



Submitting proposals to research infrastructures: how to respect the excellence in avoiding the double evaluation?

Wolfgang Sandner

Director, Max-Born Institute Berlin
Co-ordinator, LASERLAB-EUROPE



Max Born Institute



Future Access to European Research Infrastructures:
Benefits to Academia, Industry and Society
Lund, 27th October 2009

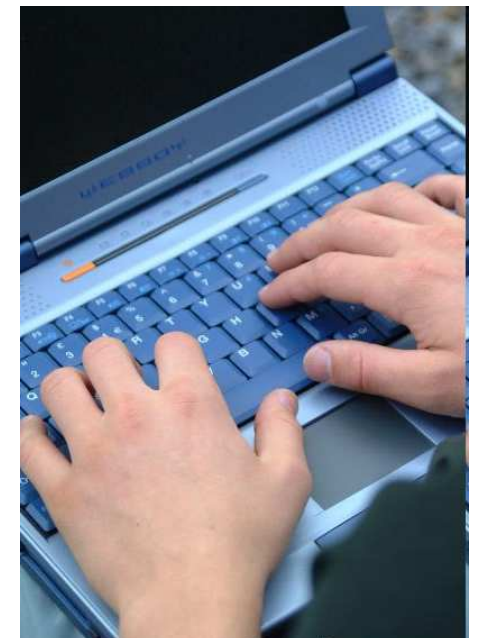
The problem:

- a) In order to get access, users must submit a proposal to the Research Infrastructures.
- b) In order to **ensure excellence in research**, the host Infrastructures apply highest standards in their **internal evaluation** of these proposals

➡ *there is – as a long standing tradition - an evaluation barrier between the users and the **individual Infrastructures***



Scientific excellence



Is this a problem?

Apparently not:

“All 32 synchrotron X-ray and neutron facilities responding to the questionnaire operate proposal programs for their user communities....”

“The user community is generally happy with the proposal access mechanism and it is expected to remain the chief mechanism.”

Scientific review by external committees is now clearly a universal, worldwide practice and is anticipated to continue

From:

Access To Major International X-Ray and Neutron Scattering Facilities

Committee on International Scientific Affairs
The American Physical Society



Sometimes the situation is more complicated.....

2) Application for access

1) Application for funding



→ Double evaluation of proposals



**Equal treatment of all users
+
primacy on excellence**

**=> double evaluation
seems unavoidable**



...or yet more complicated!

Double evaluation

single evaluation

Double evaluation

single evaluation

A closer look on double evaluation

Pro:

- equal treatment of all users of a facility => **primacy on excellence**
- quality control is in the hands of the facility => **enables competition**

between facilities

- „good proposals will always prevail“ => **no real problem for**
excellent

users

- many (most?) users accept it => **why**
change?

and finally:

Contra:

- pre-evaluated and funded projects may not get beam time at all (or not in time)
=> **waste of funding resources, time and human capital**
- evaluation standards may differ between funding agency and facility => **not all users are treated equally**
- evaluations are costly, reviewers are over-loaded => **degradation of review processes**
- evaluation standards may vary between access facilities => **competition between facilities and/or equal access opportunities may be distorted,**
- international user groups may want to form a collaboration, cross-nationally funded
=> **unpredictable outcome**

The only (?) alternative:

Single evaluation by an independent panel, recognized by both the host facilities and national funding agencies

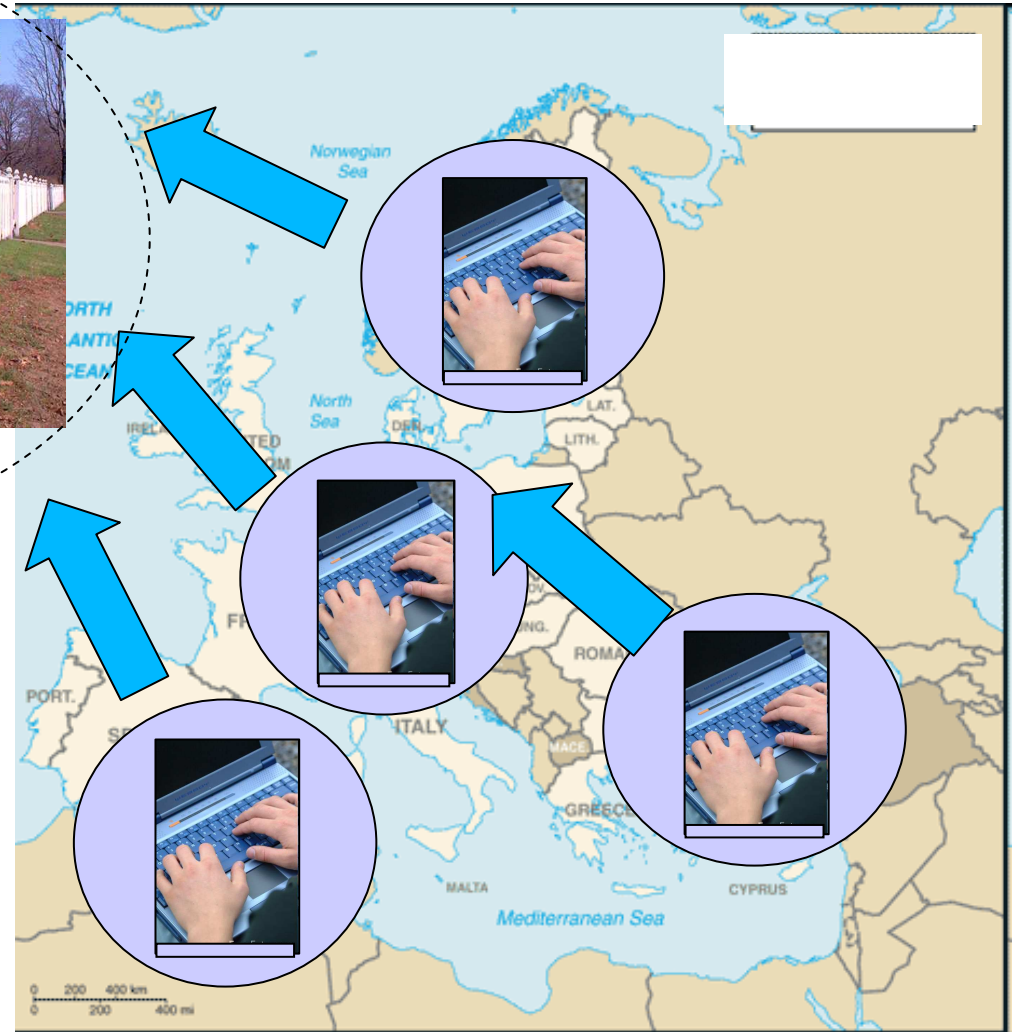
The EUROHORCs and ESF Vision on a Globally Competitive ERA and their Road Map for Actions to Help Build It

Peer Review of researchers and proposals at the European level

- For the benchmarking of ‘national’ researchers and national projects, instruments such as **common international peer review** are of key importance.
- EUROHORCs Member Organisations will build on their own experiences and that of the ESF to establish European-level benchmarks for peer review processes, **set up European peer review panels** and develop shared European-level peer review resources such as quality controlled shared databases of reviewers.
- **Concept of a „lead agency“** if several funding agencies are involved

Common international peer review

project funding + access



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Pro's and Con's revisited:

All Contrasts removed => o.k.

What about the Pro's?

- **previously:** equal treatment of all users of a facility => primacy on excellence
(still o.k.)

- **previously:** quality control is in the hands of the facility => enables
competition

between facilities

now:
longer a
gate“ but of the quality of service!

**scientific quality (and hence, competition) is no
matter of the „entrance**

**strict discipline
central evaluation procedure!**

**=> this is even a better situation but requires
in common standards of the**

Can it work?



Access implementation in LASERLAB-EUROPE

Access Policy



LASERLAB-EUROPE has put special emphasis on the development of a *unified Access organisation*.

It is specified in the **Access Policy**, which is part of the **Consortium Agreement**.

Main features :

- *a coordinated and flexible implementation* of the Access opportunities provided to the European User community, and
- the co-ordinated selection of Access proposals by a **joint and external panel**



Access providers

<http://www.laserlab-europe.eu/transnational-access/access-facilities>

Access policy part 1: “Coordinated and flexible implementation”

- 1) EU Contract: There are only *global objectives* for the whole network, not for the individual RI's
- 2) The distribution of Access and funds (!) between individual RI's is *dynamically adjusted* according to demand and offers.
- 3) Hence, Access may differ substantially from the proposal. The *global Access performance of the network* matches or exceeds the Contract goals
- 4) Dynamic implementation requires
 - Mutual agreement and trust between all participating RI's
 - Close monitoring and quality control by an Access Board
 - Co-operative spirit in setting up the dynamic implementation plans

Example: 2007 Access



Network performance

100%
(proposal prediction)

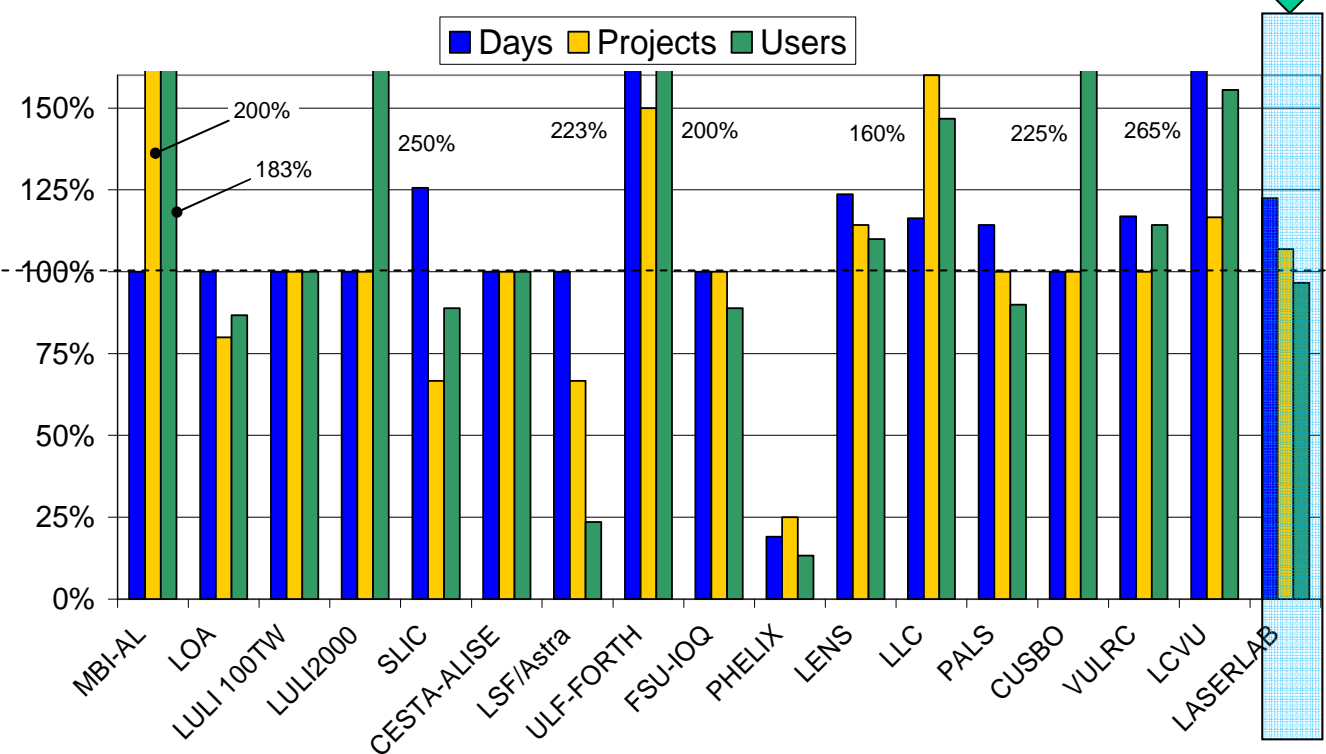


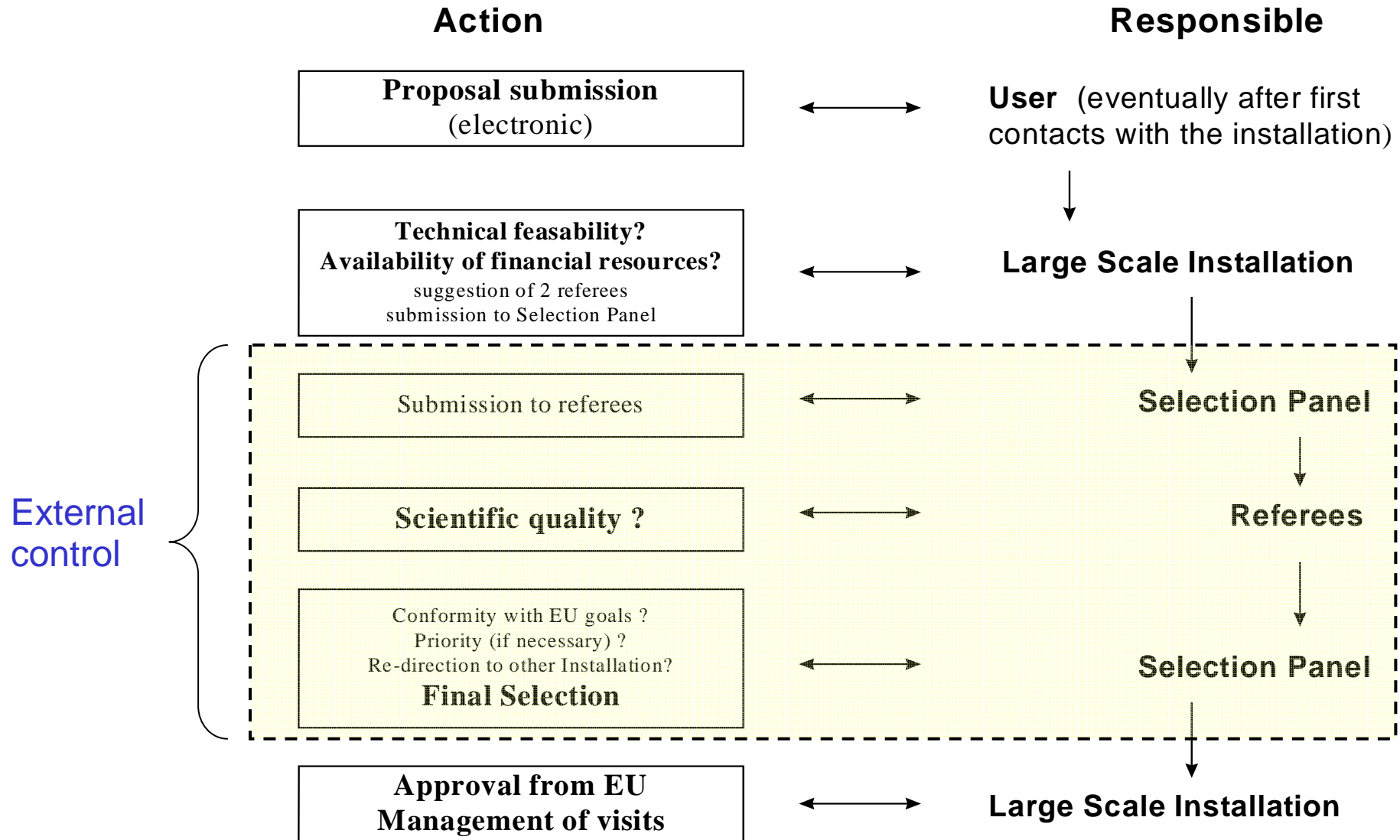
Figure 1 : Transnational Access provided by LASERLAB partners in 2007 compared to the 4th Implementation Plan

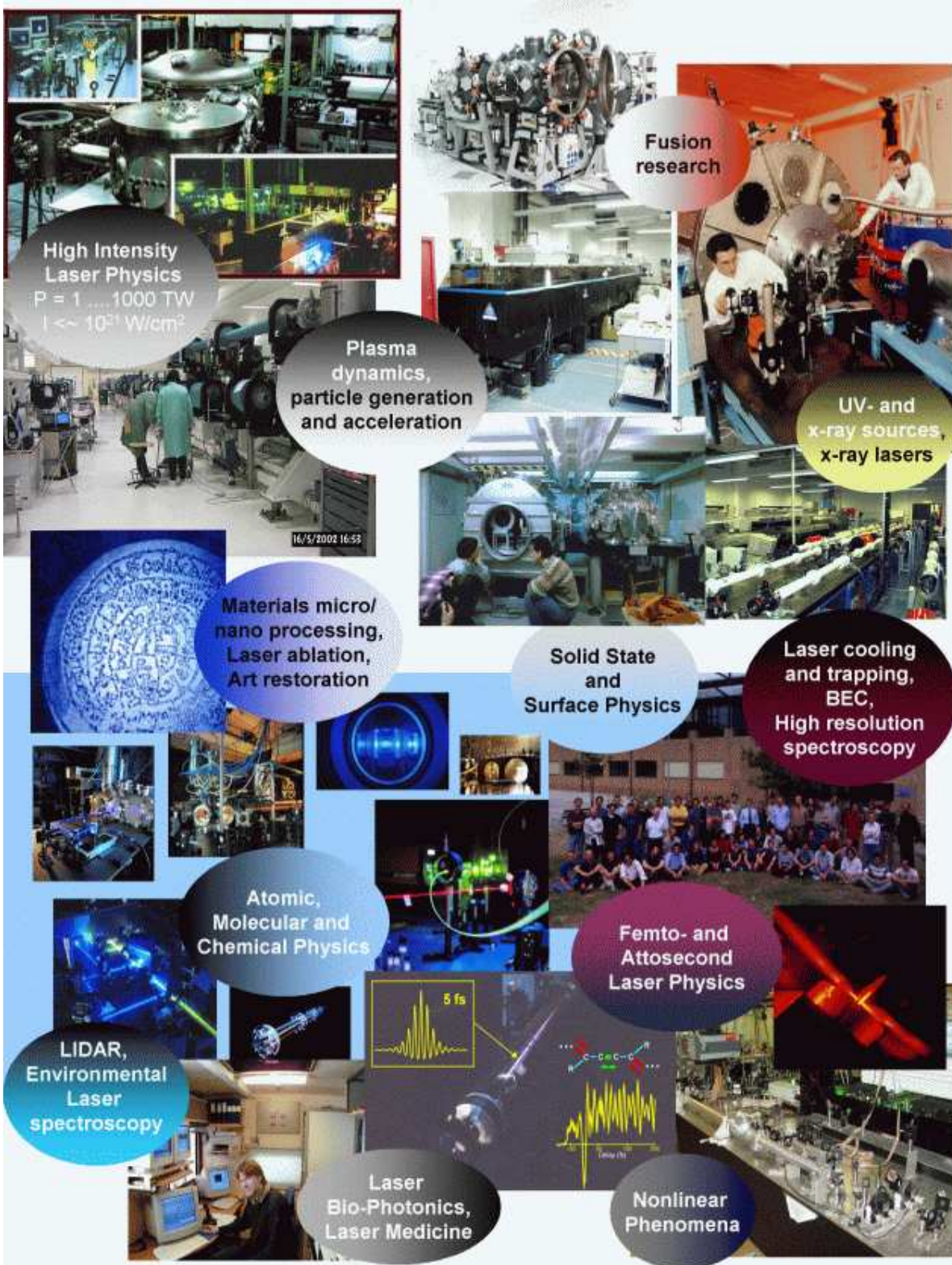
Proposal selection and processing



- *joint and common access offer* by all participating RIs
- *fully electronic proposal processing*
=> proposals accepted at any time; return time ~ 4 weeks
- *Independent external selection panel*
- *large pool of referees (> 100), jointly selected by all RIs*
- *involvement of user representatives & Access Board quality control*
- *re-direction of users between facilities*

Workflow





Joint Call for Proposals:
www.laserlab-europe.net

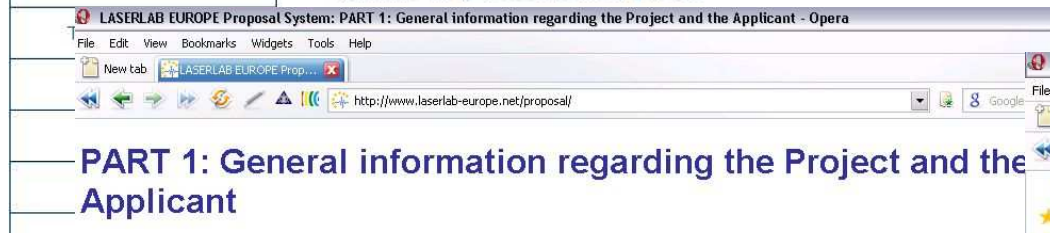




Online proposal submission and management



Home	Transnational Access Access Opportunities Call for proposals How to apply for access Criteria of eligibility Information for Submit your research proposal How to apply for Access <ul style="list-style-type: none"> ◦ Submission procedure ◦ Evaluation procedure ◦ Access Policy for oversubscriptions
Partners	
News and Press	
Activities	



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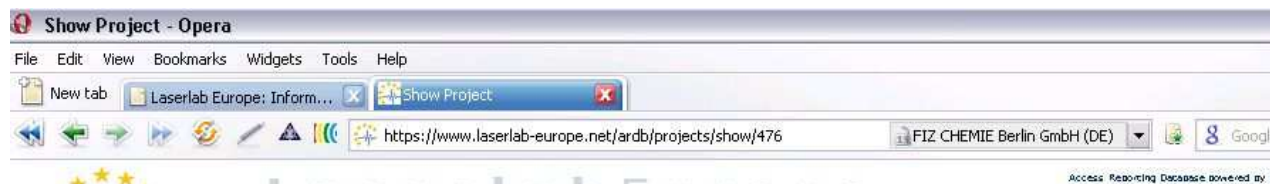
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Short presentation of the project

Title of project:	<input type="text"/>
Keywords:	<input type="text"/>
Abstract (250 characters max.): (Please provide here a brief description of the project. You will be asked to present in detail the proposal at a later stage.)	<input type="text"/>



- **Online Access Reporting Database**
- **Automatic Update of Access Publications List**



Project mbi001252 (AR4)

[Back to desktop](#)

Title	Generation of high-power pulses in the near-infrared by optical parametric amplification
General Discipline	Physics
Specific Discipline	
Objectives	We proposed to realize a BiBO based optical parametric amplifier generate femtosecond pulses tunable between 1.2 and 2.4 μm w devoted not only to investigation of a novel application for the BiBO the conventional OPA technique to high energies (mJ) in the near-IR include (1) direct comparison of BiBO with BBO in a commercial cell on the improved efficiency and extended tunability into the mid-IR energy scalability with large aperture BiBO crystals, and (3) Inverse continuum seeded BiBO based OPA operating in the near-IR.
Achievements	The main results from the first year (two, 2-week stays) can be summarized with BBO in a commercial, continuum seeded, 1kHz type-II femtosecond and showed similar performance in terms of energy and pulse duration allowed to extend the tuning range in the mid-IR up to 3000nm. were used in the second stage of a 1kHz OPA, pumped with 5mJ Ti:sapphire amplifier. For the first time output energies (signal + pulses) were characterized. 3. Pulse compression was attempted compressor for the signal pulses, which were shortened to below 100fs.
Installation used	MBI 1 MBI-AL



Publications

- o published
- o in press
- o submitted

Conference contributions

Published Papers:

Access User Project Acronym	Publication
clf000808	Barsberg S, Matousek P, Towrie M Structural analysis of lignin by resonance Raman spectroscopy MACROMOLECULAR BIOSCIENCE (8), 5 ,2005 ,743-752
clf000808	Barsberg S, Matousek P, Towrie M, Jorgensen H, Felby C Lignin radicals in the plant cell wall probed by Kerr-gated resonance Raman spectroscopy BIOPHYSICAL JOURNAL (8), 90 ,2006 ,2978-2986
clf001281	Susan Quinn, Gerard W. Doorley, Graeme W. Watson, Alexander J. Cowan, Michael W. George, Anthony M. Radley, Katalin Borsos, Michael Towrie, and Jatek M. Kelly

Access quality management:



User questionnaires linked to individual projects

Laserlab Europe: Information for Users - Opera

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New tab Laserlab Europe: Inform... x

http://www.laserlab-europe.net/access/userinfo.html

Laserlab Europe

Home	Transnational Access Access Opportunities Call for proposals How to submit your research proposal
Partners	
News and Press	
Activities	
Transnational Access	Users' feedback to the EU: To enable the Commission to evaluate the Research contracts, and to improve the services provided by the project supported under an EC Research Infrastructure Group Questionnaire". The questionnaire must be completed before the experiments on the infrastructure come to end.
Events	You will find the questionnaire at: http://www.cordis.lu/infrastructures/questionnaire
Publications	When completing the questionnaire please indicate the acronym of the host institution (for projects carried out in 2008 (for projects carried out in EUROPE)) and the acronym of the host institution at the time of your proposal submission.
Jobs	

User Questionnaire - Opera

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New tab Laserlab Europe: Inform... x User Questionnaire x

http://www.laserlab-europe.net/proposal/internal/StfQuestionnaire.pl?qid=0770417d4932b837&frm5criptAc

Laserlab Europe

Proposal Details
[Information sent to host facility and Laserlab Europe]

EC contract n° and acronym	RII3-CT-2003-506350 (LASERLAB-EUROPE)
Host infrastructure acronym	MBI
User project n°	mbi000409
User project title	Analysis of thermo-mechanical properties of high-power diode lasers
Discipline(s)	Engineering Sciences
User group leader: family name	Kozłowska
First name(s)	Anna

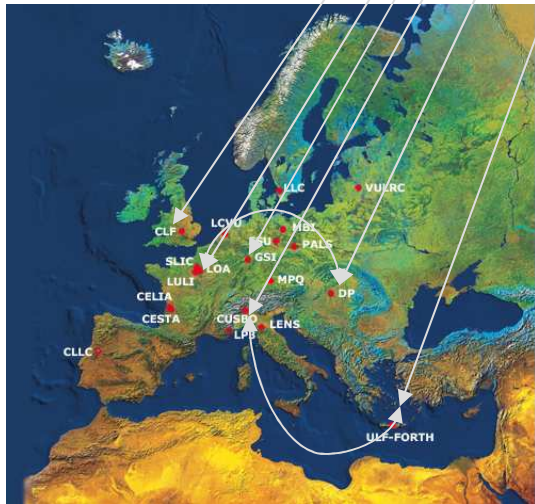
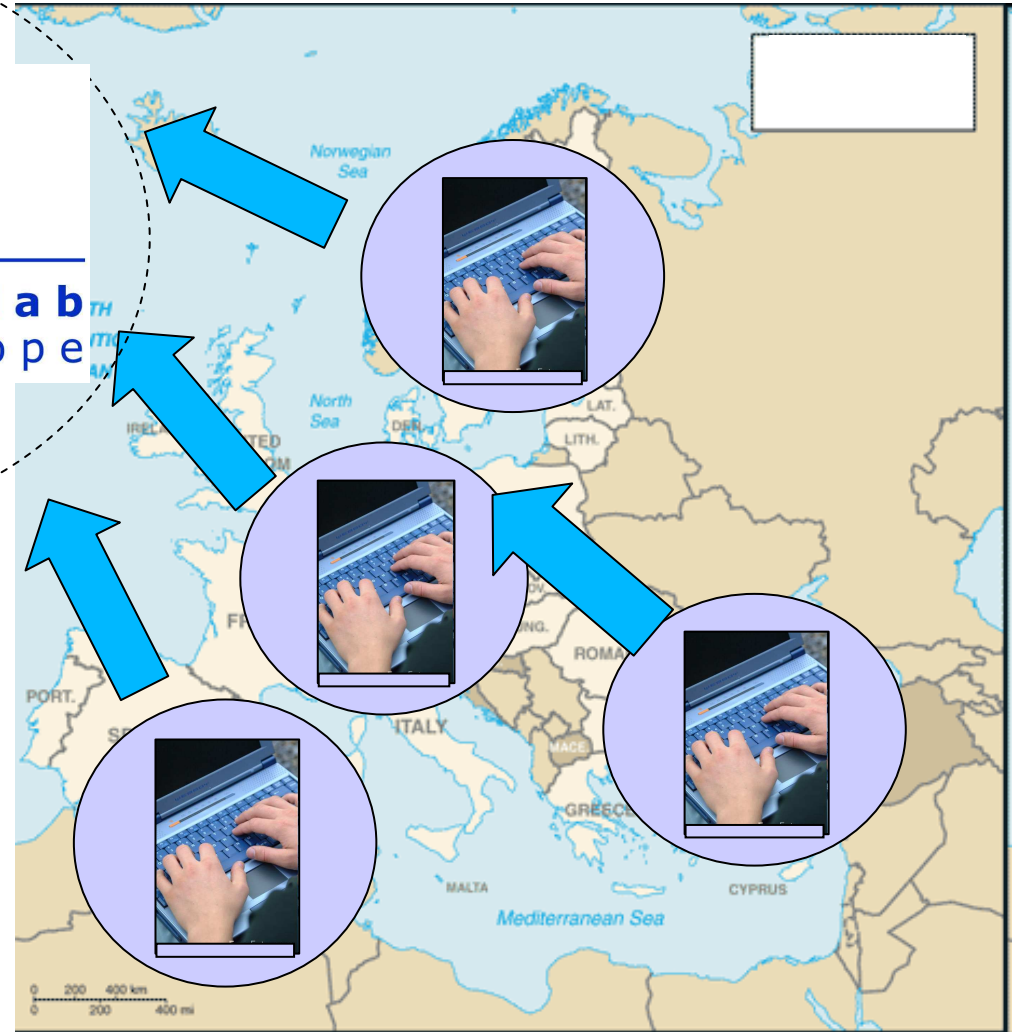
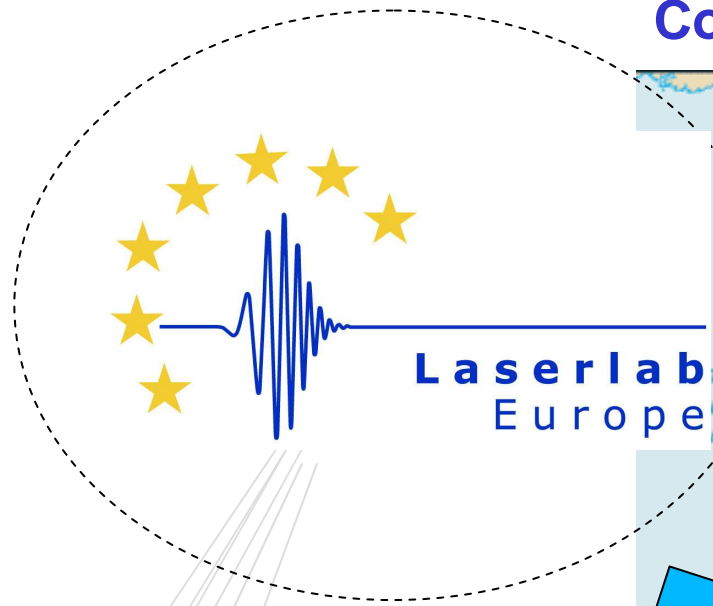
Access publicity

[Information sent to host facility and Laserlab Europe]

Where did you first find out about the possibilities of access supported through the contract? (you may tick more than 1 possibility)

Common international peer review

project funding + access



Infrastructures:
Society

W. Sandner

FP6 and FP7 experience



Joint & external proposal evaluation and selection works to the satisfaction of the network and users.

It allows for

- central and uniform external quality control and best practices
=> element of *RI co-operation and trust*
- dynamic access distribution between host infrastructures
=> element of *RI competition*, based on services offered
- efficient, transparent and competent electronic review process with a single gateway => open access
- avoidance of double review even if local review is formally

FP6 and FP7 experience



Joint & external proposal evaluation:

What it does not (yet) do:

- include both EU- funded and nationally funded (or third party)
Access => equal treatment of *all* users?
- include funding agencies, apart from host RIs => double evaluation still possible
- provide a common evaluation standard for and gateway to *all* European laser facilities => more steps to be taken

Conclusion:

Double evaluation in Access for funded projects

- occurs, even if not uniformly seen as a *surmountable problem* by the scientific community (yet)
- closer analysis of Pro's and Con's leads to the proposition of alternative solutions, e.g. EUROHORC's and ESF's „lead agency“
- Any new solution will require a change in spirit among Access providers: strong co-operation in evaluation while maintaining scientific excellence through *competition in services*
- First (still incomplete) model solutions have been successfully implemented