to develop an open access data hub and to create an Environmental Research Infrastructure (ENVRI) service framework in order to connect the environmental research community with the European Open Science Cloud (EOSC).



## EOSC EU NODE

<https://grnet.gr/en/business-directory/eu-node-en/>

**Funding:** Horizon Europe Framework Programme

The EOSC EU Node project aims to create a platform that supports multidisciplinary and multinational research, promoting the use of FAIR (Findable, Accessible, Interoperable, Reusable) data and complementary services in Europe, enabling researchers to collaborate more effectively and promote progress in Open Science.



## ECHOES

<https://grnet.gr/en/business-directory/echoes/>

**Funding:** Horizon Europe Framework Programme

**Duration:** 1/6/2024 - 30/4/2029

The European Cloud for Heritage Open Science (ECHOES) project aims to establish the Cultural Heritage Cloud (or European Collaborative Cloud for Cultural Heritage - ECCCH), a shared platform to provide heritage professionals and researchers with access to data, scientific resources, training, and advanced digital tools tailored to suit their needs.

# EUROPEAN & INTERNATIONAL PROJECTS



## ACROSS

[www.grnet.gr/en/across](http://www.grnet.gr/en/across)

**Funding:** HORIZON 2020

**Duration:** 01/02/2021 - 30/04/2024

### **Towards user journeys for the delivery of cross-border services ensuring data sovereignty**

The project focuses on the mobility of citizens between EU Member States and aims to support them in aligning and fulfilling their obligations under the Single Digital Gateway Regulation.



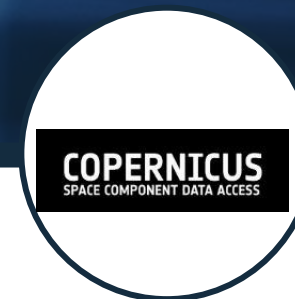
## ICT-AGRI-FOOD

[www.grnet.gr/en/ict-agri-food](http://www.grnet.gr/en/ict-agri-food)

**Funding:** H2020/ERA-NET

**Duration:** 1/10/2019 - 30/09/2024

Supporting the development and implementation of new technologies for a competitive, sustainable and environmentally friendly agriculture.



## Data Hub Relay 2 - Data Relay Hub Framework

**Funding:** European Space Agency (ESA)

**Duration:** 7/10/2022 – 30/9/2025

The project concerns the access of international organizations and users across the globe to the European programme Copernicus data. It aims to provide (a) the continuity of the different data access services currently running in ESA Copernicus operations framework, and (b) expansion of access services.

# EUROPEAN & INTERNATIONAL PROJECTS



**interTwin**

[www.grnet.gr/en/intertwin](http://www.grnet.gr/en/intertwin)

**Co-designing and prototyping an interdisciplinary Digital Twin Engine.**

**Funding:** HORIZON-INFRA

**Duration:** 01/09/2022 - 31/8/2025

InterTwin is an EU-funded project with the goal to co-design and implement the prototype of an interdisciplinary Digital Twin Engine – an open source platform based on open standards that offers the capability to integrate with application-specific Digital Twins.

Its functional specifications and implementation are based on a co-designed interoperability framework and conceptual model of a DT for research – the DTE blueprint architecture.



**SUBMERSE**

[www.grnet.gr/en/submerse](http://www.grnet.gr/en/submerse)

**Funding:** HORIZON

**Duration:** 1/5/2023-30/4/2026

The SUBMERSE project is characterized as a consortium of European and global partners, supported by the European Union's Horizon Europe program, which launched in early May the "SUBMarine cables for ReSearch and Exploration" (SUBMERSE) program, aiming to make available to the scientific community, civil society and industry, data from continuous observations on several submarine fiber optic cables, using a standardized technological configuration on a continental scale.



**e-Safety & e-Creativity**

[www.grnet.gr/en/e-safety](http://www.grnet.gr/en/e-safety)

**e-Safety & e-Creativity Network for Teachers, Parents/Guardian & Professionals**

**Funding:** ERASMUS+

**Duration:** 31/12/2022 - 30/12/2025

eSafety-eCreativity Network for Teachers, Parents & Guardians project includes the design and implementation of a holistic learning network, to support Digital Readiness with the aim of strengthening the safety, responsibility and confidence of children, young people and adults in relation to new digital technologies.

# EUROPEAN & INTERNATIONAL PROJECTS



## DC4EU

[www.grnet.gr/en/dc4eu](http://www.grnet.gr/en/dc4eu)

### DIGITAL CREDENTIALS FOR EUROPE

**Funding:** Digital Europe

**Duration:** 1/4/2023-30/3/2025

DC4EU aims to contribute in creating a hybrid paradigm where citizens will own and directly share their data through explicit consent, supporting and enhancing free movement of citizens with various entitlement documents in the social-security domain and student/staff mobility for both identity and records.



## TRACE4EU

**Funding:** Digital Europe

**Duration:** 1/6/2023 – 30/8/2025

TRACE4EU aims to create an umbrella architecture based on existing EBSI services. The architecture builds the basis for the implementation of traceability application scenarios. The Pilot will be aligned with the EU Digital Wallet and related qualified trust services. TRACE4EU promotes recommendations for developing the EBSI ecosystem through engagement with pan-European stakeholders and has the potential to significantly influence traditional industries, assisting them in becoming more efficient, productive, competitive, and resilient.



## POTENTIAL

[www.grnet.gr/en/potential](http://www.grnet.gr/en/potential)

**POTENTIAL builds and realizes applications for testing the European Digital Identity Wallet launched by the European Commission.**

**Funding:** Digital Europe

**Duration:** 1/4/2023-31/5/2025

POTENTIAL aims to shape and realize scenarios for testing the European Digital Identity Wallet being launched by the European Commission. POTENTIAL launches six use cases in the fields of banking, mobility, health, and administration to pilot the usage of the European Digital Identity Wallet, offering several benefits.

# EUROPEAN & INTERNATIONAL PROJECTS



## EBSI-NE

[www.grnet.gr/en/ebsi-ne](http://www.grnet.gr/en/ebsi-ne)

**Funding:** Digital Europe

**Duration:** 1/5/2023 – 1/4/2025

EBSI-NE aims to support the development and adoption of the European Blockchain Service Network (EBSI), within the framework of the European Commission's call "Accelerating Best Use of Technologies".



## EBSI-VECTOR

[www.grnet.gr/en/ebsi](http://www.grnet.gr/en/ebsi)

**Funding:** Digital Europe

**Duration:** 1/6/2023 – 1/5/2025

EBSI's Verifiable Credentials Framework is a full framework for expressing, exchanging, and verifying information, using a new information format (W3C Verifiable Credentials), digital wallets, and the blockchain to establish trust.



## EWC

[www.grnet.gr/en/ewc](http://www.grnet.gr/en/ewc)

## EU Digital Wallet Consortium (EWC)

**Funding:** Digital Europe

**Duration:** 30/12/2022 – 30/12/2024

The EU Digital Wallet Consortium (EWC) is a joint effort to successfully leverage the benefits of the proposed EU digital identity in the form of Digital Travel Credentials across the Member States. The EWC intends to build on the Reference Wallet Application to enable a use case focused on Digital Travel Credentials.



# EUROPEAN & INTERNATIONAL PROJECTS



## GR digiGOV innoHUB

<https://digigov.innohub.gr/>

**The European Digital Innovation Hub  
for Digital Governance**

**Funding:** Digital Europe 2021 - 2027

**Duration:** 01/01/2023 – 31/12/2025

EOSC Future aims to promote EOSC portal and unlock the potential of European research via a vision of Open Science for Society. EOSC Future will interconnect and integrate digital infrastructures, Open Science national initiatives and research communities to EOSC, aiming to further enhance the EOSC Portal, EOSC-Core and EOSC Exchange.



## Govtech4all

**GovTech4All is the first round of  
implementation of the GovTech4All  
Framework Partnership Agreement**

**Funding:** Digital Europe 2021 – 2027

**Duration:** 1/1/2023 - 30/12/2026

GovTech4All is an incubator that unites 21 organizations in 14 European countries to establish a cohesive European GovTech ecosystem and a GovTech market.

# NATIONAL PROJECTS

Leasing fiber  
optic  
infrastructure  
IRU

## Leasing fiber optic infrastructure

[www.grnet.gr/en/iru](http://www.grnet.gr/en/iru)

**Funding:** Recovery And Resilience Facility (RRF)  
Greece 2.0 – NextGenerationEU  
**Duration:** 17/05/2021- 31/12/2025

The Project "Granting GRNET for the purpose of leasing fiber optic infrastructure" involves a new lease and the upgrade of the existing network infrastructure so that entities connected to the GRNET network, continue to be provided with relevant services.

Upgrade of the  
software and  
cloud computing  
services - Cloud

## Cloud Upgrade

[www.grnet.gr/en/upgrade-cloud](http://www.grnet.gr/en/upgrade-cloud)

**Funding:** Recovery And Resilience Facility (RRF)  
Greece 2.0 – NextGenerationEU  
**Duration:** 1/8/2022-31/12/2025

Expansion of GRNET's existing cloud computing infrastructure and services in order to offer advanced services to members of the research and academic community it serves.



## Upgrade of National HPC System "ARIS"

[www.grnet.gr/en/upgrade-of-aris](http://www.grnet.gr/en/upgrade-of-aris)

**Funding:** Operational Program "Attica 2014-2020" and the Priority Axis "Dissemination and Development of Innovative Products and Services of SMEs using ICT"  
**Duration:** 1/5/2022-31/06/2025

GRNET's existing HPC system will be upgraded with additional high performance computing equipment at the existing Data Center. ARIS HPC will continue to support the scientific applications which have special requirements regarding the speed of executing calculations, the storage space and memory capacity in various scientific fields of the Greek scientific community.

# NATIONAL PROJECTS



## National Disability Benefits Portal

[www.grnet.gr/en/national-disability-portal/](http://www.grnet.gr/en/national-disability-portal/)

**Funding:** Recovery And Resilience Facility (RRF) Greece 2.0 – NextGenerationEU

**Duration:** 01/09/2022- 31/12/2025

Development of an information system by GRNET which shall become the central service and information hub for people with disabilities.



## WHITE AREAS

[www.grnet.gr/en/white-areas/](http://www.grnet.gr/en/white-areas/)

**Funding:** Public Investments Program

**Duration:** 10/03/2021 - 31/12/2024

### National Access to TV stations of national coverage for permanent residents of areas without TV coverage

The aim of the project is to provide television coverage to households even in the most remote continental and island regions of the country, which have specific geomorphological characteristics.



## TRANSPORTATION EQUIVALENT

**Funding:** Public Investments Program of Secretariat General for the Aegean and Island Policy of the Ministry of Maritime Affairs, Islands and Fisheries

**Duration:** 1/1/2022 - 31/12/2024

Further operations for Development of the Information System for the Implementation of the Transportation Equivalent

# NATIONAL PROJECTS



## Financial Aid for the support of tourism on the island of Rhodes (Rodos Week)

<https://vouchers.gov.gr/gr/rodos-week>

**Funding:** Tactical budget of the Ministry of Digital Governance

**Duration:** 26/03/2024 - 30/06/2025

The aim of the project is to provide financial assistance for the year 2024 to individuals, regardless of nationality, who stayed in hotels that were evacuated during the forest fires on the island of Rhodes in July 2023.



## Intangible Digital Card for the support of Tourism (Thessaly Evros Pass 2024)

**Funding:** Public Investment Programme (PIP)

**Duration:** 02/05/2024 - 31/12/2025

The main objective of the project is the financial support of tourism activity in municipalities and municipal units of the Region of Thessaly affected by the adverse effects of the flooding phenomena of September 2023 and in municipalities and municipal units of the Regional Unit of Evros of the Region of Eastern Macedonia and Thrace, affected by the adverse consequences of the fires of summer 2023.



## Evia Samos Pass

Intangible Digital Debit Card for the support of Tourism

<https://vouchers.gov.gr/eviasamospass>

**Funding:** Public Investment Programme, Special Emergency Response Program 2021-2025

**Duration:** 01/06/2022 - 31/12/2024

The aim of the action was to provide financial support for tourism activity in the areas of North Evia and Samos.

# NATIONAL PROJECTS



## Development of the application ecosystem of the National Academy of Digital Capabilities

[https://grnet.gr/en/business-directory/nationaldigitalacademy\\_application\\_ecosystem-en/](https://grnet.gr/en/business-directory/nationaldigitalacademy_application_ecosystem-en/)

**Funding:** Digital Transformation Programme 2021 - 2027

**Duration:** 15/12/2023 - 15/12/2025

The project "Development of the application ecosystem of the National Academy of Digital Capabilities" includes the implementation and operation of a digital ecosystem that will be the central infrastructure of the public sector for structured, effective and systematic planning and implementation of digital skills enhancement programmes for citizens.



## Digital education and empowerment of the elderly and disabled

<https://greece20.gov.gr/?projects=psi-fiaki-ekpaideysi-kai-endynamosi-ton-ilikiomenon-kai-ton-atomon-me-anapiria>

**Funding:** Recovery and Resilience Facility (RRF)

**Duration:** 01/09/2024 - 31/12/2025

The project aims to empower elderly and people with disabilities by enhancing their digital literacy. Through specifically designed programmes, it focuses on familiarising and training them in new technologies, ensuring they can navigate, communicate, and utilize essential online tools and platforms effectively and independently.

# NATIONAL PROJECTS

**Ntantades  
tis  
geitonias**

## **Ntantades tis geitonias**

<https://ntantades.gov.gr/>

**Funding:** NSRF 14-20, "Human Resources Development, Education and Lifelong Learning" OP

**Duration:** 1/2/2022 - 31/12/2024

The "Ntantades tis geitonias" programme is part of the framework of actions to reconcile family and professional life, which is one of the key objectives of the European Equality Strategy for the coming years.

The purpose of the programme is mainly concerned with the care of infants aged between two months and 2.5 years and provides for the financial support of working parents, single parents, sponsors and the family in general across the board, for the care of their child or children, either within the family home

**GR-HDAB**

## **Health Data Access Body Infrastructure (GR-HDAB)**

<https://grnet.gr/en/business-directory/gr-hdab-en/>

**Funding:** Public Investments Program (Ministry of Digital Governance - Ministry of Health), EU

**Duration:** 1/12/2023 - 30/11/2027

The objective of the GR-HDAB project is the establishment of a National Health Data Access Body (HDAB) and the development of the necessary national infrastructure to support and promote the secondary use of health data, as well as the secure interconnection with the corresponding European centralised cross-border infrastructure HealthData@EU.



## **DIKTYNNA**

**Energy Footprint Upgrade for Crete  
University and the National Health Data  
Center of GRNET SA**

**Funding:** Management Service of the Operational Program "Environment and Sustainable Development"

**Duration:** 02/09/2019 - 31/12/2024

The DIKTYNNA project concerns the infrastructures energy upgrade with the use of renewable sources of energy, for the daily operations of the resources.

**National Infrastructures for Research and Technology**  
**GRNET S.A.**

**CORPORATE PRESENTATION**

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