



## LASERLAB-EUROPE

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

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Work package 3 – Publicity and Dissemination

Deliverable D3.8

Final report on dissemination and publicity activities

Lead Beneficiary: 7 – FVB

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<i>Deliverable Type</i>	
R = Report DEM = Demonstrator, pilot, prototype, plan designs DEC = Websites, patents filing, press & media actions, videos, etc. OTHER = Software, technical diagram, etc.	R
<i>Dissemination Level</i>	
PU = Public, fully open, e.g. web CO = Confidential, restricted under conditions set out in Model Grant Agreement CI = Classified, information as referred to in Commission Decision 2001/844/EC	PU

## 1 Work package objectives

This networking activity deals with all aspects of external communication of the Laserlab-Europe consortium. The overall objectives are (i) to promote the recognition of Laserlab-Europe and its achievements and to increase the general awareness of the opportunities offered by the Consortium, and to communicate these to a very broad audience, from the general public, to fellow scientists, potential users of laser-based tools in very diverse scientific fields, and to regional, national and European public organisations; and (ii) to enhance the dissemination of project results and to promote their exploitation wherever possible.

## 2 Work performed

### Task 1: Communication and Publicity

**Web presence.** From the project start, the Laserlab-Europe website (based on the Content Management System implemented in WP2) has been revised and regularly updated with information on new access opportunities, new research activities and other relevant information about the project. A section “Services for Industry” was implemented in collaboration with WP10 “Innovation Management and Industrial Relations”, providing guidance and support for industrial users. Thematic sections on specific fields of research, e.g. environment, materials science and energy, have been added in order to reach out to the general public and to new scientific communities. As a service to the broader community, a calendar of international events related to optics and photonics as well as job advertisements are updated regularly.

Use of the Laserlab-Europe webpages is monitored and analysed regularly, showing that services such as RSS feeds for news or job advertisements and the conference calendar seem to be very popular. Page visits in general amount to around 10000 per month.

**Social media presence.** Laserlab-Europe maintains a web presence on facebook with about 520 subscribers, where information for the public is provided, news about training schools and other events are spread and users and other interested persons have the opportunity to share information. ([www.facebook.com/laserlabeurope](http://www.facebook.com/laserlabeurope)).



**Laserlab-Europe Newsletter.** Laserlab Forum. The highly appreciated newsletter was established in order to improve the intra-network communication and enhance the “corporate identity” among the Europe-wide scientific staff of the participating infrastructures as well as to inform the community at large about the opportunities offered by the network, to present scientific highlights, and to convey the general strategic aims of the Laserlab-Europe Consortium. In addition, the newsletter provides a platform for users to present their experience with the access programme and opportunities for user involvement.

Publication of the newsletter is separated between the scientific editorial work and the graphical design as well as the production and distribution, both in print and electronically, under the responsibility of FVB-MBI. A subcontract is concluded with an external scientific editor (Tom Jeldes). During the lifetime of the project, eight issues of the newsletter appeared. In addition to the recurrent categories of each issue (access and other scientific highlights, Laserlab-Europe workshops and user meetings, recent ERC grantees in Laserlab-Europe partner institutions and news from the labs and from related projects, e.g. ELI, EUCALL), each issue presents a special focus:

- Issue 21: June 2016 (M07), Focus: New Research Opportunities in Laserlab (see deliverable D3.1)
- Issue 22: December 2016 (M13), Focus: Safety and Security (see deliverable D3.2)

- Issue 23: July 2017 (M20), Focus: Laser Careers, presenting examples of career paths of young scientists in Laserlab institutions (see deliverable D3.3)
- Issue 24: December 2017 (M25), Focus: Lasers for Materials Science (see deliverable D3.4)
- Issue 25: July 2018 (M32), Focus: Lasers for Cultural Heritage (see deliverable D3.5)
- Issue 26: January 2019 (M38), Focus: Lasers for Fusion Energy (see deliverable D3.6)
- Issue 27: July 2019 (M44), Focus: Lasers and Water
- Issue 28: November 2019 (M48), Focus: Lasers and Metrology



All issues of the newsletter “Laserlab Forum” may be found at: <http://www.laserlab-europe.eu/news-and-press>

PDF versions of each issue are posted on the Laserlab website, and hard copies as well as the electronic version are distributed to the consortium partners, to a large audience of users and scientists, to potential users and to the interested public. Subscription to the newsletter is steadily increasing, with currently about 2000 hardcopies being sent and more than 3300 registered recipients of the electronic version.

**Laserlab-Europe promotional material.** Promotional material such as a project leaflet and (roll-up) posters presenting Laserlab-Europe, its aims and offers to the scientific community were edited, printed and distributed. In addition, the material is provided for download in printable versions on the project webpage which facilitates easy and cost-efficient reproduction at each partner facility. Powerpoint slide series are available for download on the public and on the internal webpage. The material is presented at all events where Laserlab partners are involved, and is used in particular by the National Contact Points (see WP8) for national advertisement campaigns. Press and media releases are prepared on special occasions.

Public information material may be found at:  
<http://www.laserlab-europe.eu/news-and-press/publicity>

**Advertisement of access opportunities.** Selection of the most effective and relevant communication tools is made jointly with the User Representatives and the Access Board, based on the assessment of the effectiveness of the advertisement channels (from the analysis of the User Questionnaires – see below). The Laserlab-Europe publicity policy is currently based on mailing campaigns, on the Laserlab-Europe website and newsletter and on the individual webpages of the Access Providing Infrastructures (APIs). Special care is devoted to diversifying the targeted scientific communities in order to promote trans-disciplinary access projects.

The access opportunities offered by the Laserlab-Europe APIs are described on a unique Internet page <https://www.laserlab-europe.eu/transnational-access>. A permanent “Call for Proposals” is posted there, which clearly states that Laserlab-Europe is welcoming young researchers, and is promoting gender equality, thus encouraging proposals led by female Principal Investigators (PIs). New users are also targeted. To help them identifying the most appropriate facility for their research, the single portal is providing, for each of the topics tackled by the various Laserlab APIs, links to dedicated pages where the technical capacities of the facilities are described. Scientists can subscribe to RSS feeds to stay informed about access opportunities.

In each of its issues, the Laserlab Newsletter gives examples of access highlights performed at the Laserlab facilities and informs about the procedure to apply for access. The National Contact Points (WP8) provide information about Laserlab-Europe and the access opportunities to their national communities. In addition, several access providers run regular mailing campaigns in order to promote the access opportunities, e.g. LULI, CLF, GSI, FELIX and FERMI.

The training events organised or co-organised by Laserlab-Europe in WP5 are targeting young scientists and are an excellent too to inform potential and future users about the access opportunities of Laserlab-Europe.

Finally, potential users are informed about the access opportunities at conferences through presentations of Laserlab-Europe partners and users and through exhibition stands where leaflets, posters and other information material are displayed to present the access opportunities of Laserlab-Europe. Examples are the International Symposium on Ultrafast Intense Laser Science – ISUILS 2016, Cassis, France; the International Conference “Functional materials and Nanotechnologies-2017”, Tartu, Estonia; the 2018 Workshop on Quantum and Nonlinear Optics with Rydberg-State Atoms, National Tsing Hua University, China; the American Physical Society March Meeting 2018, Los Angeles, USA; and the SPIE Optics and Photonics Symposium, San Diego, USA.

In addition, the access offer of the majority of Laserlab-Europe’s access facilities has been included in the [www.wayforlight.eu](http://www.wayforlight.eu) database, a detailed catalogue of all facilities, beamlines and instrumentation available at European advanced light sources. In collaboration with the Horizon 2020 EUCALL project ([www.eucall.eu](http://www.eucall.eu)), a number of optical laser light sources were integrated into the database, which up to then comprised only synchrotron and FEL facilities.

**Representation in scientific events of relevant scientific communities and at events promoting science.** Laserlab-Europe is presented with posters or presentations at major international scientific and technological events and summer schools where representatives of Laserlab infrastructures participate or which are sponsored by Laserlab-Europe. At these occasions, Laserlab participants provide information on the project and on access opportunities. For example, Laserlab-Europe set up exhibition booths at the SPIE Optics + Optoelectronics 2017 and 2019 in Prague, Czech Republic. The project was also presented at international conferences and training schools, e.g.

- Science@FELs 2016, Trieste, Italy;
- PHOTONICA 2017, Belgrade, Serbia;
- International Conference on Inertial Fusion Sciences and Applications – IFSA2017, St Malo, France;
- Science@FELs 2018, Stockholm, Sweden;
- Conference of the International Committee on Ultrahigh Intensity Lasers – ICUIL 2018, Lindau, Germany;
- Laser Plasma Acceleration Workshop – LPAW 2019, Split, Croatia;
- Target for high repetition rate laser-driven sources – TARG4 2019, Milan, Italy;
- International Conference on Attosecond Science and Technology – ATTO 2019, Szeged, Hungary;
- International School and Symposium on Synchrotron Radiation in Natural Science - ISSRNS 2019, Zakopane, Poland.



Several presentations were organised by the members of the National Contact Points in WP8.

In addition, Laserlab-Europe supports its members in promoting the benefits of laser science and applications to the public, especially to the young generation, mostly through cooperation with outreach initiatives such as the ECOP Alliance (European Centres for Outreach in Photonics). Based on this collaboration, for example the Slovak Laserlab-Europe partner ILC has contributed to developing exhibits related to optics, photonics, imaging and lighting for the new hands-on science centre Aurelium in Bratislava that aims at promoting science, technology, engineering and mathematics to young people and students. Many partners participate in the European Researchers' Night or similar events, e.g. the "Long Night of Science", to promote not only their institution, but also Laserlab-Europe.

## **Task 2: Dissemination and Exploitation**

**Publications databases.** The scientific output of the JRA and the access user projects is publicised and documented on the project's webpage, not only for the present Laserlab-Europe project but also for previous projects as the delay between performing experiments and the final publication of the results usually is in the range of several months or even years. For example, since the end of Laserlab-Europe 284464, the number of publications from transnational access projects has increased from 166 to more than 260 as of today.

At the time of preparing this report, about 350 publications from JRA and 142 publications from transnational access projects (papers in peer-reviewed journals, book chapters, articles in proceedings of conferences, etc.; for an analysis of TNA publications see WP6) have been reported and documented in the databases on the Laserlab webpage. References of all publications may be found at <http://www.laserlab-europe.eu/publications>.

**Laserlab-Europe Conference.** A conference was organised at the end of the project in order to highlight scientific achievements and societal impacts of the network's activities to members and external partners from the laser community, the industrial and health care sectors and from the user community. The conference attracted about 90 participants, including Laserlab-Europe members, users, external collaboration partners and representatives of companies, who appreciated the opportunity to learn and exchange about achievements in different areas and opportunities for future involvement in the activities of Laserlab-Europe (see deliverable D3.7).

**Knowledge management.** From the start of the project, the project management bodies promoted the consortium-wide strategy to ensure open access to peer-reviewed publications resulting from JRA in order to boost the potential exploitation of results. Users are encouraged to grant open access to their results. A Laserlab-Europe repository is maintained on the zenodo platform, and the use of institutional and topical repositories for publications is promoted. Information about the open access policy and implementation is spread regularly, and an increasing number of publications are available with open access.

Data management issues, such as curation, preservation and access to research data, have been addressed in two workshops of the Thematic Network on Experiments and Operation (NEO) in WP4 (for details see the periodic reports as well as deliverables D4.9 and D4.10).

**Exploitation and innovation management.** In collaboration with WP10 "Innovation Management and Industrial Relations", support for industrial users and cooperation partners is provided. An Industrial Advisory Committee (IAC) was set up to assist Laserlab-Europe in issues related to transfer of know-how. The IAC co-organised a workshop on "Metrology of high power ultra-short pulse lasers: user and supplier perspectives" in 2017 as well as sessions of industrial interest collocated with Laserlab-Europe events, e.g. "Best practice for turning scientific results into innovative products and companies", collocated with the Joint JRA Meeting 2017, an industry session included in the foresight workshop 2018, which provided an overview of laser-driven X-ray sources and considered the needs and requirements of both academic and industrial research, as well as a panel discussion on

industrial relations, collocated with the Laserlab-Europe Conference in 2019. These events are intended not only to strengthen collaboration with industrial partners, but also to encourage entrepreneur initiatives of scientists who can found start-up companies exploiting their scientific results.

The partners are encouraged to secure IP protection and explore exploitation options. Within the JRA, several developments have led to patent applications, e.g. a Compact Ultrashort Pulse Characterization and Compression method (participant LU-LLC), Methods and devices for determining a guest structure on a host structure (participant VUA-LLAMS), a pockels cell driver circuit comprising resistive, inductive or capacitive elements (participant HZDR) and a low noise power supply (participant LENS).