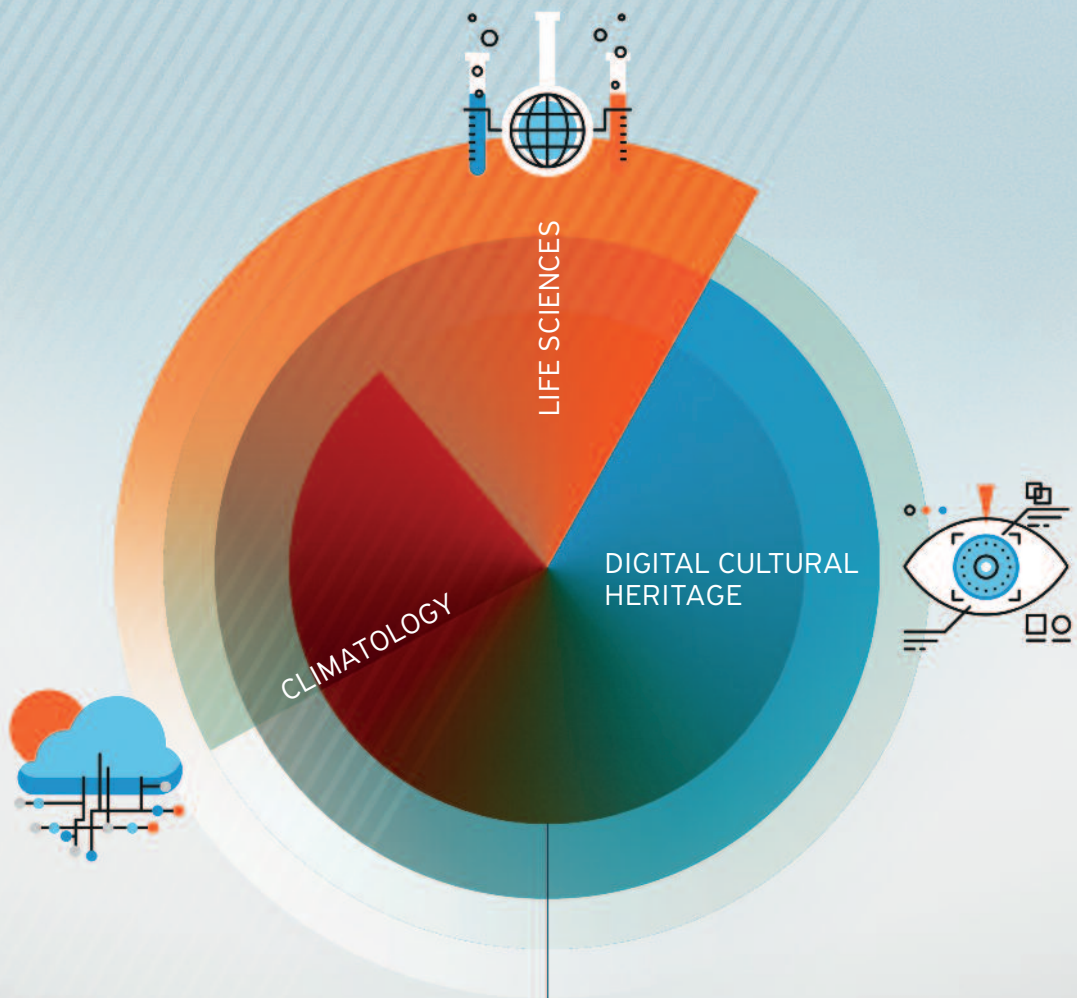


Vi-SEEM

https://vi-seem.eu

VRE FOR REGIONAL INTERDISCIPLINARY COMMUNITIES IN SOUTHEAST EUROPE AND THE EASTERN MEDITERRANEAN

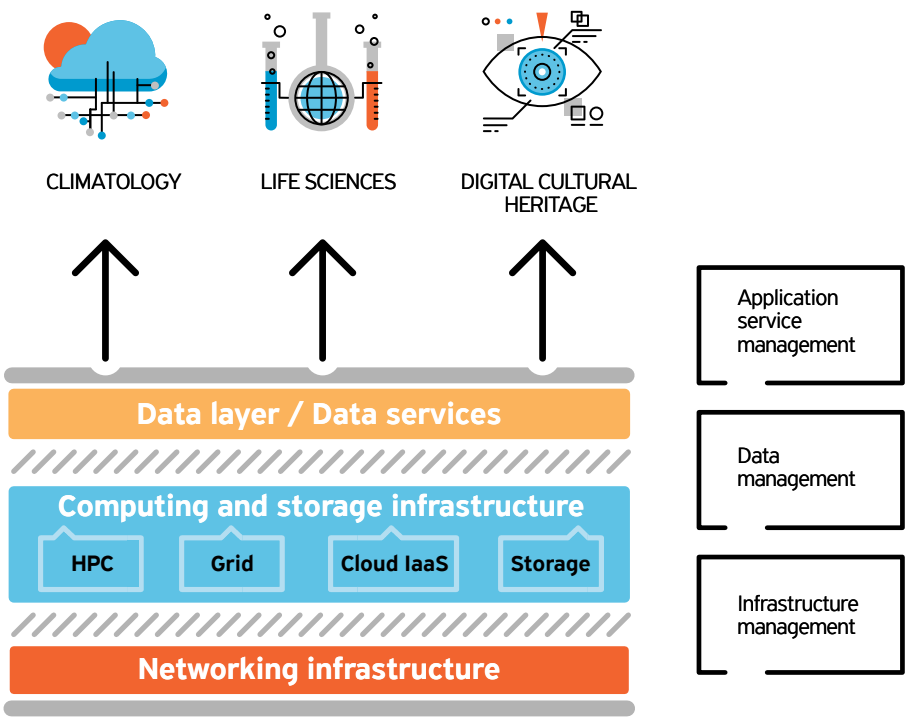
Vi-SEEM

VI-SEEM

VRE for regional Interdisciplinary communities in Southeast Europe and the Eastern Mediterranean

VI-SEEM project aims to create a unique Virtual Research Environment (VRE) in Southeast Europe and the Eastern Mediterranean (SEEM), in order to facilitate regional collaboration, with special focus on the scientific communities involved in Life Sciences, Climatology and Digital Cultural Heritage. The project unifies the regional networking, computing and storage e-Infrastructures in an integrated platform to better utilize synergies for an improved service provision across the SEEM region.

The integrated VI-SEEM platform encompasses all e-Infrastructure layers: networking, computing (High-Performance Computing, Grid Computing, Cloud Virtual Machines), Cloud storage resources and related data management services, as well as software and tools relevant for the regional multi–disciplinary communities.



Vi-SEEM

Objectives

Provide scientists with access to state of the art e-Infrastructure – computing, storage and connectivity resources.

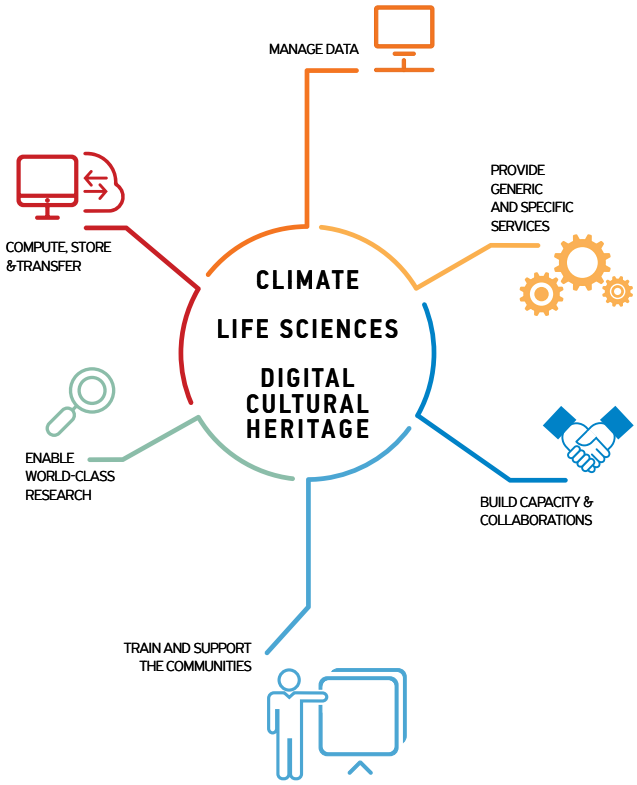
Integrate the underlying e-Infrastructure layers with generic / standardized as well as domain-specific services for the region.

Promote capacity building in the region and foster interdisciplinary approaches.

Provide functions to facilitate data management for the selected scientific communities, engage the full data management lifecycle, link data across the region, and provide data interoperability across disciplines.

Provide adequate user support and training programs for the user communities in the SEEM region.

Bring high-level expertise in e-Infrastructure utilization to enable research activities of international standing in the selected fields of Climatology, Life Sciences and Digital Cultural Heritage.



Impact on Scientific Communities

The scientific communities of Climatology, Life Sciences and Digital Cultural Heritage will be able to increase the efficiency, creativity, and productivity of their work by using a unique working environment which provides integrated access to large-scale e-Infrastructure resources and services, and relevant generic and discipline specific data sets, codes and tools.

Climatology

Local and regional climate modelling, weather forecasting and air quality simulations need a common working platform. The community will benefit from the combination of HPC, Grid and Cloud computing together with the storage facilities and services, as it heavily relies on data from very scattered locations. VI-SEEM will create opportunities for users to engage in joint activities: with code repositories and training material for climate models, VRE will empower climate scientists from the 19 research groups in 13 countries. Services provided for and by this community contribute to the understanding of the Societal Challenge related to climate action.

Life Sciences

This community will utilize the VI-SEEM platform for analysis and processing of big data arising from decoding the human genome in relation to health and disease. The associated data challenges include capture, curation, analysis, search, sharing, storage, transfer, and visualization. This community consists of 12 research institutes from 10 countries. The project will improve the innovation capacity as well as efficient collaboration of researchers in the SEEM region by providing access to relevant codes, data repositories, processing and simulation setup, and the related training material. Services provided for and by this community relate to the Societal Challenge of health and wellbeing.

Digital Cultural Heritage

VI-SEEM will facilitate the transition of the Digital Cultural Heritage community towards more computationally-intensive activities, such as high detail rendering of 3D modeling, and simulations of environmental influence on historical buildings. The community will also benefit from VI-SEEM services related to common data repositories and software, algorithms for remote sensing image classification, automatic object recognition, etc. Shared datasets, easy remote access and visualization enabled by the VI-SEEM platform will offer a novel approach to Digital Cultural Heritage research that can foster innovation in methodologies and applications used. This community consists of 14 research institutes from 9 countries.

Vi-SEEM

Project acronym: **VI-SEEM**

Call Identifier: **H2020-EINFRA-2014-2015**
Type of action: **RIA**
Start date: **01/10/2015**
Duration: **36 months**
Total budget: **3,300,000 €**

Participant organisation name	Part. short name	Country
GREEK RESEARCH AND TECHNOLOGY NETWORK S.A.	GRNET	Greece
THE CYPRUS INSTITUTE	CyI	Cyprus
INSTITUTE OF INFORMATION AND COMMUNICATION TECHNOLOGIES – BULGARIAN ACADEMY OF SCIENCES	IICT-BAS	Bulgaria
INSTITUTE OF PHYSICS BELGRADE	IPB	Serbia
NATIONAL INFORMATION INFRASTRUCTURE DEVELOPMENT INSTITUTE	NIIF	Hungary
WEST UNIVERSITY OF TIMISOARA	UVT	Romania
POLYTECHNIC UNIVERSITY OF TIRANA	UPT	Albania
UNIVERSITY OF BANJA LUKA	UNI BL	Bosnia and Herzegovina
SS CYRIL AND METHODIUS UNIVERSITY OF SKOPJE	UKIM	FYR of Macedonia
UNIVERSITY OF MONTENEGRO	UOM	Montenegro
RESEARCH AND EDUCATIONAL NETWORKING ASSOCIATION OF MOLDOVA	RENAM	Moldova
INSTITUTE FOR INFORMATICS AND AUTOMATION PROBLEMS OF THE NATIONAL ACADEMY OF SCIENCES OF THE REPUBLIC OF ARMENIA	IIAP NAS RA	Armenia
GEORGIAN RESEARCH AND EDUCATIONAL NETWORKING ASSOCIATION	GRENA	Georgia
BIBLIOTHECA ALEXANDRINA	BA	Egypt
INTER UNIVERSITY COMPUTATION CENTER	IUCC	Israel
SYNCHROTRON-LIGHT FOR EXPERIMENTAL SCIENCE AND APPLICATIONS IN THE MIDDLE EAST	SESAME	Jordan

Vi-SEEM

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