



## LASERLAB-EUROPE

### The Integrated Initiative of European Laser Research Infrastructures V

**Grant Agreement number: 871124**

Work package 5 – NA4 – Access Management and Monitoring Infrastructure-Users Connections

Deliverable D5.2

Final report on User relations and User meetings

Lead Beneficiary: 1 – CNRS-LULI

Due date: Month 60

Date of delivery: Month 60

Project webpage: [www.laserlab-europe.eu](http://www.laserlab-europe.eu)

<i>Deliverable Type</i>		
R	Document, report	R
DEM	Demonstrator, pilot, prototype	
DEC	Websites, patent fillings, videos, etc.	
OTHER		
ETHICS	Ethics requirement	
ORDP	Open Research Data Pilot	
DATA	data sets, microdata, etc.	
<i>Dissemination Level</i>		
PU	Public, fully open, e.g. web	PU
CO	Confidential, restricted under conditions set out in Model Grant Agreement	



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## 1 Objectives

This WP aims at (i) coordinating the Laserlab-Europe joint transnational access programme, including managing its proposal submission and selection procedures, (ii) monitoring and improving, at the consortium level, the quality of services provided to users by the access-providing infrastructures, with substantial involvement of User Representatives, and (iii) taking advantage of user feedback to refine the consortium long-term strategy. All access-providing facilities and all User Representatives are involved in this activity under the leadership of the Access Board.

Lead beneficiary: CNRS

## Preamble

The Experimental Effectiveness Assessment Forms (EEAFs) were received before November 26, 2024. Access data, provided by the access providing infrastructures (APIs), are not audited. Numbers presented in this report should thus not be final.

## 2 Modalities of Access Management and Selection Procedures

The transnational access activity is organised as a joint activity among all participating infrastructures, under supervision of the Access Board. The technical web-based tools used for the access proposal submission and selection procedures are implemented in WP2 “Publicity, Dissemination and Community Support”. Outreach to new users is addressed in WP2 and in WP4 “Training and Development of User Communities”.

### *Description of publicity on access opportunities*

The Laserlab-Europe publicity policy is currently based on mailing campaigns and on information posted on websites (<https://www.laserlab-europe.eu>, <https://www.wayforlight.eu/> and the individual webpages of the access providing infrastructures). Advertising is also distributed through the social media channels, in the Laserlab-Europe Newsletters and during the monthly Laserlab-Europe Talks. Special care is devoted to diversifying the targeted scientific communities in order to promote trans-disciplinary access projects.

The access opportunities offered by the APIs are described on the webpage <https://www.laserlab-europe.eu/transnational-access>. A permanent “Call for Proposals” is posted there; it clearly states that Laserlab-Europe is welcoming young researchers, and is promoting gender equality, thus encouraging proposals led by female principal investigators (PIs). In particular new users are targeted; to help them defining the most appropriate facility for their research, the single portal is providing, for each of the topics tackled at the various Laserlab-Europe APIs, links to dedicated pages where the technical capacities of the facilities are described. Remote access, first established in the context of the COVID-19 pandemic, has become a permanent offer under well-defined rules, clearly explained on the webpage mentioned above. Scientists can subscribe to RSS feeds to stay informed about access opportunities and success stories.

To find a suitable laboratory for their access projects, from fundamental science to validating a practical application, interested users can browse a catalogue of technologies and services offered by the access providing infrastructures. Topics are grouped by overall subject area, then by increasingly specific fields, in order to be as intuitive as possible for a user unfamiliar with Laserlab-Europe (see <https://www.laserlab-europe.eu/transnational-access/find-a-facility>).



### **Description of submission and selection procedures**

Transnational access is granted consortium-wide through a unified and original policy, which has been successfully implemented and refined during several projects. The Access Policy is part of the Consortium Agreement and, as such, binding.

A web-based application procedure (the Proposal Management System, PMS) provides a single, unified entrance gate to all Laserlab-Europe APIs. The applicant can target an infrastructure on the basis of the technical specifications of the provided equipment and of the scientific expertise available on-site.

The proposal evaluation is being performed by a common, fully external Access Selection Panel (ASP), having access to a pool of more than 200 external and international referees. It is composed of three international experts, including one User Representative, proposed and elected by the General Assembly. The panel acts on behalf of the consortium, but is independent in its scientific judgements. The ASP Chairman for Laserlab-Europe V is Prof. Ludger Wöste, from the Free University Berlin (Germany).

Selection is done on the basis of scientific excellence, followed by priority for new users. An evaluation report, summarising the referees' comments and duly explaining rejection/acceptance reasons, is sent to all applicants. Evaluation and selection are, as submission, fully web-based and managed through the Laserlab-Europe PMS.

Proposals can be submitted at any time ("continuous" call) to the majority of the APIs, except the large-scale ones (CLF, CLPU, FELIX, FERMI, GSI, HZDR, HiLASE and LULI) where scheduling procedures with fixed deadlines have to be implemented.

Once accepted, a project must be scheduled and completed within 20 months. If, for any reason, the API cannot schedule a project within this validity period, the Access Board will be informed and actions will be taken either to re-direct it or to re-submit the proposal.

The total evaluation process – from submission to final decision – takes, on average, less than 39.15 days for proposals submitted through the Laserlab-Europe "continuous" call, which is considered as satisfactory by the users, with a score of 4.52 out of 5 (according to the EEAFs – see item 5 hereafter).

### **Eligibility**

Transnational Access is exclusively reserved for external users. Scientists from one access-providing partner wanting to use the facilities of another access-providing partner are not eligible for financing out of the Transnational Access Activity. However, to foster collaborations between APIs, and thus to reinforce the collective expertise within Laserlab-Europe, such visits are encouraged under the scheme of "Joint Experimental Programmes" through the Networking Activity WP3.

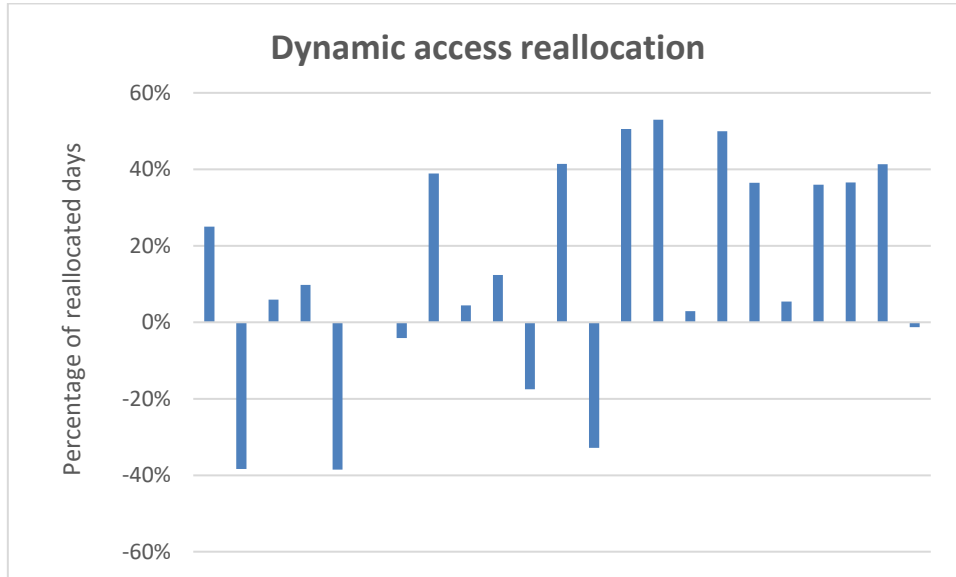
According to the grant agreement and to the Laserlab-Europe Access Policy, up to 20% of the access units can be granted to user groups for which the PI or the majority of the members are not affiliated to an institution located in a European Member or Associated state ("Third Country Access" or "Non-EU Access"). The actual percentage in terms of projects is 13.0% and 11.7% in terms of individual users. Details are given below (item 6).

### **Dynamic Access Allocation**

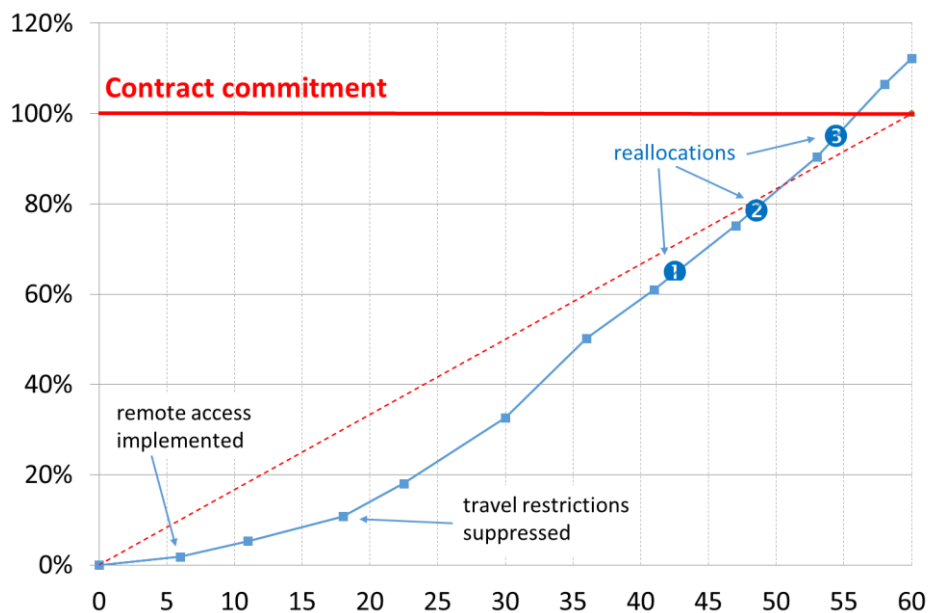
The "Dynamic Access Allocation Policy" provides efficient flexibility to the individual infrastructures when forced to react on unpredictable fluctuations in the users' demand or on temporary downtimes of equipment by transferring access units between APIs. A limited reallocation (from ~5 to ~20% of the total access days) has proven to be very effective during past contracts to adjust optimally the access programme to the users' demand and to ensure that consortium-wide contract objectives in terms of access days, projects and user groups are met.



The “Dynamic Access Allocation Policy”, managed by the Access Board and approved by the Management Board, has been implemented on three occasions during the contract, in May and November 2023, and in May 2024. It allowed the Consortium to cope with delays due to the COVID-19 pandemic and, at the end, exceed the contract objectives in terms of access days (+13.3%). The following graph illustrates how the reallocation effort is shared among the APIs.



These reallocations are based on a close monitoring of the access programme done every 6 months by the Access Board, as illustrated below by the time evolution (in months) of the percentage of commitment provided.



### 3 Support Offered to users at each Facility

All access facilities routinely provide the necessary services to their users, including on-site training, offices and computational tools. Administrative staff takes care of logistic arrangements: travel & subsistence, transfer of material, reimbursements, clearance, etc. Dedicated technical staff is in charge of daily provision of laser and experimental area operation. The users also have scientific assistance from local scientists, thus receiving not



only access to a given facility but also benefiting from the expertise of the host group. The quality of these services is monitored through the EEAF (see section 5). Apart factual grades, the form allows the Principal Investigators (PIs) commenting on their access experience and suggesting improvements. Sustainability of access to the Laserlab-Europe facilities and instruments was one of the concerns expressed.

#### 4 Interaction with User Representatives

The Laserlab-Europe User Representatives Committee consists of scientists who are experienced users of Laserlab-Europe access-providing facilities and, hence, are familiar with both the scientific needs of users and the opportunities provided by the host infrastructures. In their capacity they act as an interface between the user community and Laserlab-Europe, providing advice to both sides and helping to maintain and improve mutual relations. Eight User Representatives have been nominated and elected by the General Assembly at the start of the project and have permanent seats in the boards of Laserlab-Europe, in particular the Access Board, the Networking Board, the Management Board and the General Assembly. They co-organise the User Meetings (from establishing the scientific programme to chairing Round Tables) according to guidelines they have developed during the previous contracts. For the first User Meeting, they have designed a concept for an online format together with the Access Board to make a User Meeting possible, taking into account COVID-19-related restrictions (see below). Users can find contact details for individual User Representatives or the Committee as a whole on the webpage <https://www.laserlab-europe.eu/about-us/user-representatives.html>, so that they can address their questions, comments and suggestions directly to them.

#### 5 User Meetings

User Meetings are organised at the consortium level in order to bring together a significant number of users and potential users, facilitating and fostering their exchanges across different disciplines and with infrastructure operators. The meetings provide a unique opportunity (i) for users to present their scientific results and to give feedback on the Laserlab-Europe access programme, and (ii) for the access providers to present recent upgrades, new experimental set-ups or diagnostics. User Meetings are organised jointly by the Access Board and the User Representatives and are collocated, whenever possible, with other Laserlab-Europe events to ensure broad outreach.

Two user meetings have been held between December 2019 and November 2024:

- User Meeting 2021 (virtual), 22-23 November 2021 (see deliverable 5.1 for details),
- User Meeting 2024 (in-person), 27-29 May 2024, collocated with the Laserlab-Europe Conference (see deliverable D2.6 for details).

#### 6 User Feedback and Response to User Needs

PIs are requested, once their experimental campaigns are completed, to fill in an Experimental Effectiveness Assessment Form (EEAF) and to submit a brief summary of their achievements (Activity Reports).

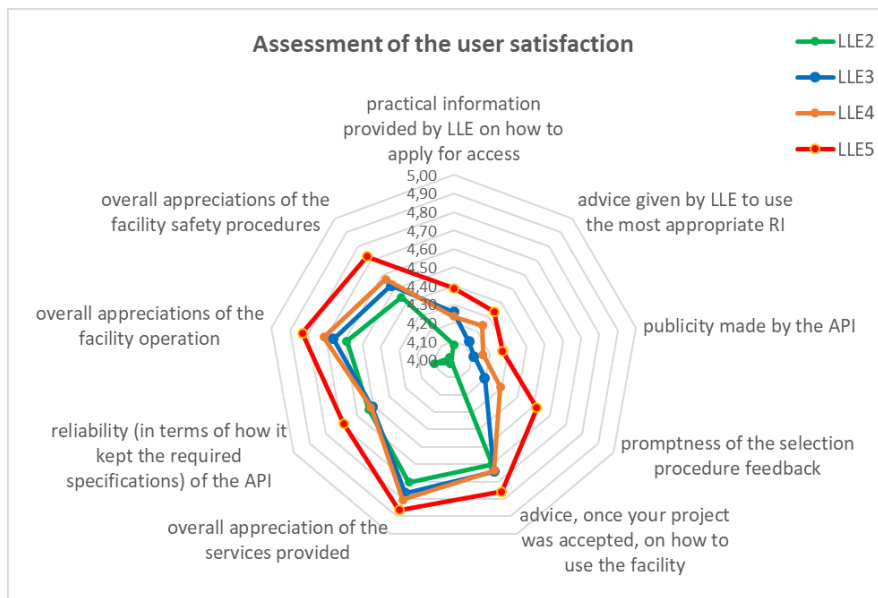
The form assesses i) access publicity, ii) the consortium's submission/selection procedure and iii) the overall quality of the support provided by the host facility through grades from 1 (very poor) to 5 (very good). Answers are analysed periodically to help defining actions to be taken by the infrastructures and the consortium to improve the access offer.

148 EEAFs of Laserlab-Europe V access projects have been received on November 26, 2024, which represents a response rate of 42.65% (347 projects being completed during the



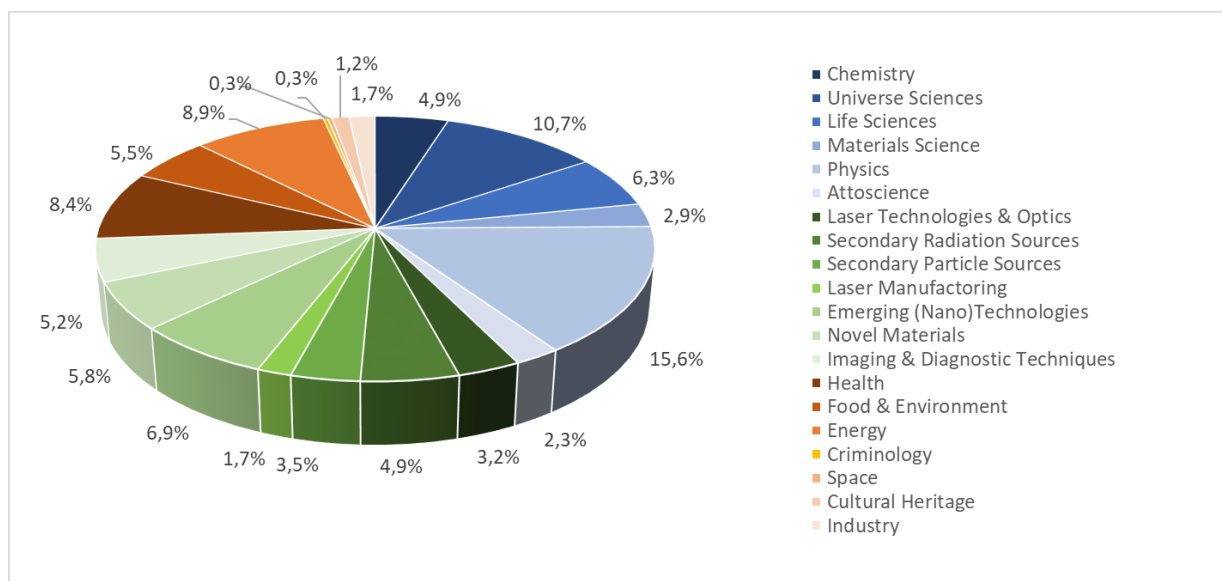
contract’s duration). This value – below the targeted value of 50% - is a bit disappointing but may be explained by the workflow of the current PMS, which is waiting for the API feedback before contacting the Principal Investigator; more questionnaires shall arrive in the next weeks. The analysis of the EEFs is summarised on the Kiviat diagram below (plotted from values 4 to 5). The present Laserlab-Europe project (12/2019-11/2024) is displayed in red (LLE5) whereas the green, blue and orange curves refer to past Laserlab-Europe projects, for the periods 03/2009-05/2012 (LLE2), 06/2012-11/2015 (LLE3) and 12/2015-11/2019 (LLE4).

All marks for LLE5 range remarkably high from 4.27 to 4.86. In addition, all services showed improvements compared to previous projects, with the most significant increase for the promptness of the selection procedure, which can be attributed to the dedication of the ASP and to the efficiency/friendliness of the PMS during the evaluation process. The user satisfaction is thus at its highest.



**Scientific fields**

The scientific fields tackled by our users through the Laserlab-Europe’s access programme are rich and diverse as can be seen on the pie chart below.



The breakdown of the 347 projects shows a good balance: projects aiming at deepening knowledge are slightly predominant (42.7% - in blue on the graph above) and we can notice a significant number of projects aiming at developing novel technologies and materials (31.1% - in green) and at exploring societal applications (26.2% - in orange). The largest societal applications encompass “Energy” projects related to laser-induced fusion, photovoltaics and green fuels (mainly hydrogen) and “Health” projects aiming at understanding the origins (at the molecular level) of organs or tumours and at developing new tools for medical imaging and therapies or new drugs.

These statistics illustrate that Laserlab-Europe remains a true analytical research infrastructure devoted to fundamental science and its laser-based applications.

## 7 Users' profile

77 proposals have been rejected during the contract's duration, which leads to a rejection rate of 18.2%. In terms of access units, the rejection rate increases to 31.7% as, for a significant number of projects, the number of allocated units has been reduced in order to maximise – for a given access budget – the number of granted projects, and thus of users.

More than 20 proposals are pending and will be performed in the framework of the follow-up project Lasers4EU. This backlog is rather stable as, among the completed projects, 14 have been submitted before the start of the contract (01/12/2019).

During the whole project's duration, 977 users have benefited from the Laserlab-Europe V transnational access activity, either in person or remotely. Once multiple tracks have been deducted (users participating to more than one project), 741 individuals are recorded.

### ***New users and user profiles***

Among these 741 individuals, 79.8% (591) are new users, i.e. persons who have not benefited of Laserlab-Europe's access activity during previous projects. The user community of Laserlab-Europe thus shows a high turnover thanks to the consortium's capacity to attract new users.

This high turnover is also linked to the high percentage of young researchers (less than 37 at completion of the access project): 54.7%. Among these 405 young researchers, 248 (61.2%) are undergraduate or PhD students, which illustrates the role of Laserlab-Europe's access activity for the training of the future European research community.

### ***Geographical distribution***

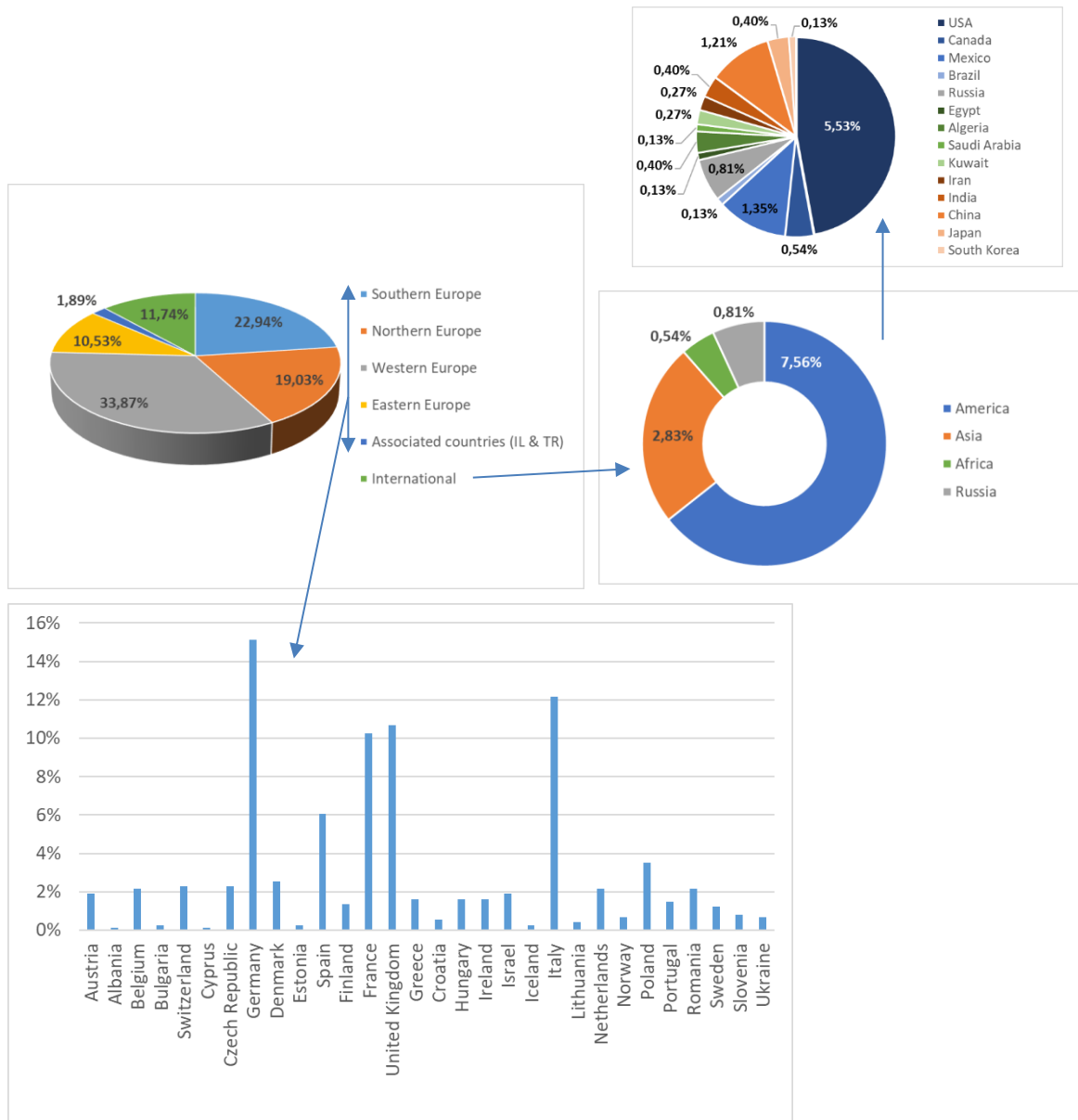
The figures on the next page display the geographical distribution of our users' home institutions, per region, and then per country.

Our users are from institutions located in 44 different countries. A large part of these institutions is located in Western Europe (33.9%) and Southern Europe (22.9%). Strong user communities are found in Italy, Germany, UK, and France (48.2% of the overall user community).

The non-European individual users were from institutions mainly located in North America. The suspension by the European Commission of the cooperation with Russian entities in research, science and innovation has led to a significant reduction of the foreseen percentage of users from Russia.

New sites have been identified, mainly in Europe – notably in Ukraine (Kyiv) –, USA and Africa, resulting from an efficient “International Relations” networking activity.





**Gender equality**

Gender equality is a key issue for Laserlab-Europe. The call for proposals emphasises Laserlab-Europe’s aim to strive for gender equality and explicitly encourages women to apply for access. Indicators, such as the percentage of female new users or female principal investigators, are regularly monitored.

Since the start of the present project, female users represent 24.7% of the individual users, which is quite satisfactory considering the percentage of women in hard sciences at the Master level. This percentage is increasing up to 29.8% in the undergraduate and PhD student population but is down to 20.9% when only principal investigators are considered, clearly exhibiting a glass ceiling.

