

HORIZON 2020 H2020 - INFRAIA-2020-1

SLICES-SC Transnational Access of Infrastructures Open Call rules and Conditions

Acronym SLICES-SC

Project Title Scientific Large-scale Infrastructure for

Computing/Communication Experimental

Studies – Starting Community

Grand Agreement 101008468

Project Duration 36 Months (01/03/2021 – 29/02/2024)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101008468. The information, documentation and figures available in this deliverable, is written by the SLICES-SC project consortium and does not necessarily reflect the views of the European Commission. The European Commission is not responsible for any use that may be made of the information contained herein.

Scientific
Large-scale
Infrastructure
for Computing
Communication
Experimental
Studies
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Communities





Executive summary

The objective of this document is to describe the documentation and the rules of the experiment calls for the use of SLICES-SC research infrastructures. The document includes the description of rules for the call for experiments, the rules of submitting applications and evaluation procedure of applications. It also includes the rules of accessing the SLICES infrastructure facilities.



Table of content

EXECUTIVE SUMMARY				
	TABLE OF CONTENT			
1.		CTION4		
1.				
	1.1.	Intended audience		
	1.2.	DOCUMENT STRUCTURE		
2. SLICES-SC AT A GLANCE		S-SC AT A GLANCE	5	
	2.1.	SLICES-SC RESEARCH INFRASTRUCTURES	5	
	2.2.	TRANSNATIONAL ACCESS OF SLICES-SC RESEARCH INFRASTRUCTURES	6	
3. TRANSNATIONAL ACCESS CALL ORGANISATION		ISNATIONAL ACCESS CALL ORGANISATION	7	
	3.1.	Application procedure	7	
	3.2.	Application form	8	
4.	PROF	POSALS GENERAL ASSESSMENT PROCEDURE	g	
	4.1.	ELIGIBILITY ASSESSMENT	9	
	4.2.	TECHNICAL ASSESSMENT	10	
	4.3.	Proposals' scientific assessment	10	
	4.4.	Access Management	12	
	4.5.	POST-ASSESS MANAGEMENT — REPORTING	12	
Αľ	NNEX A – SUMMARY OF RULES13			
ΔΝ	ANNEX R – PROPOSAL TEMPLATE			



1. Introduction

1.1. Intended audience

This document is aimed at the researchers targeting to use the SLICES research infrastructures. The document reports the management and the rules of the access to the Research Infrastructures and the process for the open calls for experiments.

1.2. Document structure

The document is structured into the following sections:

- Chapter 1 INTRODUCTION: it introduces the intended audience of the document and its structure.
- Chapter 2 SLICES-SC at a glance: It introduces SLICES-SC and the access modalities to its nodes.
- Chapter 3 TRANSNATIONAL ACCESS CALL ORGANISATION: it provides all the necessary information, rules for the call for experiments in SLICES-SC Infrastructure nodes.
- Chapter 4 PROPOSALS GENERAL ASSESSMENT PROCEDURE: it provides all the necessary information and procedures for the assessment and the selection of the open experiment proposal.
- Chapter 5 ACCESS MANAGEMENT.
- Chapter 6 REPORTING.



2. SLICES-SC at a glance

The future SLICES Research Infrastructure (SLICES-RI) aims to develop and provide services related to experimentation in the context of digital sciences such as 5G, 6G, NFV, Internet of Things and cloud computing. The SLICES-SC project is currently building a community of researchers around SLICES-RI, which will offer the necessary solutions to create and manage efficiently the experiments. Among the features to be implemented by the SLICES-RI for the experimenters, SLICES-SC provides a facilitated access for the experiments, the reproducibility of the research experiments, the validation of the experiment results and finally, the publication of the results in open data access.

2.1. SLICES-SC Research Infrastructures

The SLICES-SC nodes participating in the first Open Call for Transnational Access are listed below:

5TONIC - IMDEA

<u>Name of the infrastructure</u>: 5TONIC - An Open Research and Innovation Laboratory Focusing in 5G Technologies

<u>Location (town, country) of the infrastructure</u>: 5TONIC - IMDEA Networks Institute, Avenida del Mar Mediterráneo 22 - 28918 Leganés (Madrid), Spain

Web site address: https://www.5tonic.org/

5G Test Network (5GTN)

Name of the infrastructure: 5G Test Network (5GTN).

<u>Location (town, country) of the infrastructure</u>: Oulu, Finland, Sodankylä, Finland, Tampere, Finland.

Web site address:

https://5gtn.fi/

https://www.oulu.fi/6gflagship/

ELKH Cloud - SZTAKI

Name of the infrastructure: ELKH Cloud

Location (town, country) of the infrastructure: Budapest, Hungary.

Web site address: https://science-cloud.hu/en

Imec IDLab iLab.t infrastructure

<u>Name of the infrastructure</u>: Imec IDLab iLab.t infrastructure (Virtual Wall, w-iLab.t, CityLab, GPULab). <u>Location (town, country) of the infrastructure</u>:



• Gent, Belgium: Virtual Wall, w-iLab.t, GPULab

• Antwerp, Belgium: CityLab

Web site address: http://ilabt.imec.be

NITOS-UTH

Name of the infrastructure: NITOS.

<u>Location (town, country) of the infrastructure</u>: Volos, Greece.

Web site address: http://nitlab.inf.uth.gr/NITlab/index.php/nitos.html

Open5GLab - EURECOM

Name of the infrastructure: Open5GLab.

Location (town, country) of the infrastructure: Sophia Antipolis.

Web site address: http://open5glab.eurecom.fr/

2.2. Transnational Access of SLICES-SC Research Infrastructures

Transnational access (TA) to the SLICES Research Infrastructures of the SLICES-SC Starting Community is open and free and it is provided to users and user groups of researchers and scientists affiliated with an academic/research institute or R&D department of an industrial company or SME that have an excellence motivation by using the SLICES-RI to experiment and produce results and scientific merit. This access will be facilitated by open calls to attract researcher groups to use the RI and conduct their experimentation. Apart from accessing the equipment, the facilities and the laboratories, users will also be offered with the required technical and scientific assistance to learn and use the infrastructure. After getting familiar with the equipment, comprehending the infrastructure logic and operation, and receiving the appropriate training, the users/researcher groups will gain full access to the related facilities for all the duration required to complete their experimentation and will receive support from the local researcher groups and distributed RI technicians. The unit of access is one working day per user project which is used to define the labour, effort and resources required to enable all the experimenters/researchers of the same user project to use the infrastructure and conduct the related experimentation activities. The duration time among different experimentations may vary depending on the requirements of the experiments and the technical expertise of the experimenters. A rough estimation for the experiment duration, however, can include two days for a training session, two days for the implementation, 2 two days for the execution and verification, 1 more day for the collection of results and lastly one day for the inference on outcomes and archiving.



3. Transnational Access call organisation

The objective of the transnational access is to offer to the users free-of-charge access to the research and testing facilities of the SLICES-SC network. As there are limitations (i) to the amount of access available for each facility, and (ii) to the capacity to support the users and their experiments, and as we want to ensure high quality and excellence in line with the SLICES-RI objectives, it is necessary to set a procedure over the whole duration of the project allowing optimum use, results and impacts.

SLICES-SC consortium concentrates on dealing with the general enquiries from potential applicants for using its research facilities. Activities related to Transnational Access will monitor the progress of incoming applications, ensure their feasibility and assess their supporting documents. Moreover, they will focus on monitoring that all the reviews are received on time, coordinating the transfer of applications between the different SLICES-SC research facilities under the "Common Pool" procedure, liaising with members of the User Committee, allocating applications to its members in such a way that each application is reviewed by the most relevant experts where possible while maintaining a reasonably equal workload for all reviewers, and informing all applicants and hosts of the outcome of the selection meeting, which will be organised between independent experts to discuss and finally approve or reject the proposals.

Applications are published using the centralized online system (https://slices-sc.eu/events/slices-sc-open-call/), a web environment accessible from the project web site. The future web database will give the facility staff a central environment to log facility access dates, resources used and other issues relating to the experiments, and can be used to extract data on all the experiments for the periodic reports for the European Commission. This future web-based management tool will offer a personalized view depending on the category of user: facility staff, applicants, experiments, hosts and reviewers will each see a different subset of information tailored to their requirements when they log in.

There will be two Open Calls for applications. The schedule of Open Calls and their closing dates will be set annually. The first Open Call is released on the 27th of April 2022 and the closing date will be the 10th of June 2022.

3.1. Application procedure

Proposal submission involves three steps, as outlined below. Proposals should be submitted online via the online proposal submission website, which will be hosted on SLICES-SC website on a specific miniwebsite (https://form.jotform.com/221164301010028). The Open Call web page includes the following information:

- Who can apply;
- How to apply;
- Deadline of the application;
- SLICES-SC open call in a nutshell;
- Documentation;
- Enter the submission system.

The steps for the submission of applications are listed below:



- **Step 1**: Prepare and submit your proposal, including all relevant information as described in proposal template (see Annex B). This step consists of different sections:
 - o **Cover page**: General information about the proposal, applicants;
 - Section A Project summary;
 - Section B Detailed description and expected results;
 - Section C Requested facilities;
 - Section D Background and qualifications;
 - Section E Expected feedback to SLICES-SC;
 - Section F Future plans;
 - Section G Financial issues (if members of a user team require travel grants for executing the experiment with physical presence in the specific location, this is the place to indicate their financial support requirements).
- **Step 2:** After the submission of the proposal, an acknowledgment of receipt will be sent to the applicant, as appears on the cover page.

The evaluation of the proposals will be based upon the information provided in the completed application form, which should be correct, sufficient and adequate for this purpose, taking into consideration the outlined evaluation criteria.

3.2. Application form

The proposal template is attached in ANNEX B.



4. Proposals general assessment procedure

In order to provide all users a fair chance of access to the facilities while guaranteeing a high level of quality and relevance of the selected projects, a specific selection procedure is set, involving the Research Infrastructure Managers as well as a panel of experts, both internal and external to SLICES-SC and a selection Committee (the User Committee).

The User Committee will consist of 9 eminent professors and senior researchers representing a broad range of scientific disciplines and a wide variety of geographical backgrounds from across Europe. The members of the User Committee are independent of any of the facilities. The User Committee will be responsible for the Evaluation of the applications for transnational access experiments.

The selection process is divided in 4 major steps:

ELIGIBILITY ASSESSMENT • STEP #1: At first, a pre-screening of the proposals is conducted by the Transnational Access coordinator (SZTAKI) to check the compliance of the proposals with the eligibility criteria as set down by the EC Transnational Access rules. Eligible proposals are then classified by focus group as defined in the SLICES-SC project.

TECHNICAL FEASIBILITY ASSESSMENT • STEP #2: The next stage is for Infrastructure Managers to assess the technical feasibility of the projects applying for access to their own facility. If a project is not technically feasible at the infrastructure, then it is either passed to a facility where it is feasible, or it is rejected. This ensures that the experts (stage 3) only receive applications that are eligible and technically feasible.

SCIENTIFIC EVALUATION

• STEP #3: At the third stage, a panel of experts (internal and external) evaluates the applications from the point of view of scientific content and relevance of the outcome. The expert gives ratings to the application on these two criteria.

SELECTION COMMITTEE • STEP #4: Finally, a selection committee – User Committee is organised to give a final decision, based on feedback provided by the Infrastructure Managers, assessments provided by the experts as well as on criteria related to allocated/remaining access time and general project management.

4.1. Eligibility assessment

The eligibility criteria and conditions are outlined in detail in ANNEX A. To be eligible to benefit for free access to any of SLICES infrastructures, a User Group (a team of one or more users who wish to use a facility, led by a User Group leader) must satisfy the following conditions:

The User Group leader and the majority of the users must work in a country other than the
country(ies) where the installation is located (this rule applies for the entire duration of the
access period). This applies for transnational access (not remote access).

This rule does not apply in case of remote access to a set of installations located in different countries offering the same type of service.



- Only user groups that are allowed to disseminate the results and the knowledge they have generated under the action may benefit from the access free of charge. User groups must agree to comply with the SLICES-SC data policy.
- Access for user groups with a majority of users not working in an EU or associated country is
 limited to 20% of the total amount of units of access (time-based) provided under the grant.
 SLICES-SC will monitor the usage of the facilities and their access during the project in order to
 make sure that the above limitation will be followed. This applies for the full duration of the
 project.

4.2. Technical assessment

Assessment of proposals by the Infrastructure Managers is part of the selection process of the SLICES-SC Transnational Access programme.

The main objective of this evaluation by the Infrastructure Managers is to check the technical feasibility of the projects requesting access to their facilities and to provide any relevant additional information to the external experts and members of the selection committee. The comments of the Infrastructure Managers on the received proposals should address the following points:

- Technical feasibility, adequacy with the facility characteristics:
 - Technical feasibility should only address the adequacy of the infrastructure in regard of the project and the capacity of carrying out the requested testing plan and producing the expected results and outcomes as described in the proposal;
 - Evaluation should then take into account criteria such as: handling capacity, availability, etc. (Criteria should be the same as those used for assessment of any commercial research project.) but of course all Infrastructure Managers should to their best to accommodate the requests.
- Level of preparedness of the project:
 - Based on documents provided by the applicants, an assessment of the level of preparedness of the project will be provided.
- Schedule and planning.
 - Based on documents provided by the applicants, an assessment of the actual time frame
 of the proposal and testing programme will be carried out.

4.3. Proposals' scientific assessment

Proposals that pass the Feasibility Check are distributed to members of the User Committee. Their evaluation is based on the following criteria:

- Global content of the proposal and Quality and technical feasibility of proposed test plan;
- Scientific excellence and novelty of the proposed test plan (re. state-of-the-art and previous experiments if applicable, etc.);
- Overall feasibility/probability of delivery;
- Why is access to the selected Access Provider / facility needed?;
- Level of competence of the user group;
- New Users, Users from non-ICT disciplines and from countries where a required research infrastructure is unavailable;



- Priority to external Users (i.e., outside the SLICES-SC consortium);
- If applicable, compliance with specific themes set out in the TA Call;
- Immediate impact of the possible outcome (how tangible & how significant);
- Med/long-term impact of possible outcome (significance);
- Extent of use/benefit of project outputs (restricted/not to User Group); extent of willingness to share.

Following the selection procedure, a list of the selected experimenters will be published at the following link: http://www.slices-sc.eu/

Definitions of the Open Calls also include clear criteria for evaluation and ranking of the proposals in accordance with the specific objectives of the calls. To ensure that the criteria are properly followed up by the independent experts / evaluators, corresponding evaluation forms are defined.

After the Transnational Access Open Call deadline, the proposals are evaluated remotely by the User Committee, in accordance with the following criteria:

- Research and scientific innovation & motivation (Threshold 3/5; Weight 2);
- Research and scientific relevance (Threshold 3/5; Weight 2);
- Clarity and methodology (Threshold 3/5; Weight 1);
- Socio-economic impact and sustainability of the results (Threshold 3/5; Weight 1);
- Scale and complexity of experiment (Threshold 3/5; Weight 1);
- Relevance for SLICES-SC (Threshold 3/5; Weight 2);
- Possible future follow-up experiments (Threshold 3/5; Weight 1);
- Technological expertise and quality (Threshold 3/5; Weight 1).

Each criterion is scored on a scale from 0 to 5, as follows:

- 0 The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information;
- 1 Poor. The criterion is addressed in an inadequate manner, or there are serious inherent weaknesses:
- 2 Fair. While the proposal broadly addresses the criterion, there are significant weaknesses;
- 3 Good. The proposal addresses the criterion well, although improvements would be necessary;
- 4 Very good. The proposal addresses the criterion very well, although certain improvements are still possible;
- 5 Excellent. The proposal successfully addresses all relevant aspects of the criterion in question.

When scores of different experiment proposals are equal, any further prioritization will be based on other appropriate characteristics and/or specific call requirements. If the scores for proposals set by experts during the remote evaluations are significantly distinguishing among individual evaluations (per criteria and/or in total), consensus meetings (video calls) are organized for the affected proposals among the involved experts, to build up a common opinion and adapt the scores accordingly. If, in some cases, the consensus is not possible to achieve, additional independent experts are involved to make final decisions.



At the end of the evaluation process, the proposals are ranked in accordance with total scores received and specific call objectives (if any), so that selection of successful proposals is done according to this list. Immediately after end of the evaluations, information about the Open Call outcome, including corresponding evaluation forms with scores and comments from the experts, is sent to the proposers.

4.4. Access Management

Access periods normally start within a few days of the announcement of the decision made by the User Committee and last for a period up to 6-months, unless otherwise agreed with the SLICES-SC management. User Committee's decisions are made available to the Applicants via their application workspace on the SLICES-SC website and to the Infrastructure Managers via e-mail.

Access procedure

The access procedure starts with an agreement between the selected proposers and the Access Provider on the most suitable way to proceed so as to complete the granted period of access.

4.5. Post-assess management – reporting

Following completion of an experiment the applicant must submit a digital **Report** to the SLICES-SC User Committee, within two months after completion of the experiment. It must explicitly refer to and comment on the fulfilment of the points of the work plan outlined in the proposal. A **report template** will be provided prior to experiment commencement. The User Committee may request further information/clarifications (or re-submission of the report) within a reasonable time-frame.



ANNEX A – Summary of Rules

The following section is a summary of the rules, conditions and eligibility governing Transnational Access to the Research Infrastructures participating in SLICES-SC, funded under the EC H2020 programme. These rules have been formulated by the SLICES-SC consortium based on the relevant provisions of the EC grant agreement. In case of any conflict, the provisions of the Grant Agreement take precedence.

Eligibility

To be eligible to benefit for free access to any of SLICES infrastructures, a User Group (a team of one or more who wish to use a facility, led by a User Group leader) must satisfy the following conditions:

- The User Group leader and the majority of the users must work in a country other than the
 country(ies) where the installation is located (this rule applies for the entire duration of the
 access period).
 - This rule does not apply in case of remote access to a set of installations located in different countries offering the same type of service.
- Only user groups that are allowed to disseminate the results and the knowledge they have generated under the action may benefit from the access free of charge. User groups must agree to comply with the SLICES-SC data policy.
- Access for user groups with a majority of users not working in a EU or associated country is limited to 20% of the total amount of units of access (time-based) provided under the grant.

Obligations

- The access provider (the SLICES-SC partner that is in charge of providing access to the chosen infrastructure) shall provide access free of charge to the selected user groups to the infrastructure managed by it, including all the logistical, technological and scientific support as well as specific training, that is normally provided to external researchers using the infrastructure.
- The test setup will remain the property of the party that provided it, unless otherwise agreed upon.
- Access will be offered to a particular facility through the call process as it will be published as part
 of each Call for Proposals. Two calls for proposals are foreseen.
- If physical access to the facility is requested, users shall abide by the normal working practices, working hours, and health and safety regulations of the Infrastructure while present on the site.
- Users shall abide by the post-access requirements.
- Before accessing the Infrastructure, the User may (at the discretion of the access provider) be requested to sign a contract with the access provider outlining access terms to the Infrastructure, agreement to be bound by the provisions of the Grant Agreement, liabilities of the access provider and the User towards each other, rights with regards to Foreground and Background and consequences of a breach of these obligations by the User.



• If necessary, the User may be required to attend a meeting(s) with the access provider prior to the access period to discuss planning and to help make the access project a success.

Priorities

• The User Committee shall base its selection on scientific merit as will be published in the specific call for experiments.

Publicity

- Dissemination activities shall be compatible with the protection of intellectual property rights, confidentiality obligations and the legitimate interests of the owner(s) of the foreground.
- The access provider shall ensure that the users have the same rights and obligations in regard to publicity as referred to for the access provider.
- Users should suitably publicise (in their publications and reports etc.) the support given by the EC for the access provided to them, referring to SLICES-SC and including the following statement (in appropriate language): "The research leading to these results has received funding from the European Union Horizon 2020 Framework Programme (H2020) under grant agreement no 101008468".
- The EC shall be authorised to publish, in whatever form and on or by whatever medium, including the Internet, the list of the users.



ANNEX B – Proposal template

COVER PAGE

Full title of your project Acronym of your proposal (optional)

Date of preparation of your proposal: xx/yy/2022

Your organisation name: Your organisation name

Your organisation address: Your organisation address

Name of the coordinating person: Name of the coordinating person

Coordinator telephone number: Coordinator telephone number

Coordinator email: Coordinator email

Section A - Project Summary

Maximum 300 words – summary of your proposed work.

Section B – Detailed Description and Expected results

This section should not exceed the length of 3 pages

This section describes the details on the planned experiment (what do you hope to obtain, how, why is it relevant). This section should also include all information with respect to the State-of-the-Art to show the innovative character of the experiment and the expected business impact. Suggested sections include:

- 1. Concept and objectives;
- 2. Business impact;
- 3. State of the Art;
- 4. Methodology and associated work plan.

Section C – Requested facilities

Please provide information on what SLICES-SC facilities presented in Section 2.1 we will use for your experiment.

This section should not exceed the length of 1 page

SECTION D - Background and qualifications

This section should not exceed the length of 1 page

This section describes the proposing organisation and includes an overview of the activities, your qualifications, technical expertise and other information to allow the reviewers to judge your ability to carry out the experiment.



SECTION E – Expected feedback to SLICES-SC

This section should not exceed the length of 1 page

SECTION F – Future plans

This section should not exceed the length of 0,5 pages

SECTION G – Financial issues

This section should not exceed the length of 0,5 pages

Describe if your proposal require travel grants for executing the experiment with physical presence in the specific location. Include the costs (travel and subsistence might be needed for travelling to the facility (if needed)



