EOSC-Life:

Building a digital

space for the

life sciences

WP7 Resource Allocation Process

WP7 – Cloud Deployment Services

Lead Beneficiaries: EMBL-EBI and Charité

WP leaders: Steven Newhouse and Chris Lawerenz

Contributing partner(s): EMBL-EBI, Charité, CSC, Masaryk University

Authors of this document: **Susheel Varma, Montserrat Gonzalez Ferreiro, Steven Newhouse.**

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Content

[**​1​ 1Executive Summary**](#_9gwya8hqjw74) **4**

[**​2​ WP7 Resource Allocation Process**](#_30j0zll) **5**

[​2.1​ Objectives](#_45juqk5yth8k) 5

[​2.2​ Principles](#_aa8ln1f0ho6l) 5

[​2.3​ Participants of the Resource Allocation Process](#_r04af97ew4qu) 6

[​2.4​ Resource Allocation Process](#_94bd6kv0bwyt) 8

[​2.5​ Technical Review Selection Criteria](#_t2gt9pxzcqp7) 11

[**3​ Abbreviations**](#_1662xenl4g16) **12**

[**4​ Appendices**](#_hb84t0htzqlf) **14**

[4.1​ Appendix 1: Resource Application Form](#_yxycy8gpw3da) 14

[4.2​ Appendix 2: Guidelines for WP7 Technical Reviewers](#_sc8xh3ndziht) 16

[​4.3​ Appendix 3: WP7 Technical Review Form](#_4mv5hma34k9j) 18

[4.4​ Appendix 4: Guidelines for WP7 Resource Allocation Reviewers](#_lyds8fovdtwr) 23

[4.5​ Appendix 5: WP7 Resource Allocation Review Form](#_jpzu5l9lul9) 25

[4.6​ Appendix 6: WP7 Resource Allocation Process Feedback](#_kk1isv6bvyt4) 27

# ​1​ Executive Summary

The EOSC-Life Resource Allocation Process (RAP) from WP7 will be used by WPs from elsewhere within the EOSC-Life project to obtain access to cloud resources to support their work. These are:

* WP1 – Publishing FAIR Data Resources
* WP2 - Tools Collaboratory
* WP3 – Demonstrators and Open Calls
* WP9 – People and Training

The entities in WP1/2/3/9 are expected to drive the scientific screening of the activities seeking cloud resources while WP7 will drive the technical screening to establish the viability and cloud resources needed to support the proposed work. It is important to note therefore that the RAP from WP7 needs to be embedded within any EOSC-Life open call involving cloud resources and any WP7 technical review needs to take place concurrently with the scientific evaluation.

|  |  |
| --- | --- |
| Fast-Track RAP for ‘small’ requests | Deep-Track RAP for ‘larger’ requests |
| Small requests are defined primarily in terms of their total monetary request value, i.e. less than €1000 which can be allocated in 9 days max. | Larger requests are defined primarily in terms of their total monetary value, i.e. more than €1000 which can be allocated in 27 days max. |

The RAP from WP7 establishes a mechanism that provides a technical review, a selection criteria and a way to document decisions (which can be used to trigger the allocation of project funds to partners and external cloud providers) for review by the EOSC-Life Work Package Leaders and to generate metrics to provide feedback to the process. It is envisaged that this RAP will be a legacy from the project that can be adopted long-term by the community.

# ​2​ WP7 Resource Allocation Process

## ​2.1​ Objectives

The selection process considers the WP7 goals aligned with the overall EOSC-Life project objectives. It is designed acknowledging best practices[[1]](#footnote-0) to ensure its neutrality and to build the trust of applicants and stakeholders. Moreover, it will ensure that the proposals are reviewed in a fair, competitive, transparent and in-depth manner. The goal of the Resource Allocation Process (RAP) is to reach an agreement between the Resource Applicant (RA) and Resource Provider (RP) concerning the parameters and conditions of the use of resources available within the EOSC-Life project.

The RAP will help RAs navigate a multi-provider landscape within EOSC-Life by providing a single point of contact and a simplified procedure to request access to computational resources. The RAP is defined within the scope of the EOSC-Life project consortium and does not support the allocation of resources in support of external grants procured by RAs. These are out-of-scope. The basic parameters of an application passed on to WP7 from the external (to WP7) review process are:

1. The amount of compute and/or storage resources
2. The amount of IT staff support needed to fully exploit the allocation
3. The duration of the activity planned to complete the scientific objective of the application.

The EOSC-Life RPs will provide offers expressed in the form of resource capabilities and capacity metrics (See Appendix 1).

The RAP is led by WP7 with the engagement of partner WPs (i.e. WP1, WP2, WP3 or WP9) depending on the source of the resource allocation request. The execution of the RAP is reviewed by the EOSC-Life WP Leaders (by email or at the regular calls) along with the assignment of resource providers to the request. Any reallocation of project resources would be circulated by the Project Office to the EOSC-Life project Executive Committee.

## ​2.2​ Principles

The principles of the EOSC-Life WP7 RAP are the foundation of the selection process and are based on the EOSCpilot selection process principles[[2]](#footnote-1). An important difference between this RAP and EOSCpilot process is that the scientific assessment and overall prioritisation takes place outside of the WP7’s evaluation. These principles are:

* Transparency - The review process should be transparent to both applicants and stakeholders while protecting the identity of the reviewers.
* Expert assessment - The review will be developed by technical experts with appropriate knowledge and experience. All the proposals will be assessed objectively according to the same technical criteria.
* Avoidance of parochialism - The selection process will ensure that proposals of specific regions, institutions or countries are not favoured.
* Right of appeal - Applicants will be able to contact the reviewers to ask for clarifications regarding the review and appeal for reconsideration of a proposal. This may lead to a resubmission of the proposal in this or a subsequent call.
* Management of conflicts of interests - Reviewers will be asked to state any conflict of interest with the proposals assigned for their review. Conflicts of interest can be personal, professional or intellectual. Any actual or perceived conflicts of interest can be reviewed by the WP Leaders when they validate the process.
* Appropriate communication channels - The outcome of the selection process will be promptly and adequately notified to the designated project representative normally within 4 weeks.
* Communication & Decision Record - All internal and external communications and decisions relating to the RAP will be archived to provide a permanent record of the interactions for audit and improving the RAP.

## ​2.3​ Participants of the Resource Allocation Process

The roles and responsibilities of the participants involved in the WP7 Resource Allocation Process (RAP) are outlined below:

* **Resource Allocation Process Owner (RAPO)** – Typically the WP7 leaders, responsible for:
	+ Ensuring the efficient and effective execution of the RAP.
	+ Confirming that participants have clear guidelines and understand the responsibilities necessary to execute their role.
	+ Assigning technical reviewers from the Technical Review Panel (defined below) to assess the resource applications.
	+ Assessing the effectiveness of the RAP (from feedback across the project) and proposing modifications to the RAP to deliver improvements.
* **Compliance and Administrative Support Officer (CASO)** – Typically a member of WP7 who supports the Resource Allocation Process Owner by managing the review process, ensuring the completeness of each technical review and contacting the applicants to clarify any technical issues. This includes with the WP leadership:
	+ For the Technical Review Panel:
		- Managing a list of technical experts drawn from across the project.
		- Assigning technical experts to resource applications for evaluation.
	+ For the Resource Allocation Committee:
		- Managing a list of Resource Providers (see below) that can be drawn on by the project to satisfy resource applications.
		- Maintaining the list of pending resource applications and their associated technical reviews in readiness for resource allocation decisions.
	+ For the Work Package Leaders Committee:
		- Providing access to the documentation
* **Resource Applicant (RA)** – Typically an individual (e.g. PI, project manager) able to legally represent end-users in a consortium/group (in EOSC-Life a WP1/2/3/9 application) who initiates the request for resources filling-in the application form, clarifies their request with the Technical Review Panel if needed,and coordinates the uses of the resources provided by one or more Resource Providers.
* **Resource Provider (RP)** – Typically a provider of research computing, storage and human resources who will provide resources to one or more Resource Applicants. There are three kinds of RPs:
	+ In-kind Resource Providers – RPs who are part of the EOSC-Life consortium who provide resources for EOSC-Life participants. Consumable costs related to delivering resources are covered by RPs either in-kind or based on annual resource consumption reports in order to have their costs refunded. In EOSC-Life this consumption report would go to the Coordinator (endorsed by WP7). They should appear in the EOSC Marketplace tagged as ‘EOSC-Life’ to be eligible (e.g. EMBL-EBI, CSC).
	+ Third-Party Resource Providers – RPs who are not part of the EOSC-Life consortium but can be linked third-parties to EOSC-Life consortium members. They should appear in the EOSC Marketplace tagged as ‘EOSC-Life’ to be eligible.
	+ Commercially Procured Resource Providers – RPs who are not part of the EOSC-Life consortium, but whose resources are part of an established EU recognised procurement framework (e.g. HNSciCloud and/or OCRE) to comply with EC project regulations. It is expected that these RPs will be part of the EOSC catalogue.
* **Technical Review Panel (TRP)** – A group of technical experts drawn from EOSC-Life WP7 (and externally from other projects if the internal technical experts have conflicts of interest with the proposal) responsible once assigned to a review for:
	+ Performing the technical review of the submitted resource applications identifying the suitability of the application for cloud resources and the additional human resources that may be needed by the consortium (e.g. data or cloud consultants) to succeed. More details in the Technical Review Selection Criteria (see 2.5).
	+ Performing a technical review of the data sensitivity risk assessment of the data processed by the Resource Applicant that has been provided as part of the resource application.
	+ Conducting a technical interview with the Resource Applicant to gather requirements and help complete their application or provide informal feedback on their proposal if clarifications are needed.
* **Resource Allocation Committee (RAC)** – Chaired by the Resource Allocation Process Owner with additional external experts (leadership from WP1/2/3/9 as required by the applications being processed). The RAC may meet as part of the WP3 process (open calls) or independently as part of WP7 for other WP requests to undertake a matchmaking role between resource requests and Resource Providers. The RAC is responsible for:
	+ Matching the resource applications to be supported by the Resource Providers based on the technical reviews undertaken by the Technical Review Panel.
	+ Making resource allocations to Resource Applicants that are aligned to the data sensitivity risk assessment provided in the application to the capabilities of the RP site. This process is dependent on M19 being developed by WP7 and WP4 and due by PM18.
	+ Negotiating and obtaining costings from the Resource Providers based on the requirements by the Resource Applicant.
	+ Negotiating and providing a pool of resources for fast-track resource request applications.
* **Work Package Leaders (WPL)** - The WPL meeting will provide documentation as required for:
	+ Validating the results of the resource allocation process undertaken by WP7 alongside the Scientific Review performed in WP1/3/9.
	+ Confirming the allocation of resources based on the technical review, resource allocation review and scientific review performed in WP1/3/9 that will trigger the flow of funds within the project or to external resource providers.

The role of the WPL is to review that the process was followed and confirm the results from that process. This may take place by email or at the regular calls. If any project funds are reallocated this information will be circulated to the Project Executive by the Project Office as part of the amendment process.

## ​2.4​ Resource Allocation Process

The Resource Allocation Process will be formed of the following steps:



*Figure 1: Steps of the WP7 Resource Allocation Process*

|  |
| --- |
| Step 0: Resource Provider Service Registration |
| * *Description: EOSC-*Life consortium member Resource Providers register their resources and services as part of the [EOSC Portal marketplace](https://marketplace.eosc-portal.eu/).

Resource Providers must provide the following information:* + Provide a resource/service name and description
	+ Resource/Service type
	+ Resource/Service Provider information
	+ Domain-specific information
	+ Webpage and Support information
	+ Terms of Use
	+ Service Phase and optional SLA information
* *Participants:* Resource Providers, Commercial Providers from procurement framework from EOSC-Hub
 |
| Step 1a: Resource Application |
| * *Description:* Resource Applicant initiates a Resource Allocation by submitting a resource request using the Resource Application Form, see Appendix 1. This information may be collected as part of the WP3 open call, or supplied by the WP1/2/9 resource allocation request.

The Resource Application must include:* + Project title
	+ Name and contact information of the Resource Applicant
	+ Summary of the resource application request and purpose
	+ Description of the compute/data/service resource needed
	+ Description of the sensitivity classification of the data being processed
* *Participants:* Resource Applicant
 |
| Step 1b: [Optional] Pre-Screening Technical Interview [3 days] |
| * *Description:* A pre-screening technical interview will happen if the Resource Applicant needs help to complete their application because it needs clarifications to confirm the technical requirements, including identification of support required for the proper utilisation of the resource.

Once the pre-screening technical interview is completed, the Resource Application is submitted. * *Participants:* Resource Applicant, Assigned Technical Review Panel Members
 |
| Step 2: Compliance Check [3 days] |
| * *Description:* Once an application is received, the Compliance and Administrative Support Officer will check the completeness and compliance of each field in the Resource Application Form (see Appendix 1) even if provided through another application process (e.g. WP1/2/3/9) and contact the Resource Applicant to clarify any administrative issues.
* *Participants:* Compliance and Administrative Support Officer
 |
| Step 3: Triage & Technical Review [3 - 12 days] |
| * *Description:* The assigned reviewers from the Technical Review Panel will evaluate the technical suitability and feasibility of the resource application using information provided during the WP1/2/3/9 request process. If a pre-screening technical interview has not been performed during the application process, then the Compliance and Administrative Support Officer may organise a technical interview to help understand complex and/or incomplete applications. For applications who have undergone a pre-screening interview, the technical reviewer will ideally be drawn from one of the interviewers. In addition to the overall technical feasibility of the application the technical review must assess:
* The human resources (type and quantity) needed to support the work from elsewhere in the project if sufficient technical competency is not available within the project team:
	+ Cloud Consultant (WP7)
	+ Platform Consultant (WP2)
	+ Security Consultant (WP5)
* The quantity of cloud resources needed to undertake the project:
	+ *Fast Track Request –* Typically requests under €1,000 and deemed to be of low technical complexity and where the resource applicants have sufficient technical competency for success as determined by the technical review.
	+ *Medium Requests* – Typically requests above €1,000 and under €10,000 and deemed to be of medium technical complexity or needing additional technical expertise to succeed as determined by the technical review.
	+ *Large Requests -* Typically requests above €10,000 and deemed to be of large technical complexity or needing additional technical expertise to succeed as determined by the Technical review.
 |
| Step 4: Resource Allocation Review [3 - 12 days] |
| * *Description:* The Resource Allocation Committee (RAC) will evaluate the technical suitability and feasibility of the resource application based upon the technical review and attempt to match the resource application requirements with the available Resource Providers (RPs) drawing on those in the EOSC Marketplace. The RAC will attempt to match the request with resource providers in the following sequence:
	+ Partner Resource Providers – The RAC will attempt to obtain offers from at least two partner RPs to reasonably match the request requirements both in terms of capacity and capability. If successful, the service offers are made back to the Resource Applicant (RA), alternatively the RAC continues with the next tier of RPs.
	+ Third-Party Resource Providers – The RAC will attempt to obtain reasonable offers from at least two linked third-party RPs to reasonably match the request requirements both in terms of capacity and capability. If successful, the offers are made back to the RA, alternatively the RAC continues with the next tier of RPs.
	+ Commercial Resource Providers – The RAC will attempt to obtain reasonable offers from at least two commercial RPs to match the request requirements. This negotiation will follow the resource procurement framework followed in HNSciCloud/OCRE. If successful, the offers are made back to the resource applicant, alternatively the RAC rejects the application due to the unavailability of suitable resource providers.

The resource allocation process may result in the following actions:* + Offer: The RAC provides two or more offers to the RA as the proposed work is seen to be feasible and appropriate human resources are available (either from the resource applicant or through additional technical consultants within the project)
	+ Partial: The RAC decides that the application only partially meets the technical suitability or feasibility based on the quantity of cloud requested or the lack of appropriate human resources in the applicant’s team or the project to support the work. The RAC may decide to continue the negotiation or require a revised application to be resubmitted.
	+ *Reject:* The RAC rejects the application due to the unavailability and suitability of the RPs, the lack of appropriate human resources to assure the success of the project or the quantity of requested resources are beyond that can be offered to a single activity due to their cost. A new submission could be made following substantial revision.
* *Participants:* Resource Allocation Process Owner, Compliance and Administrative Support Officer, Resource Allocation Committee, Members of WP1, WP3 and WP9
 |
| Step 5: Fast-Track Resource Allocation [3 days] |
| * *Description:* If, following the compliance review and triage step, it is determined that the resource application is small (<=€1,000 and low technical complexity) as per the technical review, then a fast-track allocation of resources is provided subject to resource availability. Resource applications classed as ‘Fast Track Requests’ will be actioned by the Resource Allocation Process Owner outside of any meeting of the Resource Allocation Committee.
* *Participants:* Resource Allocation Process Owner
 |
| Step 6: Notify Participants [2 days] |
| * *Description:* Notify the results of the allocation process (offer) to the Resource Providers and Resource Applicants by email or by other means
* *Participants:* Resource Allocation Process Owner, Compliance and Administrative Support Officer
 |
| Step 7a: Right to Appeal [2 days] |
| * *Description:* The technical review appraisal will be provided to the Resource Applicant (RA) as feedback. If the application has been unsuccessful, the RA is able to appeal the review decision through the WP Leaders meeting.
* *Participants:* Resource Applicant
 |
| Step 7b: Appeal response [2 days] |
| * *Description:* The appeal requests will be triaged and answered by the Resource Allocation Process Owner (RAPO) in consultation with the Resource Allocation Committee. The RAPO will ensure that the responses are gathered and communicated to the resource applicant in a timely manner, within 2 days.
* *Participants:* Resource Application Process Owner, Resource Allocation Committee
 |
| Step 8: Resource Allocation & Negotiation [12 days] |
| * *Description:* Once the offer has been made to the Resource Applicant, they may choose to select one or more of the offers made or reject them. Offers may undergo minor amendments (e.g. use of more cost effective technical approaches) to satisfy the requirements of the applicant.
* *Participants:* Resource Allocation Process Owner, Resource Providers, Resource Applicant
 |
| Step 9: Monitoring the Resource Allocation |
| * *Description:* Once the allocation of the resource has been made, the utilisation and suitability of the resource/service will be made by the resource provider and resource applicant at periodic intervals to help make minor corrections in the allocation quotas. It is recommended that the resource allocation quotas are allocated in a tapered fashion (e.g. lower limits to prototype, higher limits for production and then lower limits for service delivery) to ensure maximum utility of the resource (especially compute). Major resource allocation corrections will need an addendum resource application to ensure fair-use.
* *Participants:* Resource Allocation Process Owner, Resource Providers, Resource Applicants
 |
| Step 10: Resource Allocation Process Assessment |
| * *Description:* Once the resource allocation has been utilised, the Resource Applicant and the resource provider will be contacted by the Resource Allocation Process Owner to gather feedback through bi-annual surveys on the effectiveness of the allocation and support process. This feedback (with an initial pilot phase) will be considered to improve the allocation process for future allocation requests. The assessment process will also gather intelligence on past resource applications in a database to be used by the Resource Allocation Committee to help evaluate current and future requests.

Anonymised information related to the completed and ongoing resource allocations will also be published: number of resource applications, number of offered/rejected applications, resources allocated per application, RIs involved, Resource Providers involved* *Participants:* Resource Allocation Process Owner, Compliance and Administration Support Officer
 |

##

## ​2.5​ Technical Review Selection Criteria

The selection criteria have been shaped considering the Resource Allocation Process principles and the broader consideration of the EOSC-Life project to move the BMS RIs towards the native adoption of cloud computing resources. The selection criteria are expected to be addressed in the technical review:

1. The proposal should provide data, analysis and service delivery challenges that will drive the closer integration of services and resources within EOSC-Life, RIs and the EOSC ecosystem.
2. The proposal must be supported by a credible cloud implementation plan, with an identified technical and scientific team to deliver on the plan that is aligned with:
* the services being offered within EOSC-Life (e.g. use of WP2 Tools[[3]](#footnote-2), WP5 LS AAI, WP7 Managed Services[[4]](#footnote-3),
* the services being offered by RIs,
* and the EOSC Marketplace[[5]](#footnote-4) services more broadly.

If a credible plan is not provided then feedback can be given or the proposal rejected for a separate discussion to take place. The opportunities provided by the use of Cloud/Security/Data consultants can be identified.

1. The cloud implementation plan will deliver components that are cloud scalable and potentially sustainable by use through other activities. Simply investing project resources in a ‘lift and shift’ will fix today’s problems but not provide components for tomorrow that will scale in the cloud.
2. Assess the feasibility of the project to be completed within the timeframe described with the human resources provided by the project and potentially supplemented by additional consultancy expertise from within the consortium (e.g. cloud, security, data, development). The additional consultancy expertise is to transfer knowledge to the proposed activity, not to complete the work for them.
3. The project consortium has the required technical expertise to undertake the plan. The required technical expertise (e.g. cloud, software development, security, etc) should be defined and the approximate amount of effort estimated.
4. Technical requirements suitably and realistically defined and accounts for potential future requirements for the platform to scale and achieve sustainability from its host RI.

#

# 3​ Abbreviations

BMS RI - Biological and Medical Research Infrastructures

CASO - Compliance and Administrative Support Officer

EOSC - European Open Science Cloud

PI - Principal Investigator

RA - Resource Applicant

RAC - Resource Allocation Committee

RAP - Resource Allocation Process

RAPO - Resource Allocation Process Owner

RI - Research Infrastructure

RP - Resource Provider

SLA - Service Level Agreements

TRP - Technical Review Panel

WP - Work Package

WPL - Work Package Leaders

#

# 4​ Appendices

##

## 4.1​ Appendix 1: Resource Application Form

Thank you for your willingness to join EOSC-Life.

Please contact the Compliance and Administrative Support Officer by sending an email to eosc-life-wp7-rap@elixir-europe.org if you need support to fill-in this form and to send your form once you have completed it.

|  |
| --- |
| 1. Demonstrator Title |
| Please provide the full demonstrator project title |
| 2. Principal Investigator and Team members including affiliations |
| Coordinator(s) and team members involved |
| 3. Link to Scientific Summary of the DemonstratorProvide a brief non-scientific summary of the proposed demonstrator project and the scientific challenges it will address. You can include links to any further relevant background information.  |
| Provide a brief scientific summary of the Demonstrator project and link to any further relevant background information. |
| 4. Brief Technical Summary of the DemonstratorWrite a brief and plain explanation of the proposed demonstrator project and the technical challenges it will address. |
| Provide a brief technical summary of the Demonstrator project and link to any further relevant background information. |
| 5. Current Technical Status of the DemonstratorWrite a brief and plain explanation of the current demonstrator deployment on existing resources? |
| Explanation of the current technical status of the demonstrator |
| 6. Compute and Data Resources RequiredWhat compute and data resources are required for your demonstrator? Be explicit with the requirements, e.g. CPUhrs, RAM, GBhr storage, Network, ancillary services (data transfer, workflow execution), technical support, etc. Describe the sensitivity of the data that will be processed by the demonstrator.Feel free to request an interview with the technical reviewers to flesh these requirements if you need to. |
| Description of the compute and data resources required. Be explicit with the requirements, e.g. CPUhrs, RAM, GBhr storage, Network, ancillary services (data transfer, workflow execution), technical support, etc. The more specific you can be, the faster the review process will be. Describe the sensitivity of the data that will be processed by the demonstrator. |
| 7. Technical SupportDo you require any technical support pre- or during the resource allocation? |
| Do you require any support to help administer the compute or storage environment? Manage user accounts or any other ResOps support? |
| 8. Technical ConstraintsAre there any technical constraints or flexibility to the project? E.g. This service must be deployed in multiple geophysical regions, or require nine nines availability, etc. |
| Explanation and justification of any required SLA - any technical constraints or flexibilities, if any. E.g. This service must be deployed in multiple geophysical regions, or require nine nines availability, etc. |
| 9. Expected Technical ImpactWhat is the expected technical impact of the resources on the demonstrator project? |
| Explanation of the expected impact of demonstrator |
| 10. DurationWhat is the duration of the required resources? Default max time-limit is one year, with a reviewed extension of one year. |
| Description of the start, duration and end date/times of the resources, including stating constraints in the required start/end date or flexibility in the start/end date. |
| 11. Sustainability PlanWhat is the data and compute sustainability plan of the demonstrator after the resources have been utilised? |
| Description of the sustainability plan of the demonstrator post resource allocation? Data Management Plans? Software Sustainability Management Plan? Project Output Management Plan? |

## 4.2​ Appendix 2: Guidelines for WP7 Technical Reviewers

This document is aimed to provide EOSC-Life WP7 RAP technical reviewers general guidelines for the completion of the technical review form.

**1. General considerations**

Please contact the Compliance and Administrative Support Officer by sending an email to eosc-life-wp7-rap@elixir-europe.org if:

- You are unable to review a proposal due to a conflict of interest.

- You find that your expertise does not cover the proposal you have been assigned to review.

Remember during your review:

- You must not write any information that can reveal your identity to the applicant.

- Scientific and Technical reviews of the applications are conducted in parallel but they are independent. You are developing the Technical review and you do not have to take the scientific review into consideration.

**2. Technical review selection criteria**

The selection criteria have been shaped considering the Resource Allocation Process principles and the broader consideration of the EOSC-Life project to move the BMS RIs towards the native adoption of cloud computing resources. The selection criteria are expected to be addressed in the technical review:

1. The proposal should provide data, analysis and service delivery challenges that will drive the closer integration of services and resources within EOSC-Life, RIs and the EOSC ecosystem.
2. The proposal must be supported by a credible cloud implementation plan, with an identified technical and scientific team to deliver on the plan that is aligned with:
* the services being offered within EOSC-Life (e.g. use of [WP2 Tools](https://docs.google.com/document/d/1lck8E6pC5s9U5dWNDuz0gZJKG7wEf10Dof_e_0CcE3g/edit), WP5 LS AAI, WP7 Managed Services ([ECP](http://portal.tsi.ebi.ac.uk/), [cPouta](https://research.csc.fi/cpouta), [ePouta](https://research.csc.fi/epouta), [rahti](https://rahti.csc.fi/), ELIXIR GA4GH Cloud, [Embassy](https://www.embassycloud.org/), Den.BI, Den.BI-Galaxy, CNR-Galaxy),
* the services being offered by RIs,
* and the [EOSC Marketplace](https://marketplace.eosc-portal.eu/) services more broadly.

If a credible plan is not provided then feedback can be given or the proposal rejected for a separate discussion to take place. Has the use of Cloud/Security/Data consultants been identified and the effort required?

1. The cloud implementation plan will need to deliver components that are cloud scalable and potentially sustainable by use through other activities. Simply investing project resources in a ‘lift and shift’ will fix today’s problems but not provide components for tomorrow that will scale in the cloud.
2. Assess the feasibility of the project to be completed within the timeframe described with the human resources provided by the project and potentially supplemented by additional consultancy expertise from within the consortium (e.g. cloud, security, data, development). The additional consultancy expertise is to transfer knowledge to the proposed activity, not to complete the work for them.
3. The project consortium has the required technical expertise to undertake the plan. The required technical expertise (e.g. cloud, software development, security, etc) should be defined and the approximate amount of effort estimated.
4. Technical requirements suitably and realistically defined and accounts for potential future requirements for the platform to scale and achieve sustainability from its host RI.

**3. Assessment methodology**

To complete the assessment you will need to assess the proposal against the Technical review selection criteria by answering a set of questions in the Technical review form.

The evaluation of a proposal includes assessing ideas, concepts and approaches of it. The presentation of the proposal may help or hinder your ability to review a proposal and a comment to this effect would be appropriate, but this should not form the basis of your assessment.

There is no set way for answering the questions on the form. However, the Resource Allocation Committee and the Resource Applicant will find it useful if you explicitly identify the main strengths and weaknesses of the proposal.

**4. Technical review form**

The form consists of 4 parts: general information, a reviewer’s self-assessment, the proposal review and the appraisal to be disclosed to the applicant:

* General information will show the proposal number, the project title, the contact(s) name(s) and the organisation(s).
* The Reviewer’s self-assessment will ask if you experience any conflict of interest and your confidence level assessing the proposal.
* The Proposal technical assessment will be your assessment of the different aspects or the proposal: what is the overall benefit to reach a closer integration of service and resources within EOSC-Life, how challenging is the demonstrator, status of development, feasibility to be completed with the given resources and in the defined time frame, monetary estimation of the cost of tha requested resources, and overall conclusions among others.
* The Proposal’s technical appraisal to be disclosed to the applicant will be provided to the submitters. The applicants will use this appraisal to decide whether they will use their right to reply and provide clarifications if needed.

To facilitate the review, there are explanatory notes under each heading to help you focus on what should be taken into consideration.

Note that there is no limit for the number of words to answer each section of the review form, but please write your responses as concisely as possible while making sure that you cover all the areas of your expertise.

## ​4.3​ Appendix 3: WP7 Technical Review Form

This form will help you to do the technical review of a proposal submitted to EOSC-Life to request access to compute and data resources. Please read the Guidelines for technical reviewers <link to the content in Appendix 2: Guidelines for WP7 technical reviewers> before the completion of this form.

**1. Proposal’s general information**

|  |  |
| --- | --- |
| Demonstrator title | Please write the demonstrator title |
| Applicant(s) name and affiliation | Please write the applicant's name and affiliation |

**2. Technical reviewer self-assessment**

2.1. Do you experience any conflict of interests by assessing this proposal?

This question will help us to know if you can continue with the review.

Please mark the box that best describes your level of agreement and briefly explain your choice.

|  |  |
| --- | --- |
|  | Yes - Please contact the WP7 Resource Allocation Process owners (see Guidelines for technical reviewers) and don’t continue with the assessment.  |
|  | No - Please continue with the review |

2.2. What is your confidence level assessing this proposal?

This question will help us to know if we should look for another technical review to complement yours.

Please mark the box that best describes your level of agreement and briefly explain your choice.

|  |  |
| --- | --- |
|  | High - I have a clear understanding of all the technical aspects of the proposalPlease provide more details below by explaining your choice. |
|  | Medium - I have a clear understanding of some technical aspects of the proposalPlease provide more details below by explaining your choice and what are the aspects that you assess.  |
|  | Low - I am unable to comment with confidence the proposalPlease contact the WP7 Resource Allocation Process owners (see Guidelines for technical reviewers) and don’t continue with the assessment.  |

|  |
| --- |
| Please briefly explain your choice  |
| My choice is based on… |
|
|
|

**3. Proposal’s technical assessment**

3.1 Does the proposal provide data, analysis and service delivery challenges that will drive the closer integration of services and resources within EOSC-Life, RIs and the EOSC ecosystem?

This question will help us to assess the 1st point in the Technical review selection criteria.

Please mark the box that best describes your level of agreement and briefly explain your choice*.*

|  |  |
| --- | --- |
|  | Yes |
|  | Neutral |
|  | No |

|  |
| --- |
| Please briefly explain your choice  |
| My choice is based on… |
|
|
|

3.2 Will the proposal be using services being offered within EOSC-Life (e.g. use of [WP2 Tools](https://docs.google.com/document/d/1lck8E6pC5s9U5dWNDuz0gZJKG7wEf10Dof_e_0CcE3g/edit), WP5 LS AAI, WP7 Managed Services ([ECP](http://portal.tsi.ebi.ac.uk/), [cPouta](https://research.csc.fi/cpouta), [ePouta](https://research.csc.fi/epouta), [rahti](https://rahti.csc.fi/), ELIXIR GA4GH Cloud, [Embassy](https://www.embassycloud.org/), Den.BI, Den.BI-Galaxy, CNR-Galaxy) or [EOSC Marketplace](https://marketplace.eosc-portal.eu/) services?

This question will help us to assess the 2nd point in the Technical review selection criteria.

Please mark the box that best describes your level of agreement and briefly explain your choice.

|  |  |
| --- | --- |
|  | Yes |
|  | No |

|  |
| --- |
| Please briefly explain your choice  |
| My choice is based on… |
|
|
|

3.3 Does the proposal include any technical constraints to be developed?

This question will help us to assess the 2nd and 4th points in the Technical review selection criteria.

Please mark the box that best describes your level of agreement and briefly explain your choice.

|  |  |
| --- | --- |
|  | Yes |
|  | No |

|  |
| --- |
| Please briefly explain your choice  |
| My choice is based on… |
|
|
|

3.5 Does the proposal require technical support before or during the resource allocation?

This question will help us to assess the 2nd and 4th points in the Technical review selection criteria.

Please mark the box that best describes your level of agreement and briefly explain your choice.

|  |  |
| --- | --- |
|  | Yes |
|  | No |

|  |
| --- |
| Please briefly explain your choice  |
| My choice is based on… |
|
|
|

3.6. Do you think the WP7 team has the technical expertise (e.g. cloud, software development, security, etc) to support the development of the demonstrator?

This question will help us to assess the 5th point in the Technical review selection criteria.

Please mark the box that best describes your level of agreement and briefly explain your choice.

|  |  |
| --- | --- |
|  | Yes |
|  | No |

|  |
| --- |
| Please briefly explain your choice  |
| My choice is based on… |
|
|
|

3.7. How many FTE do you estimate will require from WP7 to support the development of this demonstrator? (Please consider a 40-hour workweek is 1.0 FTE and the specific duration of the demonstrator)

This question will help us to assess the 5th point in the Technical review selection criteria.

Please mark the box that best describes your level of agreement and briefly explain your choice.

|  |
| --- |
| Please briefly explain your answer |
| My answer is based on… |
|
|
|

3.8 Does the proposal require a reasonable amount of compute and data resources for the expected technical challenge it will address?

This question will help us to assess the 2nd and 4th points in the Technical review selection criteria.

Please mark the box that best describes your level of agreement and briefly explain your choice.

|  |  |
| --- | --- |
|  | Yes |
|  | Neutral |
|  | No |

|  |
| --- |
| Please briefly explain your choice  |
| My choice is based on… |
|
|
|

3.9 What are the Resource Providers you would recommend to meet the needs expressed in the proposal?

This question will help to assess if the proposal can follow the Fast-Track or Deep-Track of the WP7 RAP.

Please briefly explain your choice. You need to explain what providers will meet each need (e.g. Storage needs can be met by using Provider 1, compute needs can be met by using Provider 2) and consider data sensitivity risks.

|  |
| --- |
| Please briefly explain your choice  |
| My choice is based on… |
|
|
|

3.10 What is the approximate monetary value of the compute and data resources requested?

This question will help to assess if the proposal can follow the Fast-Track or Deep-Track of the WP7 RAP.

Please mark the box that best describes your level of agreement and briefly explain your choice considering different Resource Providers.

|  |  |
| --- | --- |
|  | Less than €1000 |
|  | More than €1K but less than €10K |
|  | More than €10K |

|  |
| --- |
| Please briefly explain your choice  |
| My choice is based on… |
|
|
|

3.11 Do you think the proposal is feasible considering the current status of the demonstrator, the expertise and human resources of the current team, the compute and data resources requested, the technical support needed (if needed), and the time estimated to develop the demonstrator?

This question will help us to assess the 4th point in the Technical review selection criteria.

Please mark the box that best describes your level of agreement and briefly explain your choice.

|  |  |
| --- | --- |
|  | Yes |
|  | Neutral |
|  | No |

|  |
| --- |
| Please briefly explain your choice  |
| My choice is based on… |
|
|
|

3.12. Will the cloud implementation plan deliver components that are cloud scalable and potentially sustainable by use through other activities or in the host RI once the demonstrator work in EOSC-Life is over?

This question will help us to assess the 3rd and 6th points in the Technical review selection criteria.

Please mark the box that best describes your level of agreement and briefly explain your choice.

|  |  |
| --- | --- |
|  | Yes |
|  | Neutral |
|  | No |

|  |
| --- |
| Please briefly explain your choice  |
| My choice is based on… |
|
|
|

**4. Proposal’s technical appraisal to be disclosed to the applicant**

4.1. What do you consider to be the main strengths and weaknesses of the proposal?

The answer to this question will help us to write a response to the applicant.

|  |
| --- |
| I think the proposal strength is mainly… |
|
|
|

Thank you for your technical assessment.

Please submit this form to the WP7 Compliance and Administrative Support Officer by sending an email to eosc-life-wp7-rap@elixir-europe.org

​

## 4.4​ Appendix 4: Guidelines for WP7 Resource Allocation Reviewers

This document is aimed to provide EOSC-Life WP7 RAP resource allocation reviewers general guidelines for the completion of the resource allocation review form.

**1. General considerations**

Please contact the Compliance and Administrative Support Officer by sending an email to eosc-life-wp7-rap@elixir-europe.org if:

- You are unable to review a proposal due to a conflict of interest.

- You find that your expertise does not cover the proposal you have been assigned to review.

- You need clarifications from the technical reviewers.

Remember during your review:

- You must not write any information that can reveal your identity to the applicant.

- Scientific and Technical reviews of the applications are conducted in parallel but they are independent. You are developing the Resource Allocation review only considering the Technical review. EOSC-Life WP1/2/3/9 should assess the application from the Scientific point of view.

**2. Technical review selection criteria**

The selection criteria have been shaped considering the Resource Allocation Process principles and the broader consideration of the EOSC-Life project to move the BMS RIs towards the native adoption of cloud computing resources. The selection criteria are expected to be addressed in the technical review:

1. The proposal should provide data, analysis and service delivery challenges that will drive the closer integration of services and resources within EOSC-Life, RIs and the EOSC ecosystem.
2. The proposal must be supported by a credible cloud implementation plan, with an identified technical and scientific team to deliver on the plan that is aligned with:
* the services being offered within EOSC-Life (e.g. use of [WP2 Tools](https://docs.google.com/document/d/1lck8E6pC5s9U5dWNDuz0gZJKG7wEf10Dof_e_0CcE3g/edit), WP5 LS AAI, WP7 Managed Services ([ECP](http://portal.tsi.ebi.ac.uk/), [cPouta](https://research.csc.fi/cpouta), [ePouta](https://research.csc.fi/epouta), [rahti](https://rahti.csc.fi/), ELIXIR GA4GH Cloud, [Embassy](https://www.embassycloud.org/), Den.BI, Den.BI-Galaxy, CNR-Galaxy),
* the services being offered by RIs,
* and the [EOSC Marketplace](https://marketplace.eosc-portal.eu/) services more broadly.

If a credible plan is not provided then feedback can be given or the proposal rejected for a separate discussion to take place. The opportunities provided by the use of Cloud/Security/Data consultants can be identified.

1. The cloud implementation plan will deliver components that are cloud scalable and potentially sustainable by use through other activities. Simply investing project resources in a ‘lift and shift’ will fix today’s problems but not provide components for tomorrow that will scale in the cloud.
2. Assess the feasibility of the project to be completed within the timeframe described with the human resources provided by the project and potentially supplemented by additional consultancy expertise from within the consortium (e.g. cloud, security, data, development). The additional consultancy expertise is to transfer knowledge to the proposed activity, not to complete the work for them.
3. The project consortium has the required technical expertise to undertake the plan. The required technical expertise (e.g. cloud, software development, security, etc) should be defined and the approximate amount of effort estimated.
4. Technical requirements suitably and realistically defined and accounts for potential future requirements for the platform to scale and achieve sustainability from its host RI.

**3. Assessment methodology**

To complete the assessment you will need to assess the proposal against the Technical review selection criteria by answering a set of questions in the Resource Allocation Review form.

The evaluation of a proposal and the technical review form includes assessing ideas, concepts and approaches of it. The presentation of the proposal and the responses in the technical review form may help or hinder your ability to review a proposal and a comment to this effect would be appropriate, but this should not form the basis of your assessment.

**4. Resource allocation form**

The form consists of 4 parts: general information, a reviewer’s self-assessment, the proposal review and the appraisal to be disclosed to the applicant:

* General information will show the proposal number, the project title, the contact(s) name(s) and the organisation(s).
* The Reviewer’s self-assessment will ask if you experience any conflict of interest and your confidence level assessing the proposal.
* The Proposal resource allocation assessment will be your assessment of the different aspects or the proposal: if it is a proposal to be supported by WP7, the resources to be allocated and the monetary value of the resources to be allocated.
* The Proposal’s resource allocation appraisal to be disclosed to the applicant will be provided to the submitters. The applicants will use this appraisal to decide whether they will use their right to reply and provide clarifications if needed.

To facilitate the review, there are explanatory notes under each heading to help you focus on what should be taken into consideration.

Note that there is no limit for the number of words to answer each section of the review form, but please write your responses as concisely as possible while making sure that you cover all the areas of your expertise.

## 4.5​ Appendix 5: WP7 Resource Allocation Review Form

This form will help you to do the Resource allocation review of a proposal submitted to EOSC-Life to request access to compute and data resources. Please read the Guidelines for resource allocation reviewers <link to the content in Appendix 4: Guidelines for the resource allocation reviewers> before the completion of this form.

**1. Proposal’s general information**

|  |  |
| --- | --- |
| Demonstrator title | Please write the demonstrator title |
| Applicant(s) name and affiliation | Please write the applicant's name and affiliation |

**2. Resource allocation reviewer self-assessment**

2.1. Do you experience any conflict of interests by assessing this proposal?

This question will help us to know if you can continue with the review.

Please mark the box that best describes your level of agreement and briefly explain your choice.

|  |  |
| --- | --- |
|  | Yes - Please contact the WP7 Resource Allocation Process owners (see Guidelines for technical reviewers) and don’t continue with the assessment.  |
|  | No - Please continue with the review |

**3. Proposal’s resource allocation assessment**

3.1 Based on the technical review forms available to assess this proposal, would you approve this proposal to have resources from EOSC-Life WP7 allocated?

This question will help us to assess if the proposal meets the Technical review selection criteria.

Please mark the box that best describes your level of agreement and briefly explain your choice*.*

|  |  |
| --- | --- |
|  | Yes |
|  | No |

|  |
| --- |
| Please briefly explain your choice  |
| My choice is based on… |
|
|
|

3.2 What are the resources that will be allocated to this proposal?

This question will help us to match the proposal to the supported Resource Providers.

Please briefly explain your choice. You need to explain what providers will meet each need (e.g. Storage needs can be met by using Provider 1, compute needs can be met by using Provider 2) and consider data sensitivity risks.

|  |
| --- |
| Please briefly explain your choice  |
| The resource providers to meet the demonstrator requirements will be …. |
|
|
|

3.3 What is the estimated monetary cost of the resources to be allocated to this proposal?

This question will help the Resource Applicants to know how expensive it is to develop their demonstrator.

|  |
| --- |
| Please briefly explain your choice  |
| The cost of the resources to be provided to meet the demonstrator requirements will be …. |
|
|
|

**4. Proposal’s resource allocation appraisal to be disclosed to the applicant**

4.1. Explain to the applicant if their demonstrator would be supported by WP7 resources. It will also help to explain the main strengths and weaknesses of the proposal.

The answer to this question will be the response to the applicant.

|  |
| --- |
| The demonstrator will be supported by WP7 resources. The proposal strength is mainly… |
|
|
|

Thank you for your resource allocation assessment.

Please submit this form to the WP7 Compliance and Administrative Support Officer by sending an email to eosc-life-wp7-rap@elixir-europe.org

​

## 4.6​ Appendix 6: WP7 Resource Allocation Process Feedback

The EOSC-Life WP7 would appreciate your feedback on the Resource Allocation Process we follow to allocate resources to science demonstrators so we can improve it and make submitting proposals easier. All your answers will be kept confidential and will be anonymised after you send them.

1. Was your application reviewed using a Fast-Track or Deep-Track review?

Please mark the box that best describes how your proposal was reviewed.*.*

|  |  |
| --- | --- |
|  | Fast-Track |
|  | Deep-Track |
|  | I Don’t know |

2. What is your opinion about these statements regarding the Resource Allocation Process?

Please write 0 =Don’t know, 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree,

|  |  |
| --- | --- |
| Statement | Your answer |
| The submission procedure is accessible and clearly explained |  |
| The technical review criteria is clearly explained |  |
| The technical review criteria was provided to the resource applicants before submitting their proposal |  |
| The information requested to submit an application is proportional and adequate  |  |
| The information provided during the review process was timely and clear |  |
| The resource allocation review process was smooth  |  |
| The appeal process was clearly explained and useful |  |
| The appraisal received included clear and useful information |  |

3. Please feel free to add here any additional comments or questions for WP7.

|  |
| --- |
| I would like to …. |
|
|
|

Thank you for your feedback.

Please submit this form to the WP7 Compliance and Administrative Support Officer by sending an email to eosc-life-wp7-rap@elixir-europe.org

1. Handbook of HPC e-Science Infrastructure Allocation Reviewing, Selection and Management, EC FP7 contract RI-246711. [↑](#footnote-ref-0)
2. EOSCpilot D4.2: Science Demonstrator Selection Process, EC H2020 contract RI-739563. [↑](#footnote-ref-1)
3. M2.1 - [https://docs.google.com/document/d/1lck8E6pC5s9U5dWNDuz0gZJKG7wEf10Dof\_e\_0CcE3g/edit#](https://docs.google.com/document/d/1lck8E6pC5s9U5dWNDuz0gZJKG7wEf10Dof_e_0CcE3g/edit) [↑](#footnote-ref-2)
4. [ECP](http://portal.tsi.ebi.ac.uk/), [cPouta](https://research.csc.fi/cpouta), [ePouta](https://research.csc.fi/epouta), [rahti](https://rahti.csc.fi/), ELIXIR::GA4GH Cloud, [Embassy](https://www.embassycloud.org/), Den.BI, Den.BI-Galaxy, CNR-Galaxy [↑](#footnote-ref-3)
5. EOSC-Life Marketplace <https://marketplace.eosc-portal.eu/> [↑](#footnote-ref-4)