



EGI VO

OPERATIONAL LEVEL AGREEMENT

Customer	EGI Foundation
Provider	IISAS
User	Terradue/NextGEOSS Pilot 2: ARMINES “Solar Radiation Mapping”
First day of service delivery	January 2018
Last day of service delivery	May 2020
Status	DRAFT
Agreement finalization date	TBD
SLA Link	https://documents.egi.eu/document/3426



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DOCUMENT LOG

<i>Issue</i>	<i>Date</i>	<i>Comment</i>	<i>Author</i>
V1	8 Oct 2018	First draft	Sy Holsinger, EGI.eu
V2	12 Dec 2018	Reviewed by provider	Viet Tran, IISAS

TERMINOLOGY

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

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1 Introduction

The present Operational Level Agreement (“the Agreement”) is made between **EGI Foundation (the Customer)** and IISAS (**the Provider**) to define the provision and support of the provided services as described hereafter. Representatives and contact information are defined in Section 7.

The ARMINES Solar Radiation Mapping Application (**the User**) is represented by Terradue.

This Agreement is valid from January 2018 to May 2020.

Once approved, this Agreement is valid until the defined end date, as long as the Provider does not express a decision to terminate the Agreement at least a month before end date of the Agreement in writing.

The service offer and associated costs were discussed and approved by the Customer and the Provider on 23 January 2018.

The provision of services as described below will be provided under the frame of the H2020 funded project NextGEOSS #730329 in compliance with the Grant Agreement Article 11. Background and access rights to results for the User as described in the Consortium Agreement also apply.

2 Services

The applicable Services within this agreement are defined by the following properties:

Cloud Compute (category: Compute)¹

Resource Centre: IISAS-FedCloud

Use Case A		
Technical Specifications	<ul style="list-style-type: none">• 1 Master node VM type<ul style="list-style-type: none">○ 2 CPUs○ 4 GB RAM○ 100 GB disk	<ul style="list-style-type: none">• 4 Slave node VM type<ul style="list-style-type: none">○ 2 CPUs○ 4 GB RAM○ 100 GB disk
	<ul style="list-style-type: none">• 500 GB permanent storage	
Duration	29 Months (Jan 2018-May 2020)	
Service Offer/Cost	€ 3873.5	
Public IP address	5	
Allocation type	Pledged ²	
Payment model	Pay-for-Use ³	

¹ <https://www.egi.eu/services/cloud-compute/>

² Resources are exclusively reserved to the Customer

³ See service offer for specifications (e.g. pricing, administration)

Supported VOs	vo.nextgeoss.eu
VO ID card	https://operations-portal.egi.eu/vo/view/voname/vo.nextgeoss.eu
VO-wide list	https://appdb.egi.eu/store/vo/vo.nextgeoss.eu

The Services are supported by additional services:

- Accounting⁴
- Service Monitoring⁵ (operational only)

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

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

3 Service hours and exceptions

IT services according to the service catalogue are in general delivered during 24 hours per day, 7 days per week (i.e. 365 days or 8,760 hours), to seamlessly support business operations. Planned and announced interruptions may reduce the effective operating time of a service.

The following exceptions apply:

- Planned maintenance windows or service interruptions (“scheduled downtimes”⁵) will be notified via e-mail in a timely manner i.e. 24 hours before the start of the outage⁶, to the Customer through the Broadcast Tool⁶.
- The provider must provide justification for downtime periods exceeding 24 hours
- Human services are provided during support hours.

4 Support

Support is provided via EGI Service Desk⁷. Access requires a valid X.509 or the login via an EGI SSO account⁸. Support is available between:

- Monday to Friday.
- From 9:00 to 16:00 CET/CEST.

Service times always apply with the exception of Slovakia public holidays.

⁴ <http://accounting.egi.eu/>

⁵ <http://argo.egi.eu/>

⁶ <https://operations-portal.egi.eu/broadcast>

⁷ <http://helpdesk.egi.eu/>

⁸ <https://www.egi.eu/ssol/>

4.1 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 levels are defined as Advanced⁹:

Incident priority	Response time	Comment
Less urgent	5 working days	wishes and enhancements that are "nice to have"
Urgent	1 working day	service degraded; work-around available
Very Urgent	1 working day	service degraded; no work-around available
Top Priority	4 working hours	service interrupted; needs to be addressed as soon as possible

Response time is provided as service level target.

4.2 Service requests

In addition to resolving incidents, standard service requests (e.g. change requests, information requests, documentation) will be fulfilled through the defined support channels in the same way as incidents. Service requests are classified as "Less urgent".

5 Service level targets

Monthly Availability

- Defined as the ability of a service or service component to fulfil its intended function at a specific time or over a calendar month. As reported by EGI monitoring services.
- Minimum (as a percentage per month): 95%

Monthly Reliability

- Defined as the ability of a service or service component to fulfil its intended function at a specific time or over a calendar month, excluding scheduled maintenance periods. As reported by EGI monitoring services.
- Minimum (as a percentage per month): 95%

Quality of Support level

- Advanced (Section 4)

6 Limitations and constraints

The provisioning of the service under the agreed service level targets is subject to the following limitations and constraints:

⁹ https://wiki.egi.eu/wiki/FAQ_GGUS-QoS-Levels

- Support is provided in following language: English
- Downtimes caused due to upgrades for fixing critical security issues are not considered Agreement violations.
- Force Majeure. A party shall not be liable for any failure of 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
- Availability and Reliability calculations are based on the Service Monitoring operational results.
- Failures in VO monitoring are not considered as the Agreement violations.

7 Communication, reporting and escalation

7.1 General communication

The following contacts will be generally used for communications related to the service in the scope of this Agreement. The authoritative contact information is available in the EGI configuration database GOCDB.

Provider contact	Name: Ladislav Hluchy Email: ladislav.hluchy@savba.sk Role: Vice-director
Provider technical contact	Name: Viet Tran Email: viet.tran@savba.sk Role: Senior researcher
EGI contact	Sy Holsinger sy.holsinger@egi.eu Senior Strategy and Policy Officer
EGI technical contact	Diego Scardaci diego.scardaci@egi.eu Senior User Community Support and Outreach Officer
Service Support contact	See Section 4

7.2 Regular reporting

Reports of the Provider availability, reliability and unknown statistics will be performed on a monthly basis¹⁰.

The Provider violating the service level targets will be requested to provide justifications by the Customer. The violating provider MUST provide a report. Information is exchanged through GGUS ticket.

7.3 Violations

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

- In case of service target violation, the Provider must provide justifications and a plan for service enhancement within 10 working days from the date of notification to/from the Customer.
 - In case of no or unsatisfactory justification and plan for improvement, the Customer reserves the right to replace the Provider, in which the Provider forfeits future payments.
- In the case of repeated violations that jeopardizes the ability of the pilot to meet its goals, the Customer reserves the right to replace the Provider and the Provider forfeits all outstanding payments (i.e. current and future).

7.4 Escalation and complaints

For complaints, the defined Provider contact point shall be used, and the following rules apply:

- Complaints should be directed to the customer contact
- The provider contact will be contacted in case of received complaints.

8 Information security and data protection

The following rules for information security and data protection apply:

- Assertion of absolute security in IT systems is impossible. The Provider is making every effort to maximize security level of users' data and minimize possible harm in the event of an incident.
- The Provider must define and abide by an information security and data protection policy related to the service being provided.
- This must meet all requirements of any relevant EGI policies or procedures¹¹ and also must be compliant with the relevant national legislation.

¹⁰ https://wiki.egi.eu/wiki/Performance#Resource_Centre_performance

9 Responsibilities

9.1 Of the Provider

Additional responsibilities of the Provider are as follow:

- Adhere to all applicable operational and security policies and procedures¹² and to other policy documents referenced therein applicable to “Infrastructure” scope.
- Use communication channel defined in the agreement.
- Accept EGI monitoring services provided to measure fulfilment of agreed service level targets.
- Ensure the accuracy of the information in EGI Configuration Database GOCDB
 - The Provider contact details (name, phone number, e-mail address) of a set of contact points for security, operational and administrative emergencies.
 - Components of the service are registered and in the EGI scope.
 - The services that are offered by the Provider must be specified.
- All services with information system or accounting capabilities, must have at least one local or remote endpoint to publish information:
 - Being provided into the site information system.
 - Being delivered to the EGI accounting infrastructure.
- Enable and support
 - The OPS VO and DTEAM VO.
 - At least one either national or global non-monitoring/troubleshooting user group (e.g. managed using an interoperable VO management service), which must be registered in the EGI Operations Portal.
 - The Provider is encouraged to support as many user groups as possible. Specific agreements between the Provider and individual user groups are covered in separate agreements.
- Enable
 - Operational service monitoring - provided centrally by the Customer and (if deemed necessary by the Resource Infrastructure Provider) by the Resource Infrastructure Provider.
 - Central security monitoring - performed centrally by EGI Foundation.
 - Testing and troubleshooting from outside.
- Ensure
 - At least one system administrator reachable during working hours of supporting organization.

¹¹ https://www.egi.eu/about/policy/policies_procedures.html

¹² https://www.egi.eu/about/policy/policies_procedures.html

- Sufficient computational and storage resources and network connectivity to support the proper operation of its services, as indicated by passing all relevant Monitoring Service tests.
- The provisioning of services in itself not create any intellectual property rights in software, information and data provided to the services provided by the Provider, or in data generated by the services provided.
- Operate UMD-compliant Middleware supported by the Customer – applicable for High Throughput Computing Platform.
 - The Provider is encouraged to stay abreast of updates in order to benefit from the latest improvements and features.

9.2 Of the Customer

The responsibilities of the customer are:

- Collect requirements from the Provider and raise any issues deemed necessary by the Provider to the attention of EGI and to ensure that these issues are properly dealt with.
- Raise any issues deemed necessary to the attention of the Provider.
- Register the Provider and its administrators in GOCDDB and in the available helpdesk facilities as applicable.
- Provide support by helping in the resolution of advanced and specialised operational problems that cannot be solved by the Provider.
 - If necessary, the Customer will propagate and follow-up problems with higher-level operational or development teams.
- Monitor progress of incident and problem records and to ensure that the Provider works on records opened against them.
- Respond to incident and problem records from the Provider in a timely manner.
- Provide the operational services defined in Resource infrastructure Provider OLA and ensure their interoperation with the EGI Foundation ones as applicable.
- Coordinate and support the deployment of UMD-compliant middleware by the Provider.
- Coordinate local operational security activities and provide operational security support.
- Support coordination with other Providers.
- Support coordination and conflict resolution with the User.

Any additional responsibilities of the Customer are listed in Resource infrastructure Provider Operational Level Agreement document¹³.

9.3 Of the User

All responsibilities of the User are listed in relevant VO SLA.

¹³ <https://documents.egi.eu/document/463>

10 Finance and Administration

10.1 Service Offers

Provider is expected to adhere to the service offer and associated costs provided and agreed timescales, unless changes are otherwise agreed between both parties in writing (See Section 2).

10.2 Invoicing and Payment Schedule

Providers are to invoice the EGI Foundation according to the following schedule:

- Use cases with a duration of twelve (12) months or less
 - Full amount within 30 days upon completion of agreed service delivery
- Use cases with a duration greater than twelve (12) months and up to twenty-four (24) months
 - Half (1/2) of total amount within thirty (30) days of midway point of service delivery
 - Remaining amount within thirty (30) days upon completion of agreed service delivery
- Use cases with a duration greater than twenty-four (24) months
 - Payments can be split into no more than three (3) instalments
 - Maximum two-thirds (2/3) of the total amount to be paid until completion of agreed service delivery; final invoice to be sent within thirty (30) days of agreed service delivery completion.

Invoice details:

- Name: Yannick Legré, EGI Foundation Director
- Address: Science Park, 140 - 1098XG – Amsterdam, Netherlands
- VAT: NL8219.84.986.B.01
- Email: inkoop@egi.eu
- Date: [DD/MM/YYYY]
- Reference: NextGEOSS #730329 – Pilot 2 ARMINES “Solar Radiation Mapping”

11 Review

This agreement is subject to review at least on annual basis (from signature date) or at any time by written request by any party.