H2020-EINFRA-2015-1

# VI-SEEM

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



# Deliverable D2.5

# Promotional Package with updates

**Author(s):** Dimitra Kotsokali, Ognjen Prnjat, Valia Athanasaki (editors)

**Status –Version:** Final – b

**Date:** July 27, 2017

**Distribution - Type:** Public

**Abstract:** D2.5. "Promotional package with updates" reports on the new version of promotional package, which has been produced to address the review recommendations, focused on promotion and outreach to users. The VI-SEEM core promotional material consists of the project brochure, poster and presentation and constitutes an essential tool for the implementation of the project strategic communication and marketing plan. All 3 have been updated for this version of the deliverable.



The VI-SEEM Consortium consists of:

| | | |
|---|---|---|
| GRNET | Coordinating Contractor | Greece |
| CYI | Contractor | Cyprus |
| IICT-BAS | Contractor | Bulgaria |
| IPB | Contractor | Serbia |
| NIIF | Contractor | Hungary |
| UVT | Contractor | Romania |
| UPT | Contractor | Albania |
| UNI BL | Contractor | Bosnia-Herzegovina |
| UKIM | Contractor | FYR of Macedonia |
| UOM | Contractor | Montenegro |
| RENAM | Contractor | Moldova (Republic of) |

| | | |
|---|---|---|
| IIAP-NAS-RA | Contractor | Armenia |
| GRENA | Contractor | Georgia |
| BA | Contractor | Egypt |
| IUCC | Contractor | Israel |
| SESAME | Contractor | Jordan |

The VI-SEEM project is funded by the European Commission under the Horizon 2020 e-Infrastructures grant agreement no. 675121.

# Document Revision History

| Date | Issue | Author/Editor/Contributor | Summary of main changes |
|---|---|---|---|
| July 20th, 2017 | a | Dimitra Kotsokali, Ognjen Prnjat, Ioannis Liabotis | First version, including contributions to the promotional package by Ioannis Liabotis, Ognjen Prnjat |
| July 27th, 2017 | b | Dimitra Kotsokali, Evangelia Athanasaki | Final editing |

# Table of contents



# References

[1] Project Notebook - VI-SEEM-WP1-GR-002-Notebook-2015-10-29

[2] Project VI-SEEM-675121 - Annex I - Description of the action

# Glossary

| | |
|---|---|
| **CPU** | Central Processing Unit |
| **EC** | European Commission |
| **EM** | Eastern Mediterranean |
| **GP-GPU** | General-purpose computing on graphics processing units |
| **HPC** | High Performance Computing |
| **HP-SEE** | High-Performance Computing Infrastructure for South East Europe’s Research Communities |
| **IaaS** | Infrastructure as a Service |
| **PB** | Petabyte |
| **PID** | Persistent Identifier |
| **PM** | Project Month |
| **SC** | Supercomputer |
| **SEE** | South East European |
| **SEEM** | South East Europe and Eastern Mediterranean |
| **SEEREN** | South Eastern European Research & Education Network |
| **SEE-GRID1-2** | South Eastern European GRID-Enabled eInfrastructure Development |
| **SEE-GRID-SCI** | SEE-GRID eInfrastructure for regional eScience |
| **TB** | Terabyte |
| **VI-SEEM** | VRE for regional Interdisciplinary communities in Southeast and the Eastern Mediterranean |
| **VM** | Virtual Machine |
| **VRE** | Virtual Research Environment |
| **WP** | Work Package |

# Executive summary

**What is the focus of this Deliverable?**

The new version of D2.5 – “Promotional Package with updates” – has been produced to address the review recommendations which focused on promotion and outreach to users.

The VI-SEEM second brochure reflects the project existing conceptual design and builds on it further. It is updated to focus on presenting (to potential users) the added value and precise access modalities and conditions to the VRE services and (training) resources, including call opportunities. Based on the “explore-exploit-excel” motto, it explains what VI-SEEM is, what it offers to the three scientific communities in terms of infrastructures and applications, and describes the supported activities in the scientific fields of Life Sciences, Climate Science and Digital Cultural Heritage. It also provides information on how to get access to the Virtual Research Environment and the VI-SEEM user support and the training offerings. The brochure complements its first edition, which provides a holistic view of the project scope, objectives and target communities, thus essentially contributing to the delivery of full information and communication package that enhances the project communication strategy.

The updated poster is also consistent in terms of the project brand identity and aims to provide succinct and catchy information (which is further elaborated on in the brochure). It emphasizes the key points of the Virtual Research Environment offerings and scientific communities’ aspects.

Finally the project core presentation is updated again to reflect the current VRE status, services and access modalities. It also describes project objectives and vision, structure and activities and presents the project service catalogue.

**What is next in the process to deliver the VI-SEEM results?**

The deliverable and the workflow progress are described in the project Annex-I – Description of the Action [2]. This version of the promotional package will now be distributed to the VI-SEEM partners to achieve further dissemination through local and regional channels. As the project evolves, the promotional material will be complemented with success stories and the other activities to reach the target groups.

**What are the deliverable contents?**

The deliverable presents the VI-SEEM brochure, poster and presentation. The material is built on a common graphic style that reflects an effective visual brand identity.

The new brochure now is entirely user-centric. The VI-SEEM poster enhances and further promotes the project brand identity. The presentation is the final component of the promotional package.

**Conclusions and recommendations**

The promotional package is an essential tool for the dissemination of the VI-SEEM project. The VI-SEEM consortium has established a strong corporate image, in order to maximize the impact of the major project milestones and outcomes to its target groups.

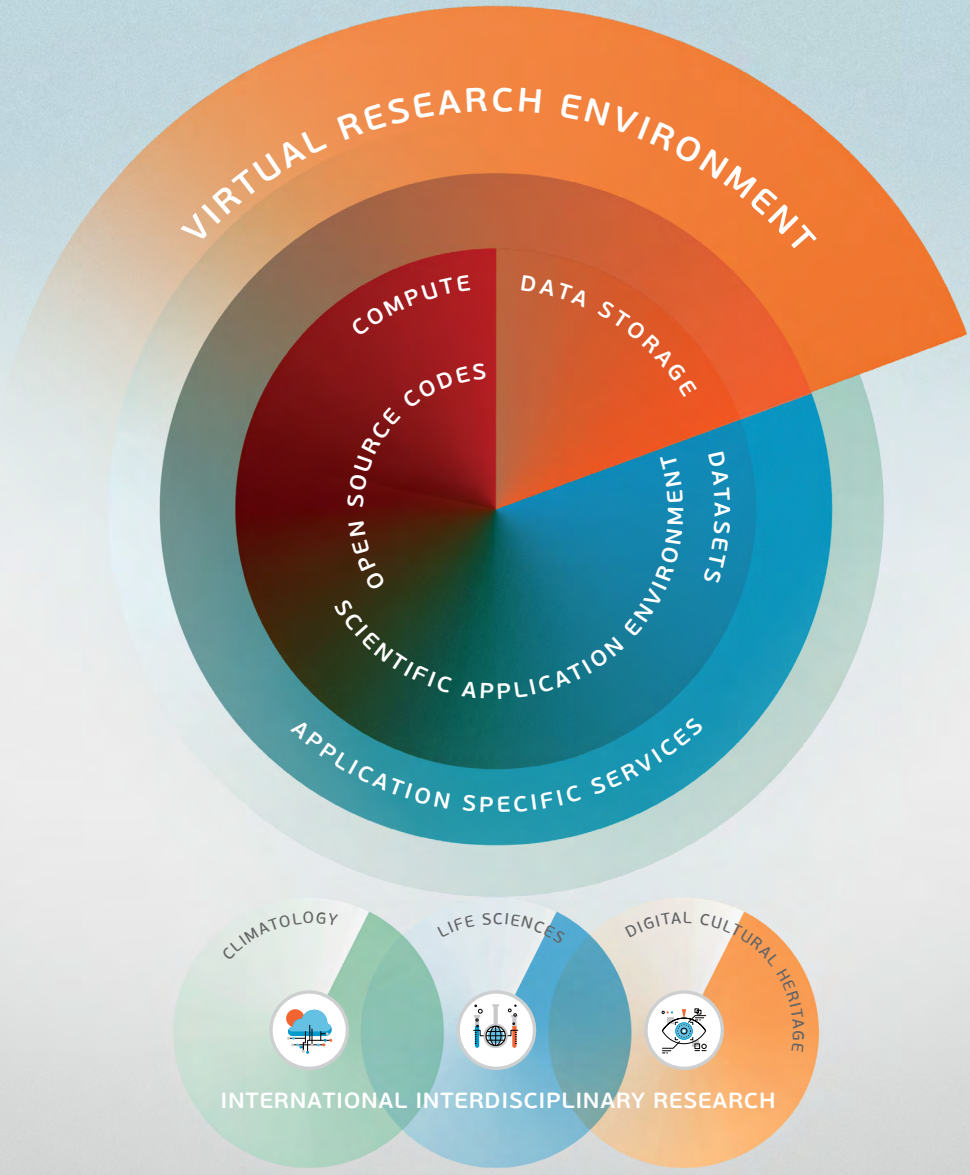
The VI-SEEM promotional package is built on a common and consistent brand and specific graphic style, which reflects the project corporate design.

The project promotional package together with additional dissemination material such as press releases, newsletters, power point presentations, etc., is significant in maximizing the effectiveness of the VI-SEEM outcomes.

# 1. VI-SEEM brochure




# Vi-SEEM

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

Explore > Exploit > Excel

vi-seem.eu


# Explore

## What is VI-SEEM?

VI-SEEM is a Virtual Research Environment (VRE) for the Scientific Communities of Life Sciences, Climate Science and Digital Cultural Heritage in Southeast Europe and the Eastern Mediterranean.

VI-SEEM unifies the existing regional High-Performance Computing, Cloud and Grid Computing resources, Data Management services, software and tools, as well as application specific on line software services, and delivers to multi–disciplinary communities an integrated platform for high-quality research.

The Virtual Research Environment is supported by the EC through the Horizon 2020 VI-SEEM project.

## Getting access to the VI-SEEM Virtual Research Environment

**ACCESS TO VI-SEEM SERVICES AND RESOURCES IS DESCRIBED AND PROVIDED VIA THE VI-SEEM VRE PORTAL: https://vre.vi-seem.eu**

### Open Access to Datasets

VI-SEEM data services are provided to all users via unrestricted free access (restrictions on fair usage apply), as long as the data sets are accompanied with creative commons or similar license to the users. User registration for statistics purposes applies in some cases.

### Access to VI-SEEM Application Specific Services

Access to the VI-SEEM application specific services, and read access to the code and tools repository is provided for free (user registration might be required) and it is subject to fair usage policy. Development and extension of application-level services is done via the open calls. Users can register to all VI-SEEM services that require registration via the federated VI-SEEM Login service.

### Access to Computation and Storage Resources

Access to large amounts of computation and storage resources for performing scientific simulations, deploying application-level services, and storing large amounts of data is provided to excellent research projects from the region via the VI-SEEM open calls.
Calls are open once a year, addressed to scientists and researchers that work in academic and research institutions in the region of South Eastern Europe and the Eastern Mediterranean. More specifically these are: Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Cyprus, Egypt, FYR of Macedonia, Georgia, Greece, Hungary, Israel, Jordan, Lebanon, Moldova, Montenegro, Romania, Serbia and Turkey.
The proposals undergo a technical review and a lightweight scientific review in order to determine the eligibility and suitability of applications for the requested services and systems. Applications requiring very large amounts of resources that are successful at this stage undergo scientific peer review by independent scientific experts in all countries of the region.

Open calls are advertised via the VI-SEEM website - https://vi-seem.eu

### VI-SEEM Access - Contributing to the VRE

Via the open calls applicants are encouraged to extend the range of services VI-SEEM offers, either by contributing to data sets, codes and workflows, or by deploying new application level services. Projects get access to extra resources and user support via the call, while extra support for generating new content or services is given via the VI-SEEM access mechanism.



## User support

https://tts.vi-seem.eu
email: support@vi-seem.eu

Our VRE user support team comprises of individuals in all countries of the SEEM region, who run, maintain and administer facilities and services.
We provide to potential users guidance on the services and the requirements to get access to VI-SEEM.

VI-SEEM user support can be offered free of charge to researchers that have gained access to the VI-SEEM services.

## Training offerings

https://training.vi-seem.eu

VI-SEEM organizes regional and national training courses to maximize the value of our services for users. Experts from the VI-SEEM scientific communities are providing technical knowledge and advice that enables researchers to get familiar with the benefits of the VRE and how they can use it to cover their high demanding research needs.

The courses consist of basic and specialized topics, followed by hands-on exercises.

## VI-SEEM training portal

https://training.vi-seem.eu

Our training portal collects and curates training material about the VI-SEEM services. It is a focal point of high quality training material and information regarding how to access the VI-SEEM e-infrastructure services (HPC, Grid, Cloud, Data), and how to use the tools, data services and infrastructure available, depending on the scientific field of interest.

# Exploit

## the VI-SEEM Services

https://services.vi-seem.eu

The VI-SEEM Service Catalogue offers a broad set of generic as well as application-specific services in the areas of compute resource provisioning, data services provisioning, datasets provisioning, software and scientific workflow provisioning as well as domain-specific applications provisioning.

## Authentication and authorisation: secure access to VI-SEEM e-Infrastructure resources

### VI-SEEM Login

VI-SEEM Login enables researchers to access VI-SEEM e-Infrastructure resources in a user-friendly and secure way, using federated authentication mechanisms. The service also supports user authentication with social identities, so that users who do not have a federated account at a home organization can seamlessly access the VI-SEEM services without compromising the security of the VI-SEEM infrastructure.

## Compute services: technology for high calibre research

### VI-SEEM HPC Access Service

VI-SEEM HPC enables users to perform complex simulations on state-of-the-art computing hardware, delivering 18.8 CPU, 371.6 GPU, 16.0 Xeon Phi, and 5.3 IBM Cell Millions of core hours per year. It provides access to supercomputers or clusters with low-latency interconnection based on x86_64 CPUs some of them equipped with accelerator cards, a BlueGene/P system, as well as one Cell processor based system.

### VI-SEEM Cloud Access Service

VI-SEEM Cloud service provides the ability to launch Virtual Machines (VMs) with public/private IPs, and to deploy Virtual Research Environment services for production or backup/fail-over instances. In total 500 VMs or 4 million of VM-hours per year are made available for the target scientific communities.

### VI-SEEM Grid Access Service

VI-SEEM grid provides access to smaller, geographically distributed clusters integrated via Grid middleware. The service enables users to utilize heterogeneous hardware resources using high-capacity approach.

## Data storage services: VI-SEEM solutions for uploading, sharing and retrieving research data

### VI-SEEM Data Discovery Service

https://search.vi-seem.eu

VI-SEEM data discovery is a powerful data management system for flexible searching, publishing and sharing of almost any type of data and metadata. The service uses B2FIND technology that is developed in the ongoing EUDAT project (https://eudat.eu) and the CKAN open-source platform (https://ckan.org).

### VI-SEEM Archival Service

The service offers safe data archiving and automatic replication with high availability and performance. Data archives are indexed and have search capabilities so that files and parts of files can be easily located and retrieved. Archived data are important for future reference and reproducibility of scientific simulations.



### VI-SEEM Simple Storage

https://simplestorage.vi-seem.eu

VI-SEEM Simple Storage service allows members of the target scientific communities to keep and sync research data on various devices, as well as to share this data thus making it a useful collaborative tool. Access is enabled via web browsers, desktop and mobile clients.

### VI-SEEM Repository

https://repo.vi-seem.eu

VI-SEEM Repository is the main storage service that allows users of the VI-SEEM VRE to deposit and share data, including publications and their associated data, software, references to software and workflows. The service also hosts simplified data formats such as images, videos or others suitable also for the general public.

## Application specific services: domain-specific services for Life Sciences, Climate Science and Digital Cultural Heritage research

### 1 SERVICES FOR LIFE SCIENCES RESEARCH: A PIPELINE WITH INNOVATIVE TOOLS FOR COMPUTER-AIDED DRUG DESIGN

### Subtract

http://subtract.vi-seem.eu

Subtract is an online tool that can calculate the volume of a binding site found in a protein. It accepts an atom selection and computes the three-dimensional convex hull of the atoms points. The algorithm computes the volume of the convex hull and the volume of the atoms that are included in the solid. The subtraction of those two volumes yields the volume of the investigated cavity. The algorithm computes cavity volumes of trajectory frames in parallel for maximum efficiency and speed.

### ChemBioServer

http://bioserver-3.bioacademy.gr/Bioserver/ChemBioServer

ChemBioServer is a web-application for effectively mining and filtering chemical compounds used in drug discovery. ChemBioServer allows for pre-processing of compounds, as well as for post-processing of top-ranked molecules resulting from a docking exercise with the aim to increase the efficiency and the quality of compound selection that will pass to the experimental test phase.

### AFMM
http://afmm.vi-seem.eu

AFMM provides an automated platform with which the users can generate parameters for modelling small molecules with Molecular Dynamics simulations. The program optimizes an initial parameter set -either pre-existing or using chemically-reasonable estimation, by iteratively changing them until the optimal fit with the reference set is obtained. By implementing a Monte Carlo-like algorithm to vary the parameters, the tedious task of manual parameterization is replaced by an efficient automated procedure.

### NANO-Crystal
http://nanocrystal.vi-seem.eu

NANO-Crystal is a web-based tool, for the construction of spherical nanoparticles of a given radius. The goal is to find the number and the Cartesian coordinates of smaller spheres that fit on the surface of the nanoparticle and visualize the output morphology. The program computes the number of smaller spheres that fit on the bigger surface and the user can download their Cartesian coordinates. The tool is complemented by a crystal computational morphology toolbox for constructing and modelling different crystal nanoparticle shapes.

### DICOM
http://viseem.dicom.md

DICOM Network is a service that aids the collection, process and visualization of medical images online. It consists of the DICOM Portal, a front-end user interface for patients, doctors, scientists, the DICOM Server, which collects and archives images to DICOM portal for online access, and the DICOM Viewer for visualization, 3D modelling and medical image editing.

## 2 SERVICES FOR CLIMATE RESEARCH: FLEXIBLE ACCESS TO GEO-REFERENCED SCIENTIFIC DATA

### VI-SEEM Live Access Server
http://las.vi-seem.eu

Live access server is a highly configurable server designed to provide flexible access to geo-referenced scientific data. The application enables the user to visualize data with on-the-fly graphics, request custom subsets of variables in a choice of file formats, access background reference material about the data (metadata), and compare variables from distributed locations.



## 3 SERVICES FOR DIGITAL CULTURAL HERITAGE RESEARCH: MANAGING COMPLEX REPRESENTATIONS OF DATA

### VI-SEEM Clowder
http://dchrepo.vi-seem.eu

Clowder is a research data management system deployed to support the VI-SEEM digital cultural heritage community by being able to handle any data format. Clowder provides three major extension points: pre-processing, processing and previewing. Users can upload, download, search, visualize and get various information about cultural heritage data in the region.

# Cross disciplinary services: access to software tools, applications, documentation and training material

### VI-SEEM Workflow and Software Tools Repository
https://code.vi-seem.eu

The service provides access to several modules such as documents containing best practice procedures and workflows for the usage of available datasets and codes for the production of scientific results.

### VI-SEEM Regional Community Datasets
https://repo.vi-seem.eu
https://search.vi-seem.eu

This service provides access and information regarding datasets of regional importance for the scientific communities of interest. Examples of such datasets are the RTi dataset of ancient Cypriot coinage (Digital Culture Heritage) and Datasets with data for thermodynamic stability of RNA/DNA and DNA/DNA duplexes (Life Sciences). The datasets can be downloaded and used by the customer for research and education purposes.

### VI-SEEM Scientific Application Environment
https://vre.vi-seem.eu/index.php/scientific-application-environment

VI-SEEM scientific application environment provides access and information to several optimized software modules such as scientific applications and libraries, virtual machine images and list of codes, relevant for the work of the regional scientific communities.


# Excel

The VRE enables scientists to run research activities of international standing in the fields of Life Sciences, Climate Science, and Digital Cultural Heritage, to address a plethora of scientific and social challenges.

## Life Sciences

Advanced services for understanding disease mechanisms in the populations of the region facilitated by the rich Virtual Research Environment.

- Modelling and Molecular Dynamics study of important drug targets
- Computer-aided drug design, analysis of next generation DNA sequencing data
- Synchrotron data analysis and image processing for biological applications.

## Climate Science

e-Infrastructure resources to predict global and regional climate change, weather extremes, and related impacts.

- Regional climate modelling to better understand and predict climate change and impacts, as well as climatic phenomena such as dust storms

- Air quality modelling, including atmospheric chemistry and air pollution transport
- Model development and application for weather forecast and extreme weather prediction.

### Digital Cultural Heritage

Sophisticated tools and techniques for new understanding of the past and more accurate interpretations of historical interactions between human actors, agency and the rich heritage of regional cultures.

- Online services and access to repositories for enabling studies of the immense cultural heritage assets in the region, such as searchable digital libraries; with support of metadata and OCR for Latin characters
- Online visualization tools and data management systems to drive breakthrough contributions to art historical problems, e.g. interactive visualization viewer of RTi files and 3D models with digital libraries integration
- Unsupervised feature learning in photogrammetric techniques, data processing for image classification; semantic referencing; and geo-referencing.

## VI-SEEM CONSORTIUM

GRNET (Greece)
Cyl (Cyprus)
IICT-BAS (Bulgaria)
IPB (Serbia)
KIFU (Hungary)
UVT (Romania)
UPT (Albania)
UNI BL (Bosnia and Herzegovina)
UKIM (FYR of Macedonia)
UOM (Montenegro)
RENAM (Moldova)
IIAP-NAS-RA (Armenia)
GRENA (Georgia)
BA (Egypt)
IUCC (Israel)
SESAME (Jordan)

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 €**




Contact: VI-SEEM Project Management Office
e-mail: vi-seem-pmo@vi-seem.eu

https://vi-seem.eu

Twitter: @vi_seem

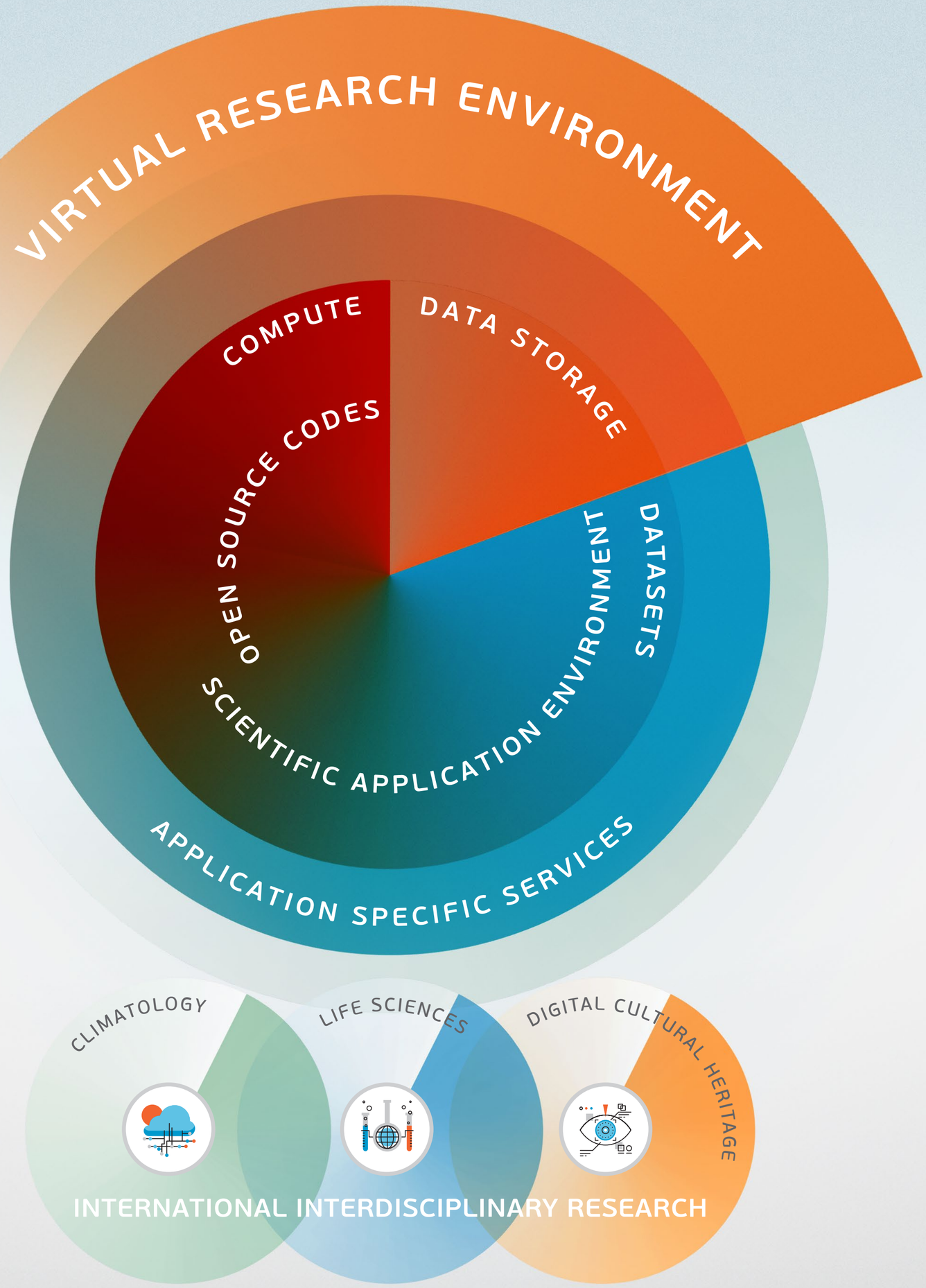
Linkedin: VI-SEEM

This project receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 675121.

HORIZON 2020

# 2. VI-SEEM poster




vi-seem.eu

# Vi-SEEM

## VRE FOR REGIONAL INTERDISCIPLINARY COMMUNITIES IN SOUTHEAST EUROPE & THE EASTERN MEDITERRANEAN

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Vi-SEEM

Project Management Office: vi-seem-pmo@vi-seem.eu
https://vi-seem.eu / Twitter: @vi_seem / Linkedin: VI-SEEM

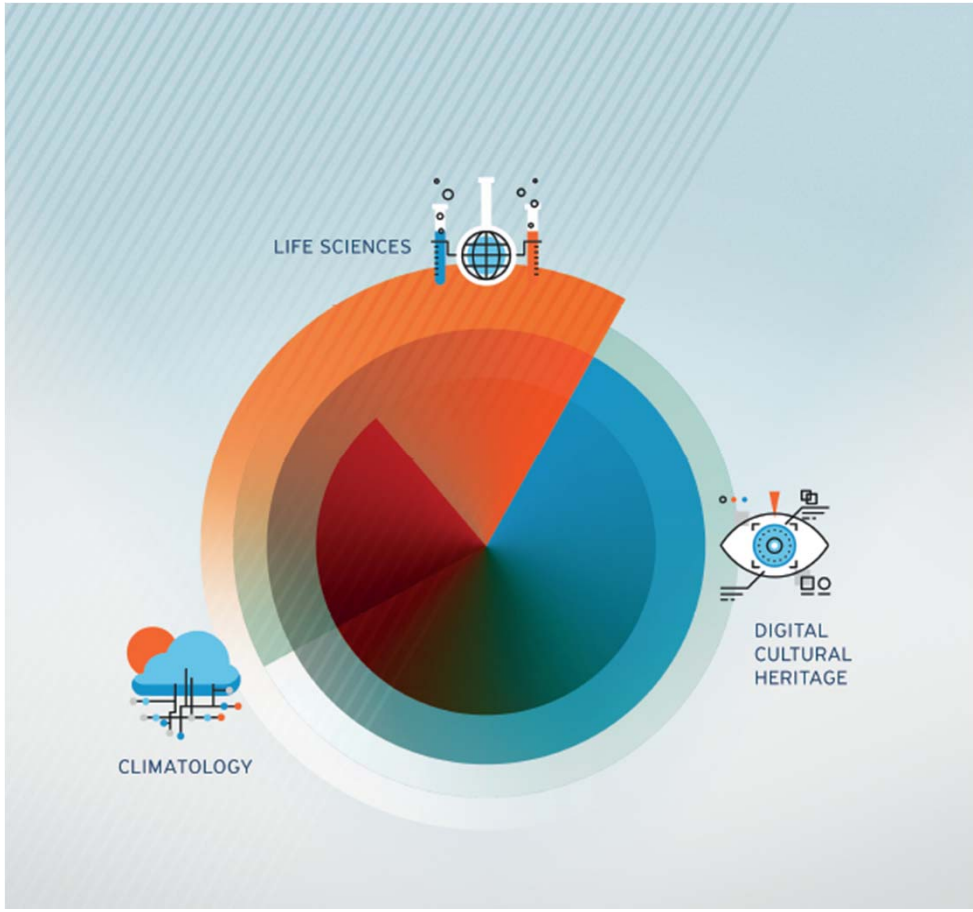
This project receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 675121.

HORIZON 2020

# 3. VI-SEEM presentation

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




**<Title>**

<Event>

<Presenter>

The VI-SEEM project initiative is co-funded by the European Commission under the H2020 Research Infrastructures contract no. **675121**

# Administrative details

- VI-SEEM: Virtual Research Environment for regional interdisciplinary communities in Southeast Europe and the Eastern Mediterranean
- Start date 01/10/2015
- Duration 36 months
- Total funded effort: 715 PMs
- EC contribution: 3.3m euro
- H2020-EINFRA-2015-1: e-Infrastructures for virtual research environments (VRE): EINFRA-9-2015, RIA, contract No 675121

| Participant no. | Participant organisation name | Part. short name | Country |
|---|---|---|---|
| 1 (Coord) | GREEK RESEARCH AND TECHNOLOGY NETWORK S.A. | GRNET | Greece |
| 2 | THE CYPRUS INSTITUTE | CyI | Cyprus |
| 3 | INSTITUTE OF INFORMATION AND COMMUNICATION TECHNOLOGIES – BULGARIAN ACADEMY OF SCIENCES | IICT-BAS | Bulgaria |
| 4 | INSTITUTE OF PHYSICS BELGRADE | IPB | Serbia |
| 5 | NATIONAL INFORMATION INFRASTRUCTURE DEVELOPMENT INSTITUTE | NIIF | Hungary |
| 6 | WEST UNIVERSITY OF TIMISOARA | UVT | Romania |
| 7 | POLYTECHNIC UNIVERSITY OF TIRANA | UPT | Albania |
| 8 | UNIVERSITY OF BANJA LUKA | UNI BL | Bosnia and Herzegovina |
| 9 | SS CYRIL AND METHODIUS UNIVERSITY OF SKOPJE | UKIM | FYR of Macedonia |
| 10 | UNIVERSITY OF MONTENEGRO | UOM | Montenegro |
| 11 | RESEARCH AND EDUCATIONAL NETWORKING ASSOCIATION OF MOLDOVA | RENAM | Moldova |
| 12 | INSTITUTE FOR INFORMATICS AND AUTOMATION PROBLEMS OF THE NATIONAL ACADEMY OF SCIENCES OF THE REPUBLIC OF ARMENIA | IIAP-NAS-RA | Armenia |
| 13 | GEORGIAN RESEARCH AND EDUCATIONAL NETWORKING ASSOCIATION | GRENA | Georgia |
| 14 | BIBLIOTHECA ALEXANDRINA | BA | Egypt |
| 15 | INTER UNIVERSITY COMPUTATION CENTER | IUCC | Israel |
| 16 | SYNCHROTRON-LIGHT FOR EXPERIMENTAL SCIENCE AND APPLICATIONS IN THE MIDDLE EAST | SESAME | Jordan |

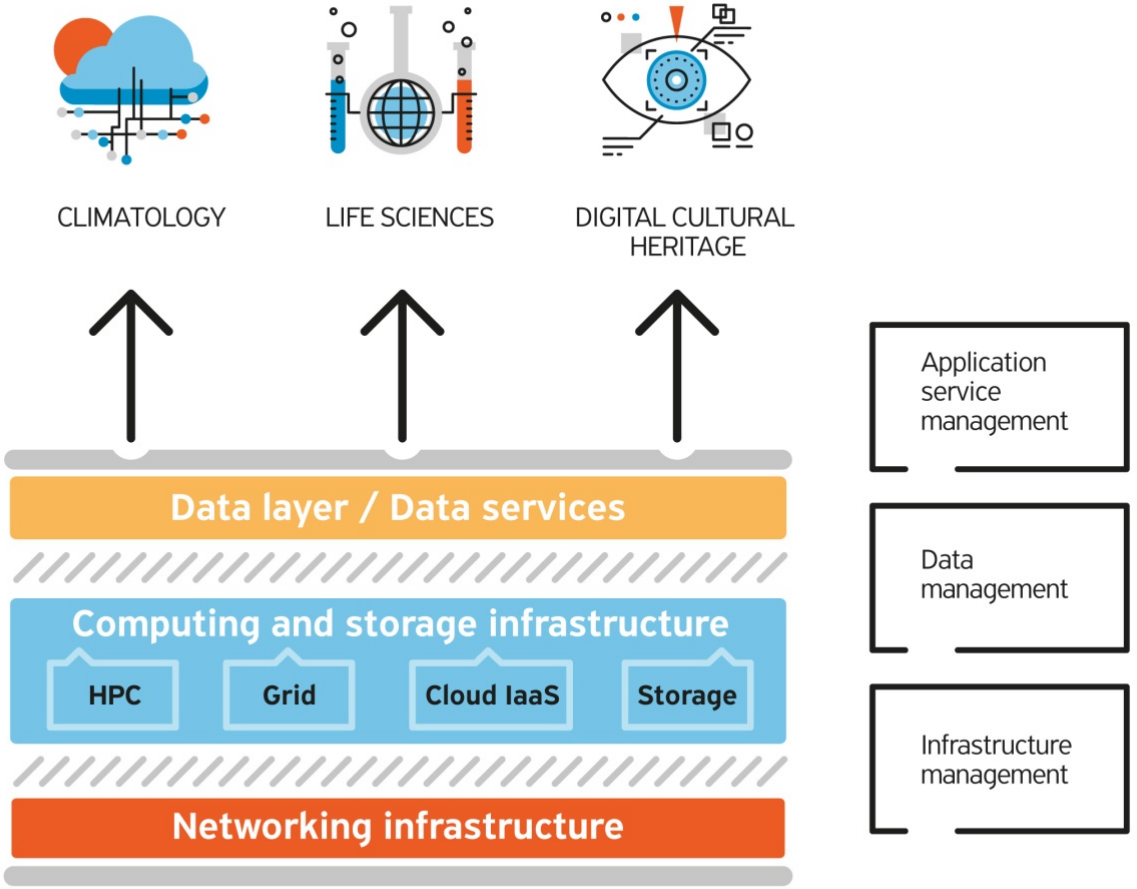
# A continuing, integrative effort

- e-Infrastructure built over the last decade
- Targeting less developed EU countries, countries on path to accession and ENP
- Merging of SEE and EM regions
- SEE: network SEEREN1-2, Grid SEE-GRID-1/2/SCI, HPC HP-SEE
- EM: HPC LinkSCEEM1-2

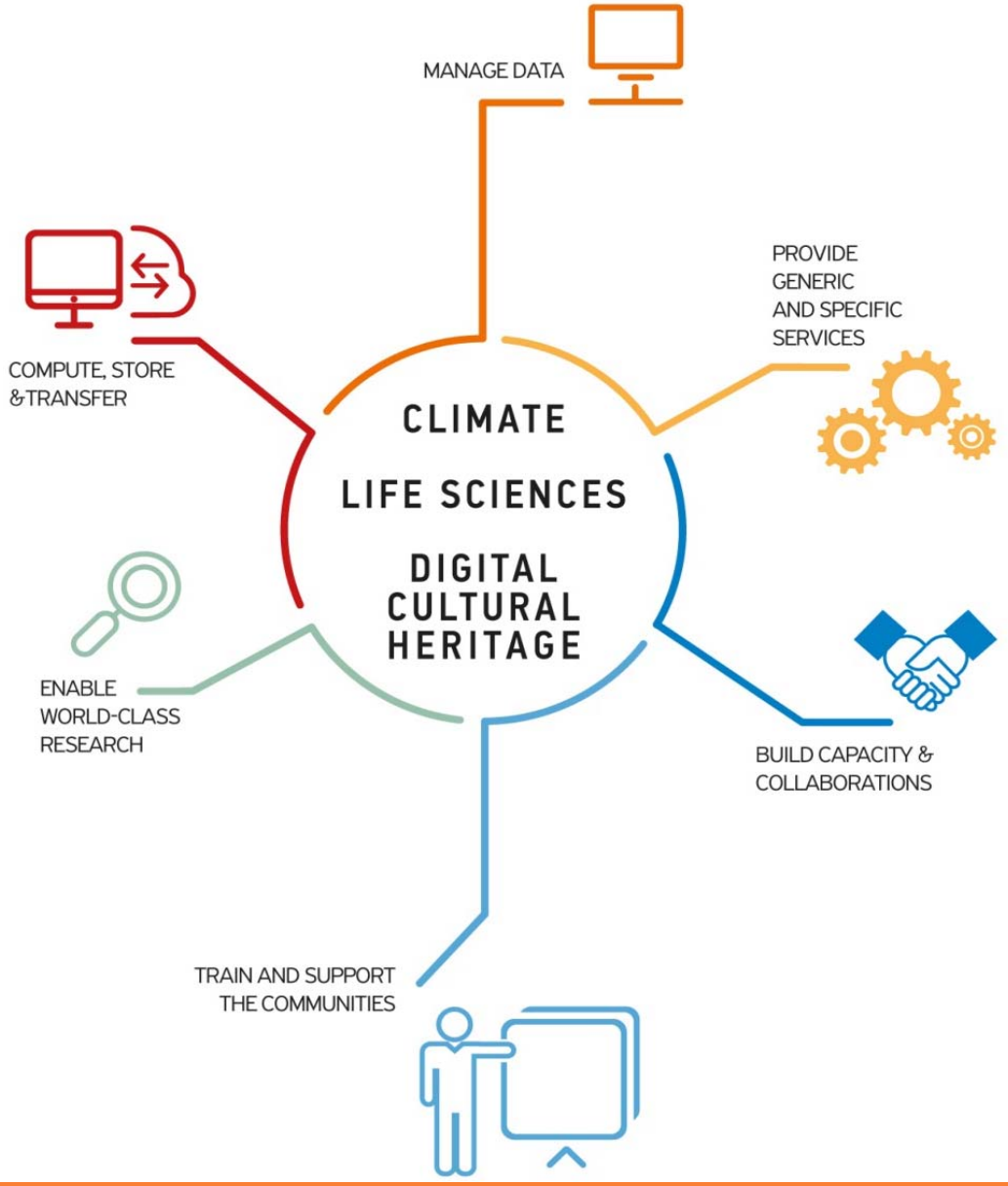
# Overall objective

- Provide user-friendly integrated e-Infrastructure platform for Scientifi Communities in Climatology, Life Sciences, and Digital Cultural Heritage for the SEEM region; by linking compute, data, and visualization resources, as well as services, software and tools.

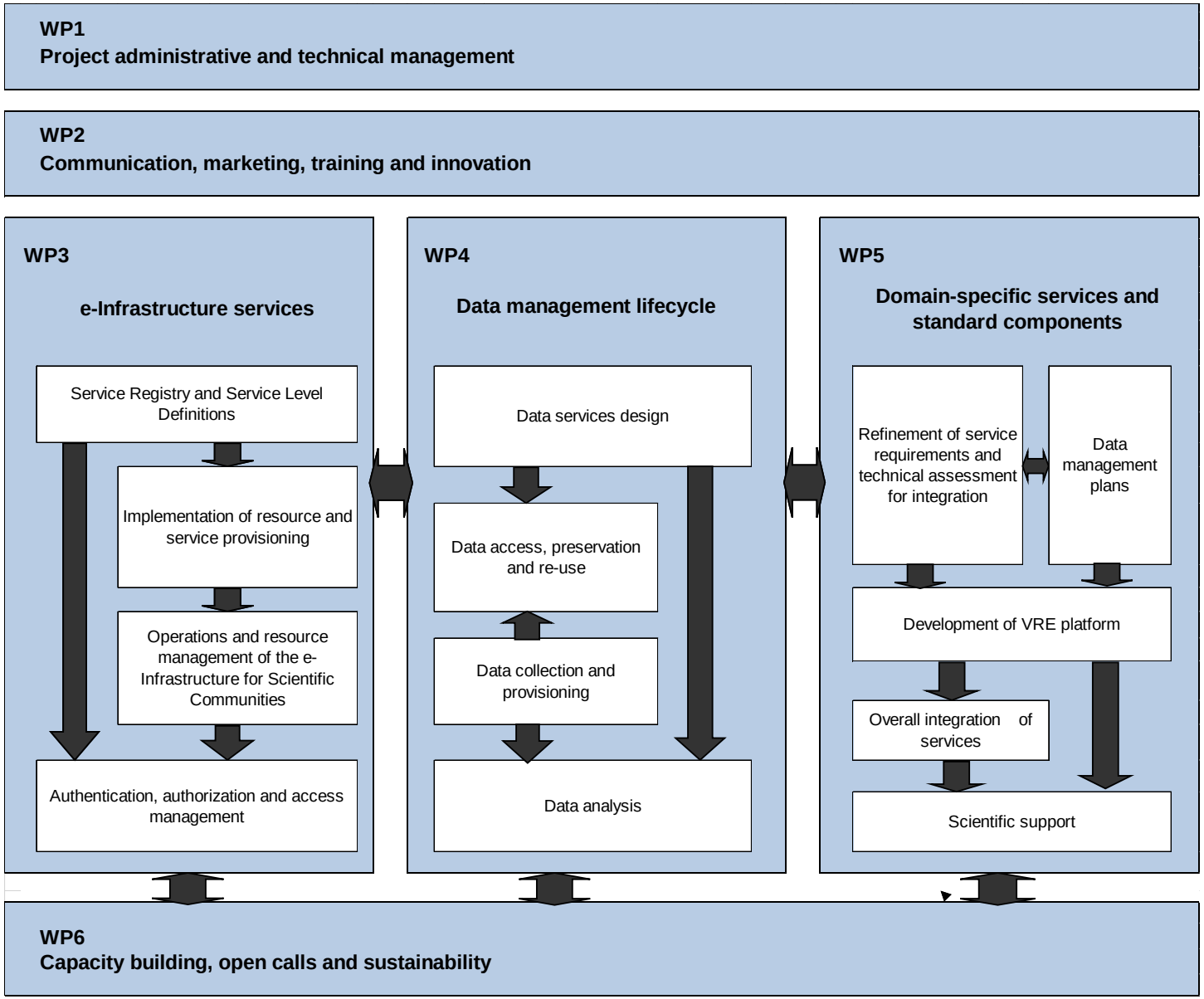
- Diverse computing technologies
- Advent of big data / data services
- Service orientation



# Specific objectives

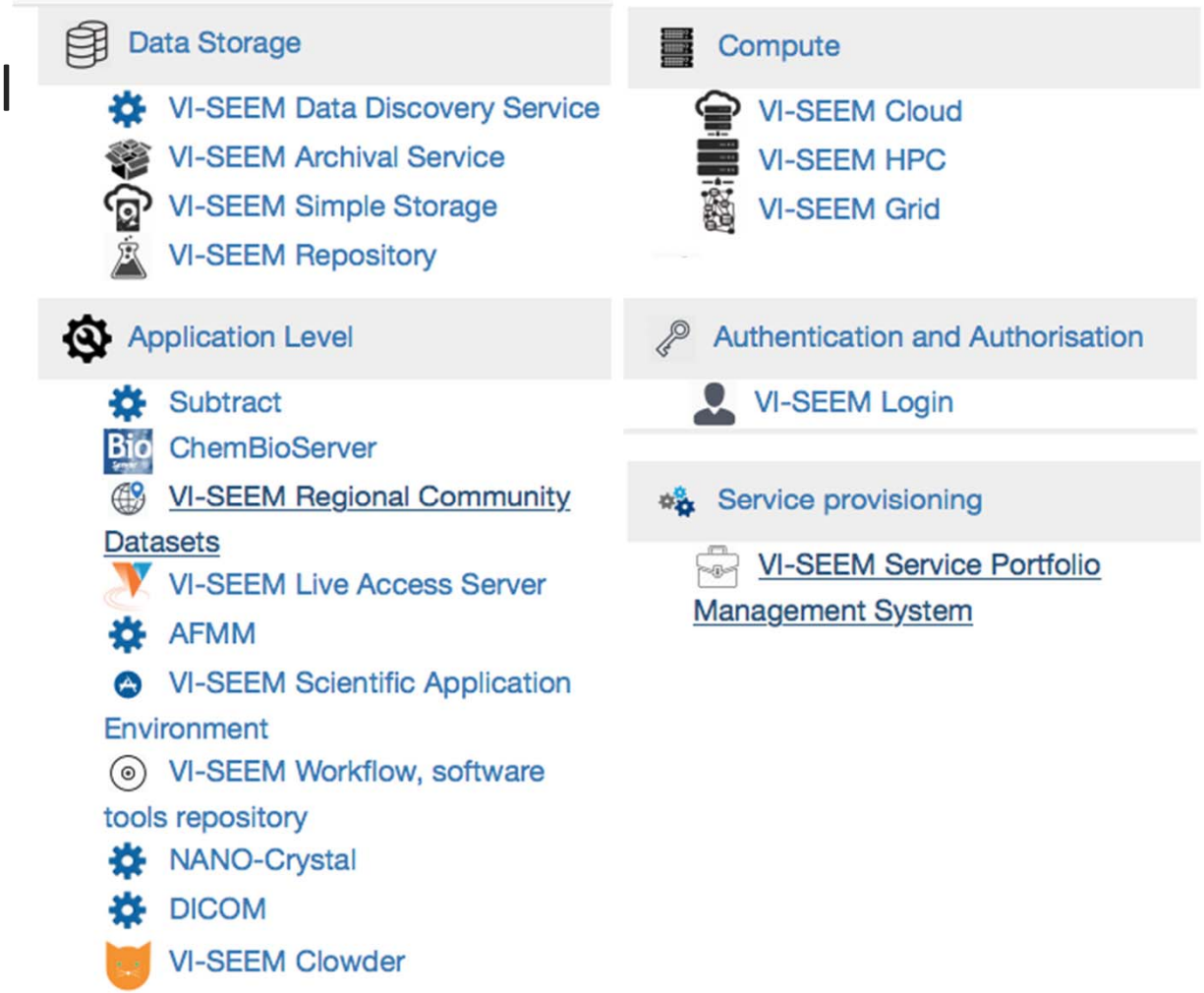


# Work organization – PERT chart



# Access to services - the service catalogue (WP3)

- Service catalogue provides service discovery and contains all project services
  - Common services and resources operated by WP3
  - Storage/data services operated by WP4
  - Application-level services provided by WP5
- Designed to be compatible with the FitSM standards
- https://services.vi-seem.eu/
- 19 services grouped in 5 categories



# e-Infrastructure services (WP3)

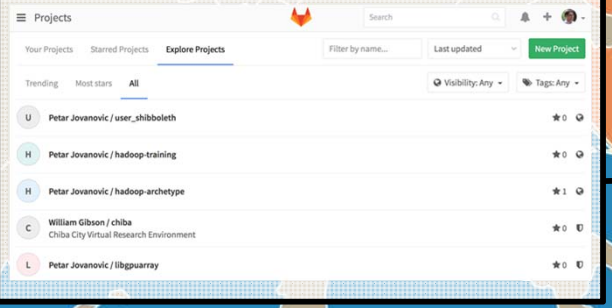
- Project e-Infrastructure
  - HPC sites – clusters and supercomputers (different hardware architectures)
  - Grid sites – interconnected via Grid middleware
  - Cloud sites – virtual machines (VMs) for services and distributed computing
  - Storage sites – short and long term storage
- Modern, state-of-the-art technologies for computing, virtualization and storage are made available to the scientific communities
- Overall infrastructure capacity
  - 23,744 CPU-cores, 1,012,736 GPU-cores, 20,496 Xeon Phi-cores
  - 3,112 Grid CPU-cores
  - 14,152 Cloud VM-cores
  - 18 PB of storage space

# e-Infrastructure example - HPC sites (WP3)

# e-Infrastructure operations and resource management (WP3)

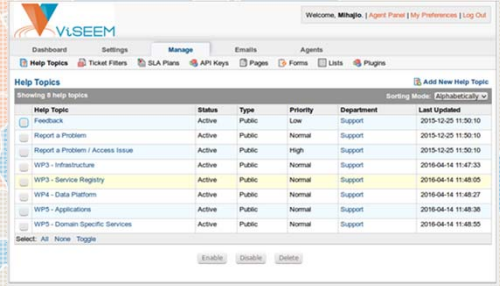
## Code Repository, UoBL

https://code.viseem.eu/




## Helpdesk, UoBL

https://support.vi-seem.eu/




## Accounting, IICT-BAS

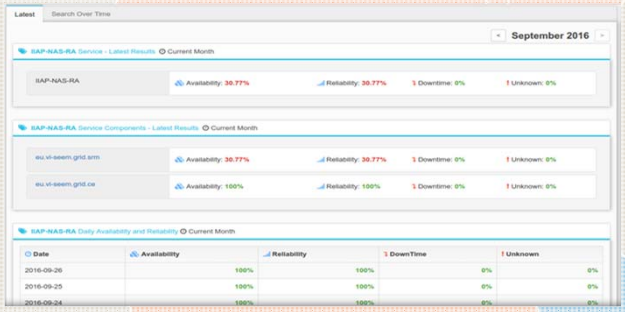
https://accounting.vi-seem.eu/

## GOCDB, UKIM

https://gocdb.vi-seem.eu/


## Monitoring, GRNET/UoBL

https://mon.vi-seem.eu/



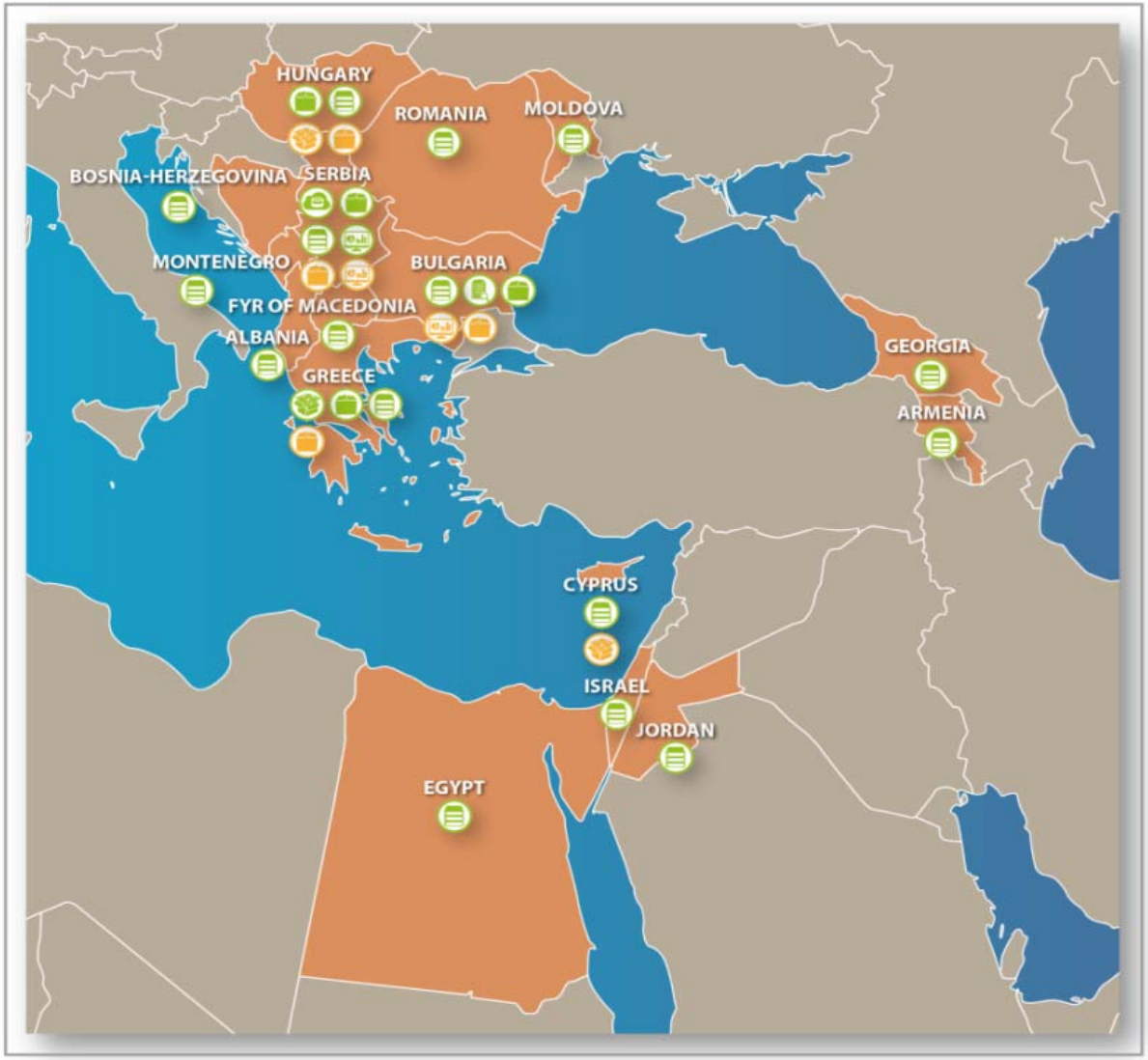

## Technical Wiki, CYI

https://wiki.vi-seem.eu/

# Data management services (WP4)

- Functions allowing for data management for selected Scientific Communities, engage the full data management lifecycle
  - VSS – Simple Storage Service (simplestorage.vi-seem.eu)
  - VRS – Repository Service (repo.vi-seem.eu); integrated with PID service
  - VAS – Archival Service (deployed at 6 sites – GRNET, IPB, IICT-BAS, NIIF, IUCC, BA)
  - VLS – work storage space / local storage and data staging (at 12 sites)
  - VDDS – Data Discovery Service (search.vi-seem.eu)
  - VDAS – Data Analysis Service (hadoop.ipb.ac.rs)
  - PIDs (handle.grnet.gr)

# Data management services – spread (WP4)



# VRE portal (WP5)

- All services integrated through the user-facing VRE portal
- https://vre.vi-seem.eu/
- Organized per Scientific Community
  - Climate SC
  - Life Sciences SC
  - Digital Cultural Heritage SC
- Access to VI-SEEM services and resources: Compute, Data, Domain-specific, Training
- Guidelines on how to contribute to
  - Applications
  - Workflows/codes
  - Datasets
  - Domain-specific services
- Domain-specific services integrated in the portal in a series of phases carried out by services enablers and user communities

# Domain-specific services (WP5)

- VRE Scientific Application Environment
  - Optimized applications and libraries
  - Virtual Machine (VM) images
  - Codes from the three scientific communities
- Workflow, software tools repository
- Regional community datasets
- Application level services
  - Climate
    - Live Access Server
  - Digital Cultural Heritage
    - VI-SEEM Clowder
    - 3DINV
    - AUTOGR
  - Life Sciences
    - ChemBioServer
    - AFMM
    - NANO-Crystal
    - Subtract

# Application-level service flagships (WP5)

- Climate
  - Live Access Server

- Digital Cultural Heritage
  - VI-SEEM Clowder

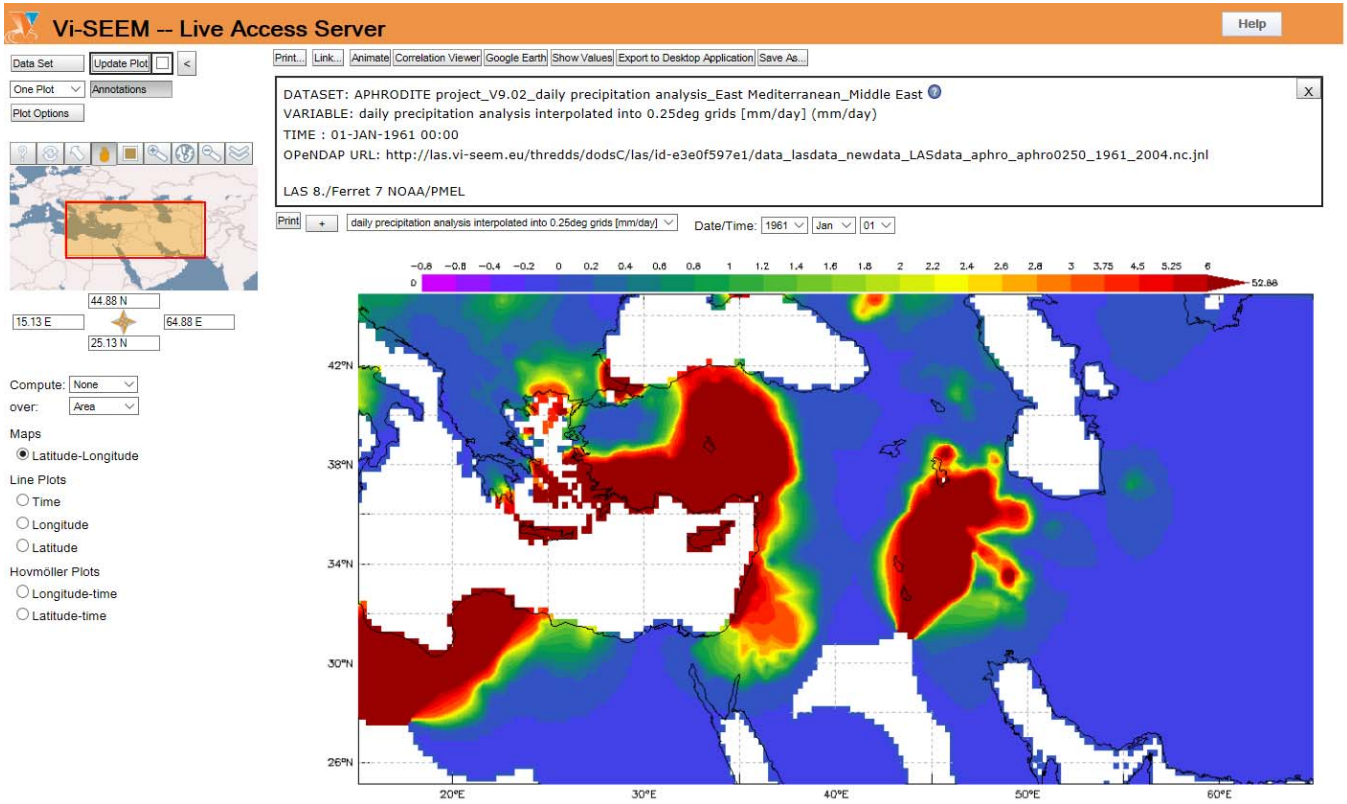
- Life Sciences
  - ChemBioServer

# Live Access Server (WP5)

- Live Access Server

http://las.vi-seem.eu/las

A web server providing flexible access to geo-referenced scientific data, offering visualization & post-processing capabilities for climate data

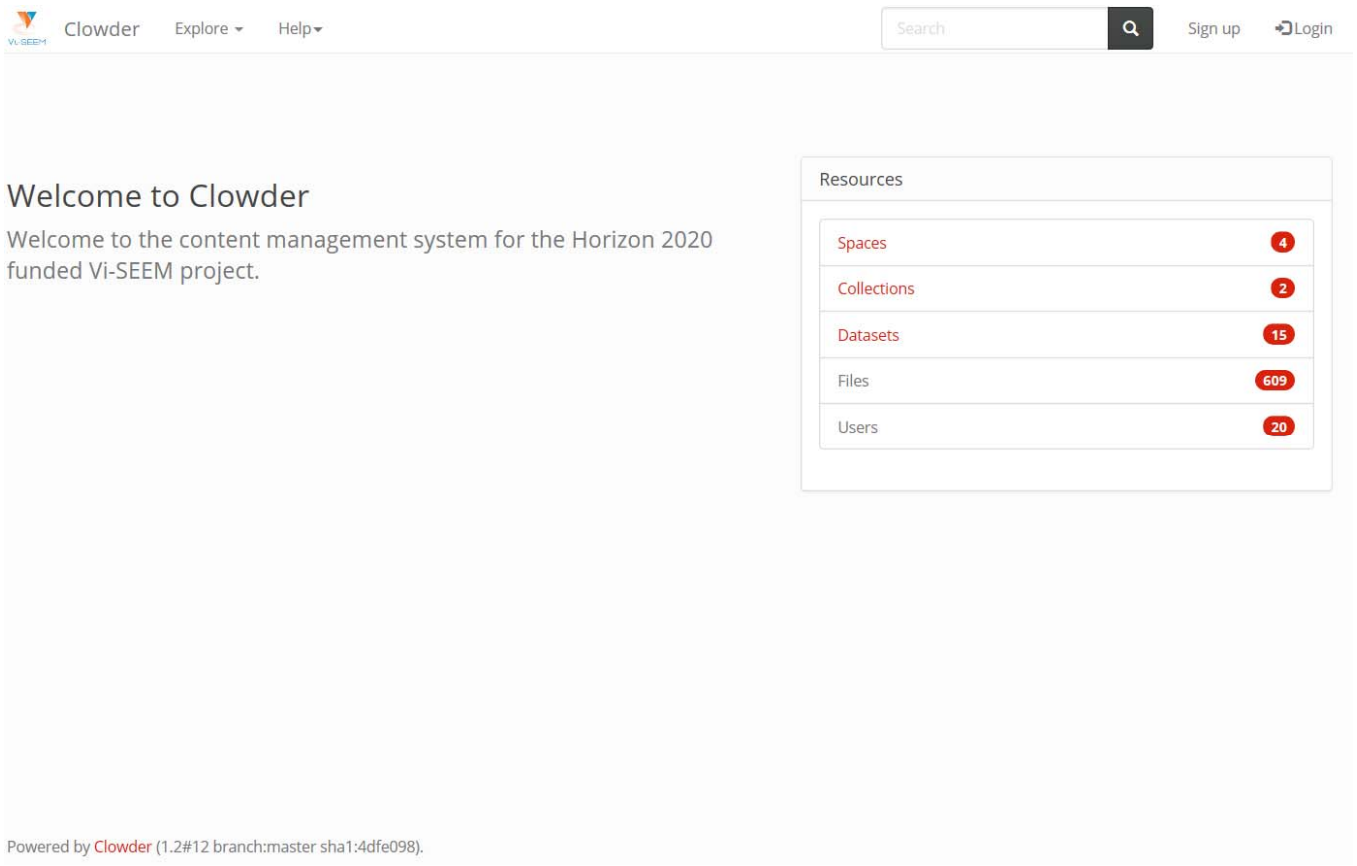


# Clowder (WP5)

- VI-SEEM Clowder

http://dchrepo.vi-seem.eu/

A Digital Culture Heritage repository which also offers integrated interactive visualization tools

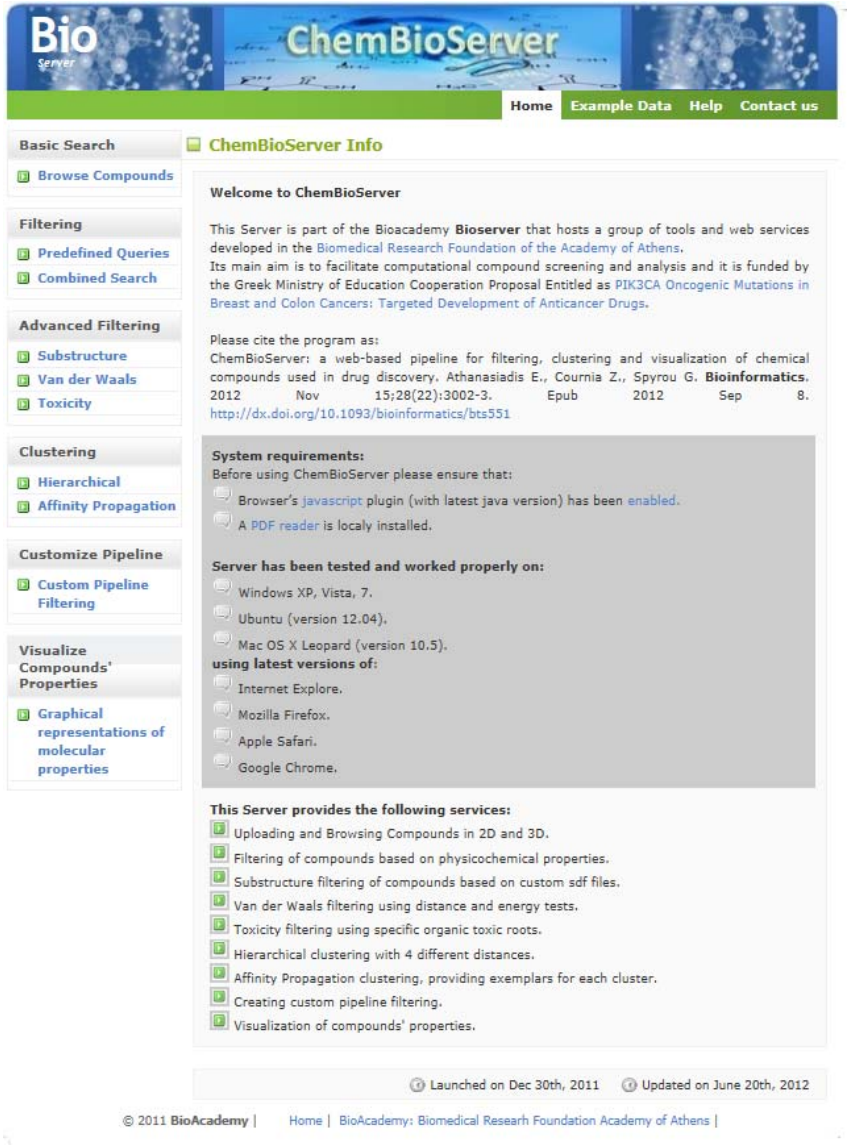


# ChemBioServer (WP5)

- ChemBioServer

http://bioserver-3.bioacademy.gr/Bioserver/ChemBioServer/

A web-based pipeline for filtering, clustering and visualization of chemical compounds used in drug discovery



# Access to the VRE (WP6)

- Defined the framework for accessing VI-SEEM services and resources
- Opened up the VRE to the widest possible regional communities
- Uses a fair, transparent and trusted mechanism for allocation of VRE resources
- Facilitates access and deployment of new applications in the VRE
- 3 calls envisaged
- 40+ applications have been allocated resources

- Scientific support also via WP5

# Access to the VRE - application areas (WP6)

- Modeling and Molecular Dynamics (MD) study of important drug targets
- Computer-aided drug design
- Analysis of Next Generation DNA sequencing data
- Synchrotron data analysis
- Image processing for biological applications

- Regional climate modelling to better understand and predict climate change and impacts, and phenomena such as dust storms.
- Air quality modelling, including atmospheric chemistry and air pollution transport.
- Weather forecast and extreme weather prediction, model development, application.

- Online services and access to repositories in order to enable studies of the immense cultural heritage assets in the region (e.g., searchable digital libraries; with support of meta-data and OCR for Latin characters).
- Online visualization tools and data management systems to drive breakthrough contributions to art historical problems (e.g., interactive visualization viewer of RTi files and 3D models with digital libraries integration).
- Unsupervised feature learning in photogrammetric techniques, data processing for image classification; semantic referencing; and geo-referencing.

# 1st Open call (WP6)

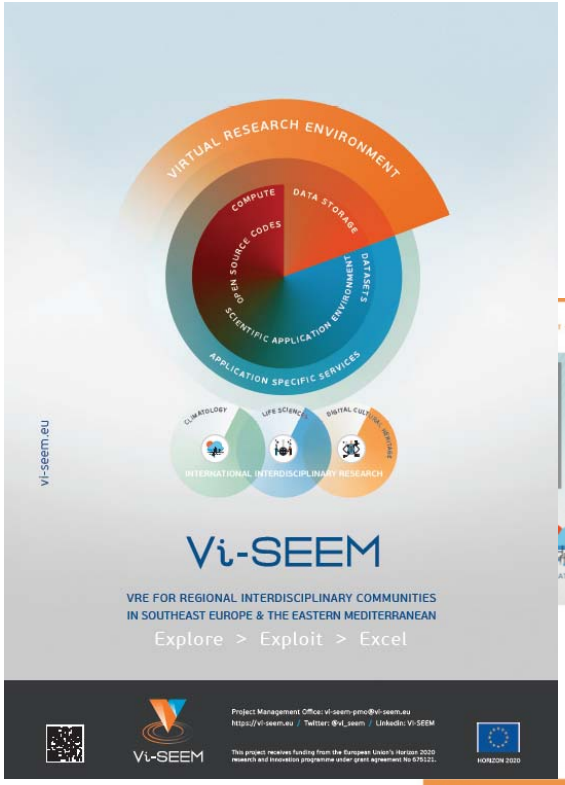
- 23 project applications, 21 accepted
  - 11 in Climatology
  - 5 in Digital Cultural Heritage
  - 5 in Life Sciences
- 10 different countries of the region
- 14 of the applications required HPC services
- 6 required Grid and Cloud services
- 12 required storage services
- 8 required application specific services
- Per-country distribution: Bosnia and Herzegovina: 1, Bulgaria: 6, Cyprus: 3, FYR of Macedonia: 2, Georgia: 1, Greece: 4, Montenegro: 1, Israel: 1, Romania: 1, Serbia: 1.
- 14M CPU core hours, 3.4M GPU core hours, 1M Phi core hours provided

# 2nd Open call (WP6)

- Call Opened in May 2017 with deadline June 2017
- 14 Services made available to users
- In total 15 million CPU core hours, 370 million GPU core hours and 15 million Phi core hours are available
- Targeted research fields
  - 5 areas in Life Sciences
  - 3 areas in Climate Research
  - 3 areas in Digital Cultural Heritage
- 18 applications have been received
  - 7 in Life Sciences
  - 5 in Climate Research
  - 6 in Digital Cultural Heritage

# Training, dissemination, marketing, innovation (WP2)

- Content-rich platform for communication within the VRE community and beyond
  - Main web page, VRE portal, training portal, wiki
  - Agenda system, document repository system
- VI-SEEM marketing activities
  - Newsletters, popular articles, promotional materials, focused meeting and events for various types of audiences (SMEs, museums, universities, institutes, etc.), seminars and tours for students
- Events organized
  - 7 national dissemination events
  - 7 national training events
  - 3 regional training events
- 26 external events where project presented
- 25 papers
- 9 innovative developments




# Training portal (WP2, WP5)

- VI-SEEM Training Portal
- Access via: https://training.vi-seem.eu/
  - Storage services
  - Domain-specific software and tools
    - Climate
    - Digital Cultural Heritage
    - Life Sciences
  - HPC
  - Cloud
  - Data
  - Grid
  - Scientific visualization

# Main achievements

- VI-SEEM provides a Virtual Research Environment for the scientific user communities in Climatology, Life Sciences, and Cultural Heritage
- VI-SEEM provides an integrated platform bringing together computing, data management and domain-specific services
- Services listed in the Service Catalogue and provided through the VRE Portal
- Support the full lifecycle of scientific research
- User-centric view
- Open calls for access, peer review
- Wide outreach campaign
- Promote and support future usage, access, and underlying services

# We cherish our community!

# Thanks!

https://vi-seem.eu

@vi_seem

VI-SEEM

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## Conclusion

The communication package constitutes a strong dissemination tool that effectively serves the objectives of the VI-SEEM strategic marketing plan.

The promotional package is an essential tool for the dissemination of the VI-SEEM project. The VI-SEEM consortium has established a strong corporate image, in order to maximize the impact of the major project milestones and outcomes to its target groups. Since the beginning of the project, special emphasis has been given on creating an effective package, i.e. the core brochure, poster and power point presentation.

The VI-SEEM promotional package is built on a common and consistent brand and specific graphic style, which reflects the project corporate design.

The new version of D2.5 – “Promotional Package with updates” – has been produced to address the review recommendations which focused on promotion and outreach to users, and is now more user-centric.

 