EGI Sponsored VO

SERVICE LEVEL AGREEMENT

Customer	**PITHIA-NFR/vo.pithia.eu**
Service Provider	EGI Foundation
First day of service delivery	01/06/2022
Last day of service delivery	31/03/2025
Status	Final
Agreement signature date	23/05/2023
Agreement link	https://documents.egi.eu/document/3885
Template version	v0.2

TERMINOLOGY

The EGI glossary of terms is available at: https://go.egi.eu/glossary

For the purpose of this Agreement, the following terms and definitions apply. The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119.

Contents

The present Service Level Agreement ("the Agreement") is made between **EGI Foundation (the Service Provider)** and **PITHIA-NFR/vo.pithia.eu (the Customer)** to define the provision and support of the provided services as described hereafter. Representatives and contact information are defined in Section 6.

The **PITHIA-NFR**[1] project aims to build a European distributed network that integrates observing facilities, data processing tools and prediction models dedicated to ionosphere, thermosphere and plasmasphere research. For the first time, all European researchers, key national and regional research infrastructures such as Ionosondes, digisondes, GNSS receivers, Doppler sounding systems, riometers, and VLF receivers are integrated, ensuring optimal use and joint development.

The Customer is a consortium represented by the **National Observatory of Athens (NOA) / Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing (IAASARS)**.

The Component providers are delivering a part of the Service(s) and are listed in Section 1.

This Agreement is valid from **01/06/2022** to **31/03/2025**.

The Agreement was discussed and approved by the Customer and the Provider on **31/05/2022**.

This Agreement was updated on **28/03/2023** and on **31/10/2023**.

1 The Services

All services provided by EGI are listed under: https://www.egi.eu/services/

Possible allocation types:

- **Pledged** - Resources are exclusively reserved to the Community.
- **Opportunistic** - Resources are not exclusively allocated, but subject to local availability.
- **Time allocation** - Resources are available for a fixed time period.

Possible payment mode offer:

- **Sponsored** - Model where the Customer uses Services that are funded, or co-funded by the European Commission or government grants.
- **Pay-for-use** - Model where the Customer directly pays for the Services used.

The Services are defined by the following properties:

Cloud Compute (category: Compute)

Description: https://www.egi.eu/services/cloud-compute/

➔ Component Provider: IN2P3-IRES

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[1] https://www.pithia-nfr.eu

◆ Cloud Compute
- Number of virtual CPU cores: 80
- Memory per core (GB): 4
- Local disk (GB): 400
- Public IP addresses: 10
- Payment mode: **Sponsored**
- Other technical requirements: N/A
- Duration: 34 months

◆ Allocation type: **Pledged**
◆ Provider AUP link: (included in VO ID card)
◆ Supported VOs: vo.pithia.eu
◆ VO ID card: https://operations-portal.egi.eu/vo/view/voname/vo.pithia.eu
◆ VO-wide image list: https://vmcaster.appdb.egi.eu/store/vo/vo.pithia.eu/image.list
◆ Cost:
- 864.00 € for the period 01/06/2022 - 31/03/2023
- 17,988.48 € for the period 01/04/2023 - 31/03/2025

Online Storage (category: Storage)

Description: https://www.egi.eu/services/online-storage/

➔ Component Provider: IN2P3-IRES
◆ Online Storage
- Guaranteed storage capacity: 10 TB
- Opportunistic storage capacity: N/A
- Standard interfaces supported: Cinder
- Storage technology: CEPH
- Other technical requirements: N/A
- Duration: 24 months
- Payment mode: **Sponsored**

◆ Allocation type: **Pledged**
◆ Provider AUP link: (included in VO ID card)
◆ Supported VOs: vo.pithia.eu
◆ VO ID card: https://operations-portal.egi.eu/vo/view/voname/vo.pithia.eu
◆ VO-wide image list: https://vmcaster.appdb.egi.eu/store/vo/vo.pithia.eu/image.list
◆ Cost:
- 1,612.80 € for the period 01/04/2023 - 31/03/2025

Check-In (category: Security)

Description: https://www.egi.eu/services/check-in/

➔ Component Provider: EGI

◆ Check-In (as community AAI/IdP): https://aai.egi.eu/registry/
  - Deployment Type[2]: Shared
  - AAI protocol[3]: OIDC
  - Authentication options (select all that apply)[4]: All supported in shared instance
  - User registration and group management service operated by[5]: EGI
  - User registration and group management[6]: COmanage
    - COU name: CO:COU:vo.pithia.eu:members:all
    - COU enrollment URL:
      https://aai.egi.eu/registry/co_petitions/start/coef:371
    - COU entitlements:
      urn:mace:egi.eu:group:vo.pithia.eu:role=member#aai.egi.eu
      urn:mace:egi.eu:group:vo.pithia.eu:role=vm_operator#aai.egi.eu
  - Access to the e-infrastructure services[7]: EGI
  - Payment mode: **Sponsored**
◆ Allocation type: **Pledged**

The Services are supported by additional services:

- Accounting[8]
- Service Monitoring[9] (EGI operational Virtual Organisation only)

Note: Please note that the following Services are not provided by EGI Foundation:

- Monitoring of **vo.pithia.eu**
- Monitoring of services provided by the Customer on agreed resources

2 Service hours and exceptions

The Services operate during the following hours: twenty-four (24) hours a day, seven (7) days a week, three hundred sixty-five (365) days a year.

The following exceptions apply:

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[2] Shared, Dedicated

[3] OIDC, SAML (multiple option can be selected)

[4] eduGAIN, ORCID, Google, Facebook, LinkedIn, X.509 digital certificates, Other (please specify)

[5] Community, EGI

[6] COmanage, Perun, VOMS, ask EGI support to choose the group management technology, Other (customer can specify other group management systems)

[7] EGI, EUDAT, GEANT (multiple options can be selected)

[8] http://accounting.egi.eu/

[9] http://argo.egi.eu/

- Planned maintenance windows or service interruptions ("scheduled downtimes"[10]) will be notified via email in a timely manner i.e. 24 hours before the start of the outage.
- Downtime periods exceeding 24 hours need justification.

3 Support

Support is provided via EGI Service Desk[11]. Access requires a valid X.509 or the login via an EGI SSO account[12]. Support is available between:

- Monday to Friday.
- From 9:00 to 17:00 in the time zone of the relevant Resource Centres.

Service times always apply with the exception of public holidays in the country of the supporting Resource Centres.

3.1 Incident handling

Incidents will be handled according to the Quality of Support level that is estimated according to the impact of the outage or service quality degradation.

The Quality of Support in this Agreement has level: **Medium[13]**

Incident priority	Response time
Less urgent	5 working days
Urgent	5 working days
Very Urgent,	1 working day
Top Priority	1 working day

so the incidents, based on their priority will be responded to with the following response times:

Incident priority[14]	Response time	Comment
Less urgent	5 working days	wishes and enhancements that are "nice to have"
Urgent	5 working days	service degraded; work-around available
Very Urgent	1 working day	service degraded; no work-around available

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[10] https://docs.egi.eu/internal/configuration-database/downtimes/
[11] http://helpdesk.egi.eu/
[12] https://www.egi.eu/sso/
[13] https://docs.egi.eu/internal/helpdesk/features/quality-of-support-levels/
[14] https://docs.egi.eu/internal/helpdesk/features/ticket-priority/

Top Priority	1 working day	service interrupted; needs to be addressed as soon as possible

Table 1. Response times to incidents according to the incident priority of "Medium" services

3.2 Service requests

In addition to resolving incidents, standard service requests[15] will be fulfilled through the defined support channels in the same way as incidents. Service requests are classified as "Less urgent".

4 Service level targets

Monthly Availability

- Defined as the ability of a service to fulfil its intended function at a specific time or over a calendar month.
- Minimum (as an average percentage per month):
  - Cloud Compute: 90%
    - IN2P3-IRES: 90% [16]
  - Check-in: 95%
    - EGI: 95%

Monthly Reliability

- Defined as the ability of a service to fulfil its intended function at a specific time or over a calendar month, excluding scheduled maintenance periods.
- Minimum (as an average percentage per month):
  - Cloud Compute: 95%
    - IN2P3-IRES: 95%
  - Check-in: 95%
    - EGI: 95%

Quality of Support level

- Medium (Section 3)

5 Limitations and constraints

The Services provisioning is subject to the following limitations and constraints.

- Support is provided in English.

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[15] https://confluence.egi.eu/display/EGISLM/EGI+Service+requests

[16] Every two years the Service Provider has an electrical outage for maintenance, with a maximum duration of 3 days. In this case, the availability will be less than 90% (but reliability will remain as agreed).

- Availability and Reliability calculations are based on the Service Monitoring operational results.
- Failures in VO monitoring are not considered as SLA violations.
- Downtimes needed to ensure the security of the Service issues are not considered Agreement violations.
- Failures of resource providers not being part of EGI production infrastructure are not considered as Agreement violations.
- The individual service components that provide resources may be terminated or replaced due to failure, retirement or other requirement(s). EGI Foundation has no liability for any damages, liabilities, losses (including any corruption, deletion, or destruction or loss of data, applications or profits), or any other consequences resulting from the foregoing.
- In no event will EGI Foundation be liable for any special, incidental, punitive or consequential damages (including, without limitation, lost profits, loss of use, loss of data or loss of goodwill), or the costs of procuring substitute products and / or Services, arising out of or in connection with this agreement or the use or performance of any products and / or Services provided by EGI Foundation hereunder, whether such liability arises from any claim based upon breach of contract, breach of warranty, tort (including negligence), product liability or otherwise. The parties have agreed that these limitations will survive and apply even if any limited remedy specified in this agreement is found to have failed of its essential purpose.
- EGI Foundation liability to the Customer with regards to an individual service is restricted to the total value of any amounts paid by the Customer to EGI Foundation in the previous 12-month period on that individual service.
- Force Majeure. A party shall not be liable for any failure or delay in the performance of this Agreement for the period that such failure or delay is due to causes beyond its reasonable control. Means any
  - fire, flood, earthquake or natural phenomena,
  - war, embargo, riot, civil disorder, rebellion, revolution
  - which is beyond the Provider's control, or any other causes beyond the Provider's control

6 Communication, reporting and escalation

6.1 General communication

The following contacts will be generally used for communications related to the service in the scope of this Agreement.

Customer contact	Dr. Anna Belehaki
	belehaki@noa.gr
	Research Director, National Observatory of Athens

Customer technical contact	Tamás Kiss
	t.kiss@westminster.ac.uk
	Director of Research Centre for Parallel Computing School, University of Westminster
EGI Foundation contact	Giuseppe La Rocca
	sla@mailman.egi.eu
	SLA Coordinator at EGI Foundation
EGI Foundation technical contact	Matthew Viljoen
	operations@egi.eu
	Operations manager at EGI Foundation
Service Support contact	See Section 3

6.2 Regular reporting

As part of the fulfilment of this Agreement and provisioning of the service, the following reports will be provided:

Report title	Contents	Frequency	Produced by	Delivery
Services Performance Report	The document provides an overall assessment of service performance (per month) and SLA target performance achieved during the last 6 months	Every six months	EGI Foundation	Email to the Customer
Scientific Publications report	The document provides a list of scientific publications benefiting from the Service.	Yearly and with the Agreement ending.	Customer	During satisfaction review

Service Performance Report:

- EGI Foundation will provide every six months a written report about the performance of the Service(s) with the justification of any underperforming and SLA violation.

Scientific Publication report:

- The Customer will provide a list of publications supported by the Service(s) and acknowledging the usage of the Service(s).
  The acknowledgement statement specified in Section 8.2 shall be included in the

Customer's website and reported in any scientific publications profiting from the use of the Services defined in Section 1.

All reports shall follow predefined templates[17].

6.3 Violations

The EGI Foundation commits to inform the Customer, if this Agreement is violated or violation is anticipated. The following rules are agreed for communication in the event of violation:

- In case of violations of the Services targets for **four months** or **two consecutive months**, EGI Foundation will provide justifications to the Customer.
    - In case of unavailability of the Component Provider to provide the service, the EGI Foundation will search for a new Component Provider and support migration.
- The Customer will notify the supporting Component Provider in case of suspected violation via the EGI Service Desk (Section 3). The case will be analysed to identify the cause and verify the violation.

6.4 Escalation and complaints

For escalation and complaints (A customer complaint is a customer's expression of dissatisfaction with an EGI service, either orally or in writing), EGI Foundation contact (section 6.1) point shall be used, and the following rules apply.

- In case of repeated violation of the Services targets for **four months** or **two consecutive months**, a review of the Agreement will take place involving the parties of the Agreement.
- Complaints or concerns about the Services provided should be directed to the EGI Foundation contact who will promptly address these concerns. Should the Customer still feel dissatisfied, about either the result of the response or the behaviour of the supporting Component Provider, complaints@egi.eu should be informed.

7 Information security and data protection

The following rules for information security and data protection related to the Service apply.

- The Customer must comply with the Acceptable Use Policy and Conditions of Use (AUP)[18], if a service-specific or Component Provider-specific AUP is not provided to the Customer or displayed when accessing the service, the general EGI Federation AUP applies.
- When the Customer is managing a community to manage access to the resources, they must comply with the Community Membership Management Policy[19].

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[17] https://documents.egi.eu/document/2748
[18] https://documents.egi.eu/document/3600
[19] https://documents.egi.eu/document/3234

- For the processing of access data (i.e. data related to authentication going through Check-in), the Customer's Home Organisation, EGI Foundation (the Service Provider) and the Component Providers hold the role of data controllers. As part of the authentication process, personal data is transmitted between these data controllers based on the consent of the user (data subject). In this context, and unless it has been agreed to use a different model, there is no need for having any particular data processing agreement in place.
- In the case the Customer, as a Data Controller, will process personal data (research data, personal data of their users or visitors) on the provided resources, EGI Foundation (the Service Provider) will be acting as a Data Processor and enter in a Data Processing Agreement (DPA) with the Data Controller. As an additional service, EGI Foundation provides standard templates for Data Processing Agreements (DPA) with EGI Foundation as a Data Processor[20] that can be used by the Data Controller. If a DPA is being put in place and if EGI Foundation is involving sub-processors, sub-processor agreements will be signed between EGI Foundation and the Component Providers acting as sub-processors.
  - When EGI Foundation is acting as a Data Processor, the Technical and Organisational Measures (TOM) put in place by EGI Foundation to protect personal data during their processing can be consulted in the EGI Document Database[21].
  - In situations where other organisations are acting as subcontracted data processors on behalf of EGI Foundation, EGI Foundation aims at ensuring that the technical and organisational measures implemented by the subcontracted processors equal at minimum the processing security level indicated by EGI Foundation TOM.
- EGI Foundation and their subcontracted data processors, if any, comply with the EGI Policy on the Processing of Personal Data[22].
- If a service-specific or component provider-specific privacy policy is not provided to the Customer or displayed when accessing a given service, the Customer can refer to the one published on the EGI Website[23].
- EGI Foundation is conforming to the GÉANT Code of Conduct (v1.0) and personal data will be processed in accordance with the Code of Conduct for Service Providers[24].
- Security incidents affecting the services described in Section 1 must be reported to abuse@egi.eu within 4 hours after their discovery and handled according to SEC01: EGI CSIRT Security Incident Handling Procedure.
- Additional policies and procedures to be enforced across the EGI Federation are in in place[25], notably:
  - EGI-doc-3015: e-Infrastructure Security Policy
  - EGI-doc-3601: Service Operations Security Policy
  - EGI-doc-2934: Security Traceability and Logging Policy

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[20] https://documents.egi.eu/document/3745
[21] https://documents.egi.eu/document/3737
[22] https://documents.egi.eu/document/2732
[23] https://www.egi.eu/privacy-policy/
[24] https://geant3plus.archive.geant.net/Pages/uri/V1.html
[25] https://go.egi.eu/policies_procedures

○ EGI-doc-2935: Security Incident Response Policy
- Assertion of absolute security in IT systems is impossible. The Component Provider is making every effort to maximise the security level of users' data and minimise possible harm in the event of an incident.
- The Component Provider will define and abide by an information security and data protection policy related to the service being provided.
- The parties of the Agreement will meet all requirements of any relevant policy or procedure of the Provider[26] and will comply with the applicable national legislation.
- The Component provider (see Section 1) holds the role of the data controller and should be contacted directly for data subject matters.

8 Responsibilities

8.1 Of EGI Foundation

Additional responsibilities of EGI Foundation are as follows.

- EGI Foundation adheres to all applicable operational and security policies and procedures[27] and to other policy documents referenced therein.
- EGI Foundation monitors the Service in order to measure the fulfilment of the agreed service level targets.
- EGI Foundation retains the right to introduce changes in how the Service is provided, in which case the Provider will promptly inform the Customer and update the Agreement accordingly.

8.2 Of the Customer

The responsibilities of the Customer are:

1. **The customer facilitates the use of EGI acknowledgement by communicating to users the need of adding the following sentence in acknowledgement: "This work used the EGI infrastructure with the dedicated support of IN2P3-IRES"**
2. The Customer will provide during Agreement review (yearly) list of scientific publications benefiting from the Service(s) defined in Section 1.
3. The data stored in the system by the Customer must not cause any legal violation due to the content type (such as copyright infringement, dual use, illegal material).
4. The Customer must not share access credentials with anyone else.
5. The use must be consistent with the Acceptable Use Policy[28] of the Service as well as AUP of the provider (if exist).

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[26] https://www.egi.eu/about/policy/policies_procedures.html
[27] https://www.egi.eu/about/policy/policies_procedures.html

[28] https://documents.egi.eu/document/74

6.   The Customer will notify the Provider in case the actual amount of the Service used results in being under- or over-estimated. The Customer will request an update of the Agreement to ensure optimal usage of the Service.

7.   The Customer will create one or more Virtual Organizations (VOs) to define the group of users entitled to access the Service. Information about the VO will be regularly updated in EGI Operations Portal[29].

8.   The Customer must request EGI Service Desk support[30] to enable assigning tickets with appropriate VO name.

9.   When applicable, the Customer is responsible for ensuring that the Virtual Machine images endorsed and listed in the AppDB[31] VO image lists are properly maintained and updated.

10.   The Customer is responsible for the management of their own data including movement or removal of the date once the agreement is terminated.

9 Finance and administration

9.1 Service Offers

The EGI Foundation is expected to adhere to the service offer and agreed timescales, unless changes are otherwise agreed between both parties in writing (See Section 2).

10 Review, extensions and termination

The Services performance will be reviewed against the defined Service level targets according to Section 4. The Agreement will be annually reviewed until expiration.

If the Customer wishes to extend the duration after the Agreement termination date, an extension will be negotiated with EGI Foundation. **The extension of the agreement between the Customer and the Service Provider shall be justified upon the receiving of a list of scientific publications produced during the duration of the agreement, and the effective use of the Service(s) as reported in the EGI Accounting Portal[32].**

EGI Foundation retains the right to introduce changes in the Service, in which case the Customer retains the right of terminating the Agreement.

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[29] http://operations-portal.egi.eu/
[30] https://wiki.egi.eu/wiki/FAQ_GGUS-New-Support-Unit
[31] https://appdb.egi.eu/
[32] https://accounting.egi.eu/

The Agreement can be terminated at any time upon agreement of the parties. Amendments, comments and suggestions must be addressed to EGI Foundation and the Customer according to Section 6.