

# EGI VO SERVICE LEVEL AGREEMENT

| Customer                      | EXTraS/extras-fp7.eu                   |  |
|-------------------------------|----------------------------------------|--|
| Provider                      | EGI Foundation                         |  |
| First day of service delivery | 01/05/2016                             |  |
| Last day of service delivery  | 01/06/2020                             |  |
| Status                        | FINAL                                  |  |
| Agreement finalization date   | 27/07/2016                             |  |
| SLA link                      | https://documents.egi.eu/document/2869 |  |
| OLA Link                      | https://documents.egi.eu/document/2869 |  |



This work by EGI Foundation is licensed under a <u>Creative Commons Attribution 4.0 International License</u>

This template is based on work, which was released under a Creative Commons 4.0 Attribution License (CC BY 4.0). It is part of the FitSM Standard family for lightweight IT service management, freely available at <u>www.fitsm.eu</u>.

#### **DOCUMENT LOG**

| Issue | Date       | Comment                      | Author               |  |
|-------|------------|------------------------------|----------------------|--|
| FINAL | 09/07/2018 | SLA agreed with the customer | Giuseppe La Rocca    |  |
|       |            |                              | Małgorzata Krakowian |  |
| V2    | 16/10/2018 | New final version:           | Giuseppe La Rocca    |  |
|       |            | SLA extended till 06/2019    |                      |  |
| v3    | 12/06/2019 | New final version:           | Giuseppe La Rocca    |  |
|       |            | SLA extended till 06/2020    |                      |  |

#### TERMINOLOGY

The EGI glossary of terms is available at: <a href="https://wiki.egi.eu/wiki/Glossary">https://wiki.egi.eu/wiki/Glossary</a>

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

| 1   | The                                         | The Services4                         |  |  |
|-----|---------------------------------------------|---------------------------------------|--|--|
| 2   | Serv                                        | ice hours and exceptions7             |  |  |
| 3   | Supp                                        | oort7                                 |  |  |
|     | 3.1                                         | Incident handling7                    |  |  |
|     | 3.2                                         | Service requests                      |  |  |
| 4   | Serv                                        | ice level targets8                    |  |  |
| 5   | Limit                                       | ations and constraints9               |  |  |
| 6   | Com                                         | munication, reporting and escalation9 |  |  |
|     |                                             | General communication9                |  |  |
| 6.2 |                                             | Regular reporting                     |  |  |
| 6.3 |                                             | Violations                            |  |  |
|     | 6.4                                         | Escalation and complaints11           |  |  |
| 7   | 7 Information security and data protection1 |                                       |  |  |
| 8   | 8 Responsibilities11                        |                                       |  |  |
|     | 8.1                                         | Of the Provider11                     |  |  |
|     | 8.2                                         | Of the Customer                       |  |  |
| 9   | Revi                                        | ew, extensions and termination12      |  |  |



The present Service Level Agreement ("the Agreement') is made between **the EGI Foundation** / **EGI.eu (the Provider)** and **EXTraS/extra-fp7.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 EXTraS project (Exploring the X-ray Transient and variable Sky<sup>1</sup>) is harvesting the hitherto unexplored temporal domain information buried in the serendipitous data collected by the European Photon Imaging Camera (EPIC) instrument on board the ESA XMM-Newton, in 13 years of observations. The main result will be a public catalogue that will become the reference for time domain astrophysics in the soft X-ray band, until a future, dedicated mission is deployed. The project plans to perform part of this analysis by exploiting Cloud resources through a dedicated science gateway. This will allow extending the analysis to recent EPIC data, not included in the public catalogue that will be released at the end of 2016 and will also allow users from the community to analyse their own data using EXTraS pipelines. Moreover, population studies of transient and variable sources can be performed only when the systematic analysis of the full data sample and its screening and validation is concluded, i.e. after the end of the EXTraS project.

The Customer is a consortium represented by the INAF-IASF.

This Agreement is valid from **01/05/2016 to 01/06/2020.** 

The Agreement was discussed and approved by the Customer and the Provider on 27/07/2016.

# **1** The Services

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

Possible allocation types:

- Pledged Resources are exclusively reserved to the Community and the job will be executed immediately after submission.
- Opportunistic Resources are not exclusively allocated, but subject to local availability.
- Time allocation Resources are available in fair share-like mode for a fixed time period.

The Services are defined by the following properties:

#### **Cloud Compute (category: Compute)**

Description: <a href="https://www.egi.eu/services/cloud-compute/">https://www.egi.eu/services/cloud-compute/</a>

- Resource Centre (also, Resource Provider): CYFRONET-CLOUD (Country: Poland)
  - Services: Cloud Compute
    - Number of Virtual CPU cores: 40 cores
    - Memory per core (GB): 4GB per core, 160GB in total

<sup>&</sup>lt;sup>1</sup> <u>http://www.extras-fp7.eu</u>



- Local disk (GB):
- Public IP addresses: No
- Access type: Opportunistic
- o Payment mode offer: Sponsored
- Other technical requirements:
  - Duration: 01/05/2016 01/06/2020
  - Supported VOs: extras-fp7.eu
- VO ID card: <u>https://operations-portal.egi.eu/vo/view/voname/extras-fp7.eu</u>
- o VO-wide list: https://vmcaster.appdb.egi.eu/store/vo/extras-fp7.eu/image.list
- Resource Centre (also, Resource Provider): INFN-CATANIA-STACK (Country: Italy)
  - Services: Cloud Compute
    - Number of Virtual CPU cores: 10 cores
    - Memory per core (GB): 4GB per core, 40GB in total
    - Local disk (GB): 20 GB
    - Scratch/ephemeral storage: 0.6TB
    - Public IP addresses: yes
  - Access type: Opportunistic
  - Payment mode offer: Sponsored
  - Other technical requirements:
    - Duration: 01/06/2017 01/06/2020
    - Supported VOs: extras-fp7.eu
  - VO ID card: <u>https://operations-portal.egi.eu/vo/view/voname/extras-fp7.eu</u>
  - o VO-wide list: <u>https://vmcaster.appdb.egi.eu/store/vo/extras-fp7.eu/image.list</u>

#### Online Storage (category: Storage)

Description: <a href="https://www.egi.eu/services/online-storage/">https://www.egi.eu/services/online-storage/</a>

- Resource Center: CYFRONET-CLOUD (Country: Poland)
  - o Online Storage
    - Block storage capacity [TB]: 0.1
    - Object storage capacity [TB]:
    - Standard interfaces supported<sup>2</sup>: POSIX
    - Storage technology<sup>3</sup>:
    - Other technical requirements:
    - Duration: 01/05/2016 01/06/2020
    - Payment mode offer: Sponsored

<sup>&</sup>lt;sup>3</sup> DPM, dCache, STORM, etc.



<sup>&</sup>lt;sup>2</sup> CDMI, POSIX, SWIFT, etc.

- Allocation type: Pledged
- Supported VOs: extras-fp7.eu
- VO ID card: <u>https://operations-portal.egi.eu/vo/view/voname/extras-fp7.eu</u>

#### • Resource Center: INFN-CATANIA-STACK (Country: Italy)

- Online Storage
  - Block storage capacity [TB]: 0.6
  - Object storage capacity [TB]:
  - Standard interfaces supported<sup>4</sup>: POSIX
  - Storage technology<sup>5</sup>:
  - Other technical requirements:
  - Duration: 01/06/2017 01/06/2020
  - Payment mode offer: Sponsored
- Allocation type: Pledged
- Supported VOs: extras-fp7.eu
- VO ID card: <u>https://operations-portal.egi.eu/vo/view/voname/extras-fp7.eu</u>

The Services are supported by additional services:

- Accounting<sup>6</sup>
- Service Monitoring<sup>7</sup> (operational only)

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

- Monitoring of VO geohazards.terradue.com
- Monitoring of services provided by the Customer on agreed resources

<sup>&</sup>lt;sup>7</sup> http://argo.egi.eu/



<sup>&</sup>lt;sup>4</sup> CDMI, POSIX, SWIFT, etc.

<sup>&</sup>lt;sup>5</sup> DPM, dCache, STORM, etc.

<sup>&</sup>lt;sup>6</sup> <u>http://accounting.egi.eu/</u>

# **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:

- Planned maintenance windows or service interruptions ("scheduled downtimes"<sup>8</sup>) will be notified via e-mail in a timely manner i.e. 24 hours before the start of the outage<sup>9</sup>.
- Downtime periods exceeding 24 hours need justification.

# **3 Support**

Support is provided via EGI Service Desk<sup>10</sup>. Access requires a valid X.509 or the login via a EGI SSO account<sup>11</sup>. 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.

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

The Quality of Support in this Agreement has level: Medium<sup>12</sup>

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

<sup>&</sup>lt;sup>12</sup> <u>https://wiki.egi.eu/wiki/FAQ\_GGUS-QoS-Levels</u>



<sup>&</sup>lt;sup>8</sup> <u>https://wiki.egi.eu/wiki/GOCDB/Input\_System\_User\_Documentation#Downtimes</u>

<sup>&</sup>lt;sup>9</sup> <u>http://goc.egi.eu/</u>

<sup>&</sup>lt;sup>10</sup> <u>http://helpdesk.egi.eu/</u>

<sup>&</sup>lt;sup>11</sup> https://www.egi.eu/sso/

| Incident priority <sup>13</sup> | 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                     |  |
| 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 (<u>https://wiki.egi.eu/wiki/EGI Service requests</u>) 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%
    - CYFRONET-CLOUD: 90%
    - INFN-CATANIA-STACK: 90%
  - Online Storage: 90%
    - CYFRONET-CLOUD: 90%
    - INFN-CATANIA-STACK: 90%

#### **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: 85%
    - CYFRONET-CLOUD: 85%
    - INFN-CATANIA-STACK: 85%
  - Online Storage: 85%
    - CYFRONET-CLOUD: 85%

<sup>13</sup> https://wiki.egi.eu/wiki/FAQ GGUS-Ticket-Priority



INFN-CATANIA-STACK: 85%

#### 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.
- 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 provider not being part of EGI production infrastructure are not considered as 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
  - o 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.

| Daniele D'Agostino        |  |
|---------------------------|--|
| dagostino@ge.imati.cnr.it |  |
|                           |  |
| Andrea De Luca            |  |
| deluca@lambrate.inaf.it   |  |
|                           |  |



| EGI Foundation contact  | Małgorzata Krakowian              |  |  |
|-------------------------|-----------------------------------|--|--|
|                         | sla@mailman.egi.eu                |  |  |
|                         | SLA Coordinator 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<br>Report    | The document<br>provides the overall<br>assessment of service<br>performance (per<br>month) and SLA<br>target performance<br>achieved during last<br>6 months | Every six months                      | Provider    | Email to the<br>Customer      |
| Scientific<br>Publications report | The document<br>provides list of<br>scientific publications<br>benefiting from the<br>Service.                                                                | Yearly and with the Agreement ending. | Customer    | During satisfaction<br>review |

All reports shall follow predefined templates<sup>14</sup>.

### 6.3 Violations

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

- In case of violations of the Services targets for three consecutive months, the Provider will provide justifications to the Customer.
  - In case of unavailability of the Resource Provider to provide the service, the Provider will search for a new Resource Provider and support migration.
- The Customer will notify the supporting Resource Centres 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.

<sup>&</sup>lt;sup>14</sup> <u>https://documents.egi.eu/document/2748</u>



• The Customer retains the right of terminating the Agreement in case of repeated violation of the Services commitments for four consecutive months or four alternate months during a year.

### 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.), the Provider contact (section 6.1) point shall be used, and the following rules apply.

- In case of repeated violation of the Services targets for four 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 Provider 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 Resource Centres, <u>complaints@egi.eu</u> should be informed.

# **7** Information security and data protection

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

- Assertion of absolute security in IT systems is impossible. The Provider is making every effort to maximize security level of users' data and minimalize possible harm in the event of an incident.
- The 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<sup>15</sup> and will comply with the applicable national legislations.

# 8 Responsibilities

### 8.1 Of the Provider

Additional responsibilities of the Provider are as follows.

• The Provider adheres to all applicable operational and security policies and procedures<sup>16</sup> and to other policy documents referenced therein.

<sup>&</sup>lt;sup>16</sup> https://www.egi.eu/about/policy/policies\_procedures.html



<sup>&</sup>lt;sup>15</sup> <u>https://www.egi.eu/about/policy/policies\_procedures.html</u>

- The Provider allows monitoring of the Service in order to measure the fulfilment of the agreed service level targets.
- The Provider 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:

- 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 CYFRONET-CLOUD and INFN-CATANIA-STACK".
- The Customer will provide during Agreement review (yearly) list of scientific publications benefiting from the Service.
- The Customer must not share access credentials with anyone else.
- 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).
- The use must be consistent with the Acceptable Use Policy<sup>17</sup> of the Service.
- 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.
- 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<sup>18</sup>.
- The Customer must request EGI Service Desk support<sup>19</sup> to enable assigning tickets with appropriate VO name.
- When applicable, the Customer is responsible of ensuring that the Virtual Machine images endorsed and listed in the AppDB<sup>20</sup> VO image list are properly maintained and updated.

# 9 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.

<sup>&</sup>lt;sup>20</sup> https://appdb.egi.eu/



<sup>&</sup>lt;sup>17</sup> <u>https://documents.egi.eu/document/74</u>

<sup>&</sup>lt;sup>18</sup> <u>http://operations-portal.egi.eu/</u>

<sup>&</sup>lt;sup>19</sup> https://wiki.egi.eu/wiki/FAQ\_GGUS-New-Support-Unit

If the Customer wishes to extend the duration after the Agreement termination date, an extension will be negotiated with the Provider.

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

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

