Jülich Centre for Neutron Science

JÜLICH
FORSCHUNGSZENTRUM

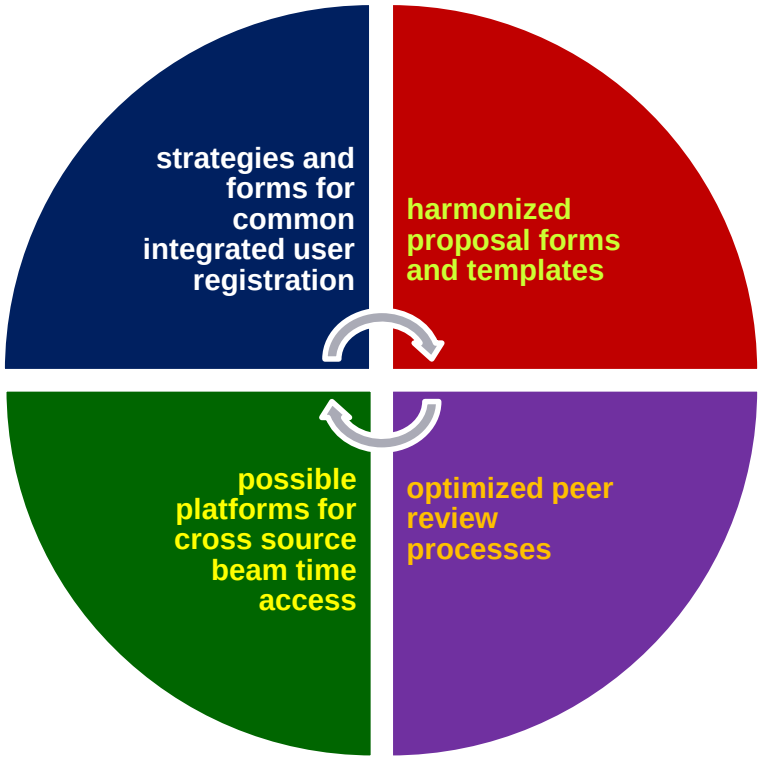
WP5 Integrated User Access

14 Oct 2015 | Thomas Gutberlet
Jülich Centre for Neutron Science

NMI3-II WP5: Integrated User Access

Scope

To structure and harmonize an integrated access format to European national neutron and muon facilities for the scientific users



NMI3-II WP5: Integrated User Access

Task list:

T5.2: - Strategies and forms for common integrated user registration

T5.3: - Harmonized proposal forms and templates

T5.4: - Optimized peer review processes

T5.5: - Possible platforms for cross source beam time access

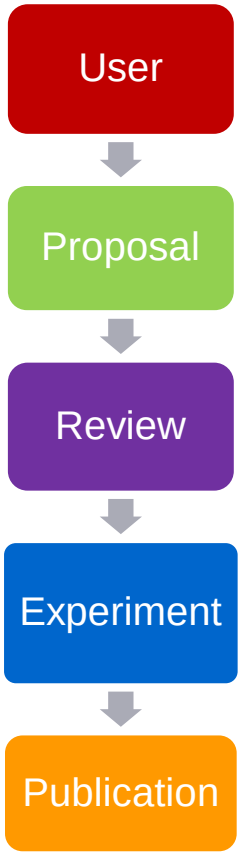
Output: Reports and software prototypes (D5.1-D5.8)

NMI3-II WP5: Integrated User Access

Strategies and forms for common integrated user registration

(Task 5.2, HZB)

- Technical and legal requirements for common NMI3 based single electronic user ID to access individual facility digital user
- Survey on existing comparable systems and report on requirements and framework for common data exchange (**Report D 5.1**)
- Software package prototype to handle integrated user registration.
  Best possible solution will be evaluated and established as a prototype. (**Report 5.2**)



NMI3-II WP5: Integrated User Access

Strategies and forms for common integrated user registration
(Task 5.2, HZB)

Survey on existing comparable systems and report on requirements and framework for common data exchange:

- User Survey Proposal Procedures
- Reviewer Survey Proposal Procedures

Insight on the satisfaction and the needs of neutron users in terms of access management:

- favor of a harmonized proposal form and procedure
- favor of a unified entry point to get access
- like to share submitted proposal to several facilities

(**Report D5.1**)

Neutron News, 25, 2014, 43, DOI:10.1080/10448632.2014.870805

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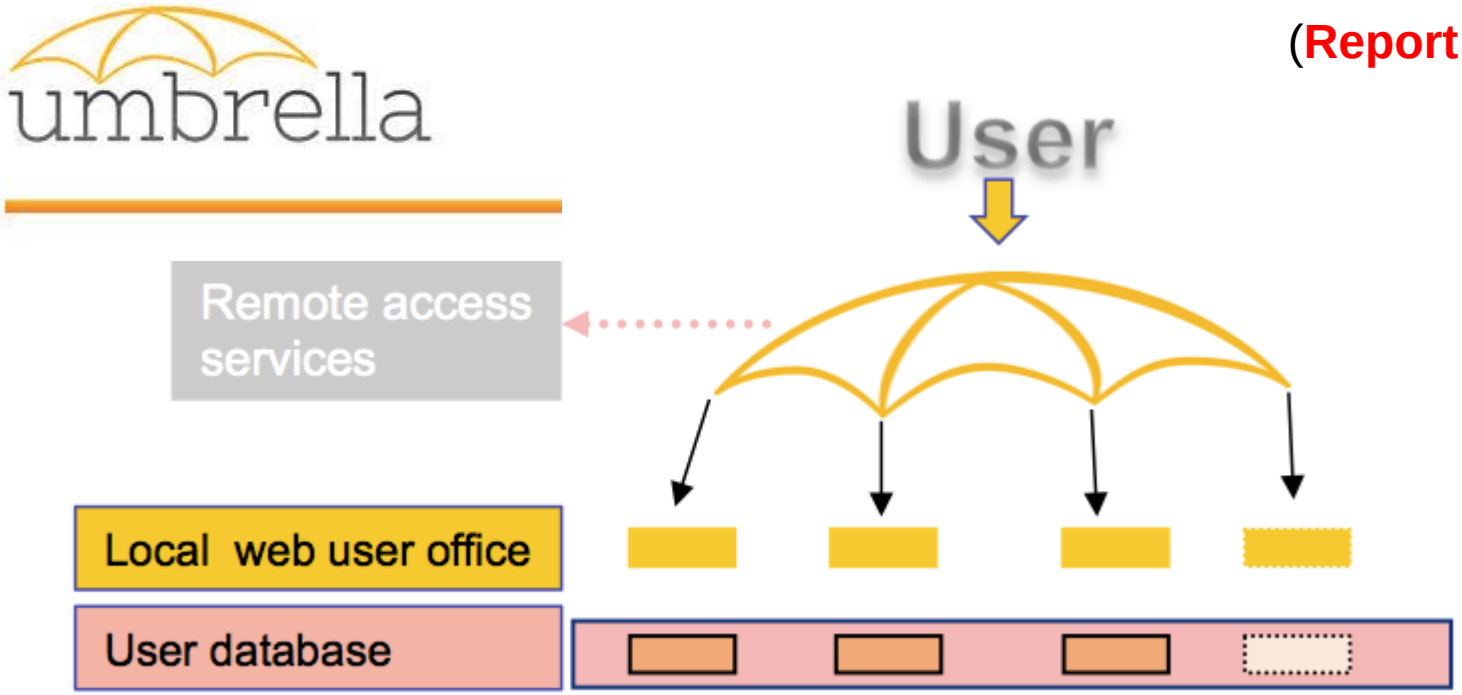
Strategies and forms for common integrated user registration
(Task 5.2, HZB)

Software package prototype to handle integrated user registration.
Best possible solution will be evaluated and established as a prototype

(**Report 5.2**)



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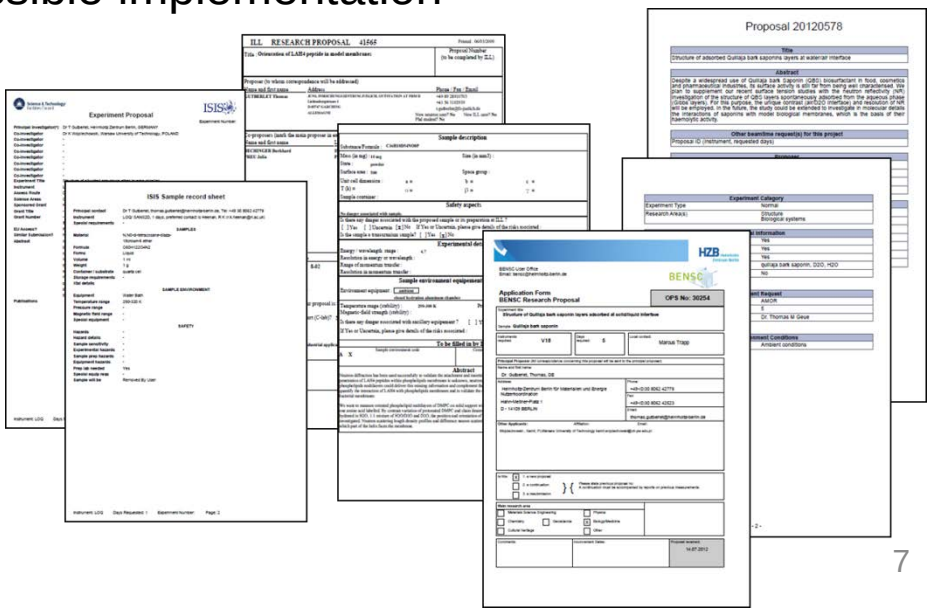
Harmonized proposal forms and templates
(Task 5.3 PSI, HZB)

- Comparison of forms and templates of proposal submissions at existing DUO applications

- Harmonized proposal template adopted for the individual requirements and software prototype for possible implementation



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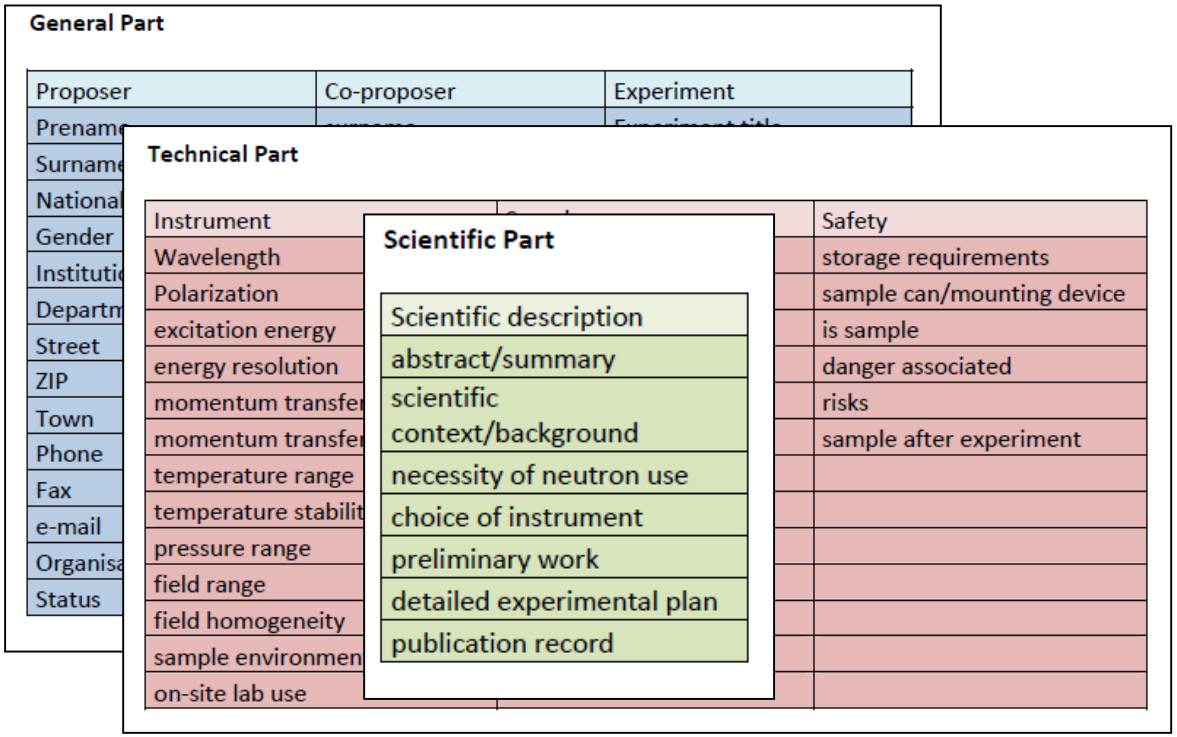
Harmonized proposal forms and templates

(Task 5.3 PSI, HZB)

Suggestion on harmonized proposal forms and appropriate templates



(**Report D5.3**)

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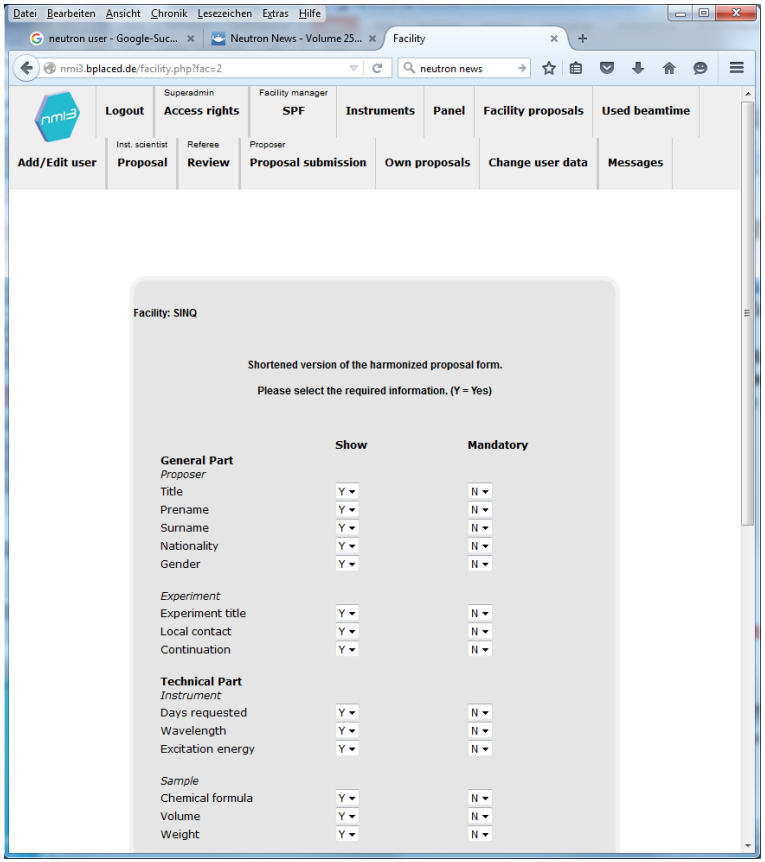
Harmonized proposal forms and templates

(Task 5.3 PSI, HZB)

Standardized proposal form adopted for the individual requirements implemented in software prototype for demonstration

http://nmi3.bplaced.de/



(**Report D5.4**)

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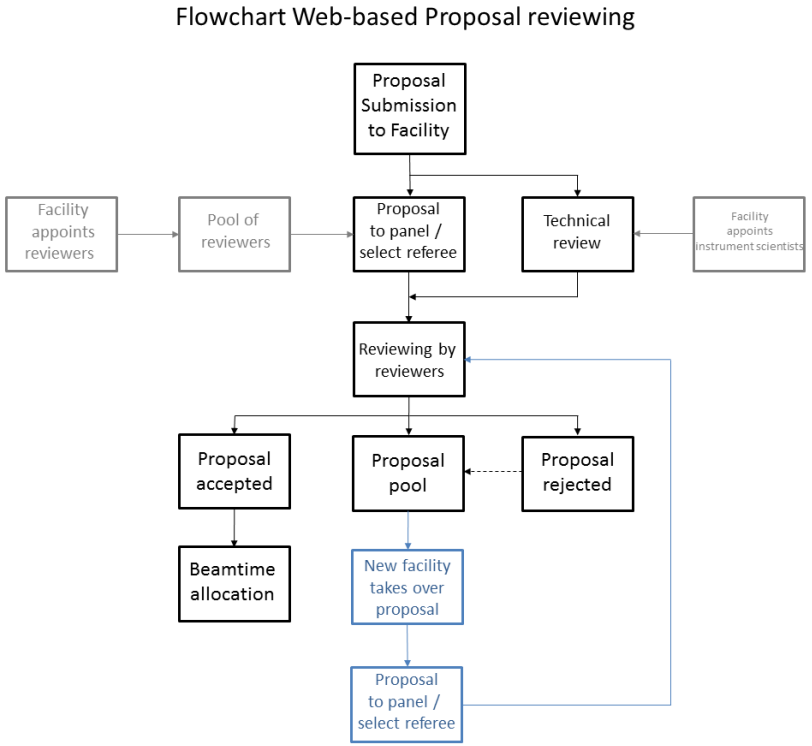
Web based proposal peer review process

(Task 5.4 TUD, HZB)

– Development of a framework to allow peer reviewing of sub-mitted proposals within NMI3 web applications for small facilities, which do not operate an individual DUO.



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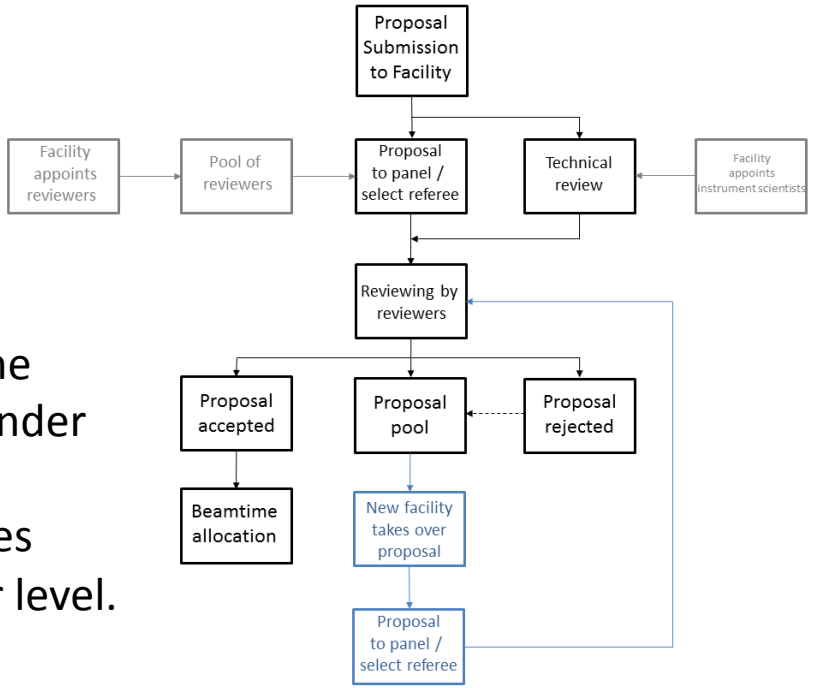
Web based proposal peer review process

(Task 5.4 TUD, HZB)

Report on requirements for web-based peer review

- The software will maintain a relational database of facilities, instruments, users, proposals and recommendations.
- It will enable electronic communication between the various users and create archives of the communications.
- Communications may be anonymous one way or both ways, depending on the sender and the recipient(s).
- The relational database will allow queries to be conducted depending on the user level.

Flowchart Web-based Proposal reviewing



(**Report D5.5**)

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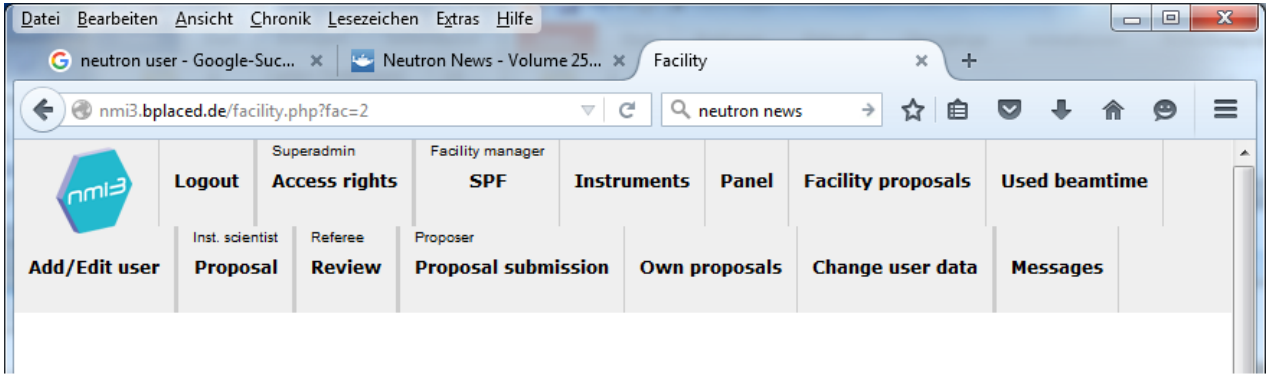
Web based proposal peer review process

(Task 5.4 TUD, HZB)

Software prototype of web based review process



http://nmi3.bplaced.de/

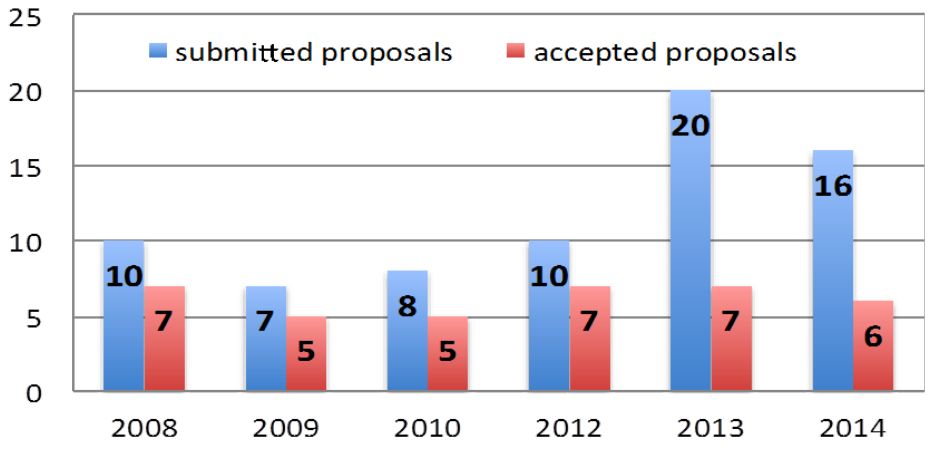
(**Report D5.5**)

NMI3-II WP5: Integrated User Access

Platforms for cross source independent beam time access
(Task 5.5 HZG, HZB)

- Developments of platforms to submit proposals for access by the combination of instruments at the NMI3 facilities

- Platforms for cross source proposals for the complementary use of instruments, laboratory services or infrastructures using different probes (e.g. neutron, muons, x-rays, facility based AFM or electron microscopy)



NMI3-II WP5: Integrated User Access

Platforms for cross source independent beam time access
(Task 5.5 HZG, HZB)

Requirements for cross facility beam time access and strategy for implementation
(**Report D5.7**)

- Survey of the existing activities at the NMI3 facilities (PSI, ILL, LLB, GEMS, HZB)

- Existing concepts and approaches (BioStructX, ESMI, Science Link)

Cross facility beam time access can be an added value for the users and may enhance efficiency and output of user experiments, but needs a high administrative effort, because proposal systems of different facilities have to be connected and synchronised.

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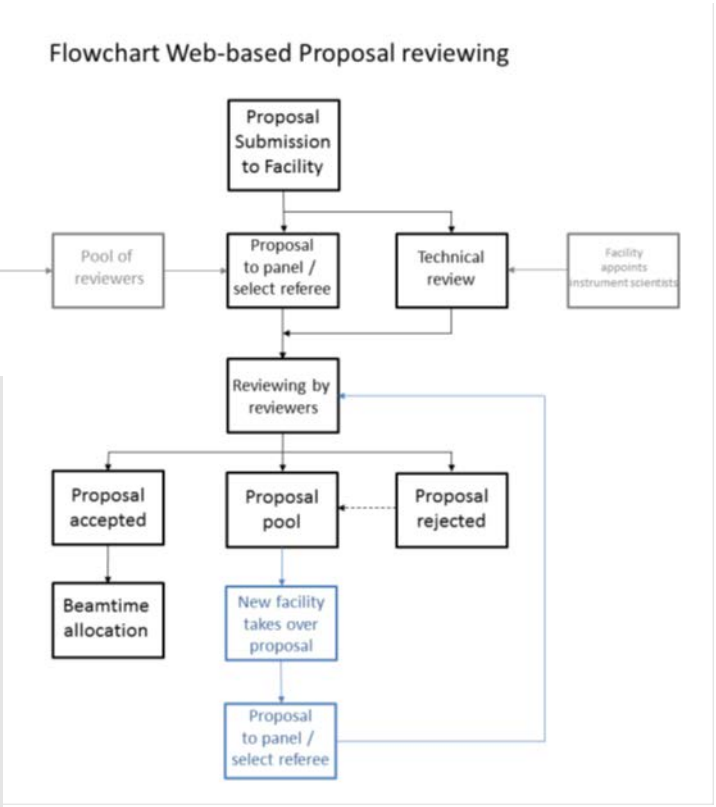
Platforms for cross source independent beam time access
(Task 5.5 HZG, HZB)

Feasibility study on software prototype for cross facility beam time access

http://nmi3.bplaced.de/

(**Report D5.8**)



Cross facility measuring time administration.
(Linked proposals have the same background color.)

Proposal ID	Facility	Proposer	Title	Instrument	Requested beamtime	Allocated beamtime
2-2015						
3	HZB	Prof. Charlie Parker	Rapid X-ray photoreduction of dimetal-oxygen cofactors in ribonucleotide reductase.	HZB Inst 2	7	
1	HZB	Nils Leidel	Bridging-hydride influence on the electronic structure of an [FeFe] hydrogenase active-site model complex revealed by XAES-DFT.	HZB Inst 1	5	5.00
2	SINQ	Nils Leidel	Bridging-hydride influence on the electronic structure of an [FeFe] hydrogenase active-site model complex revealed by XAES-DFT.	sinq instr	10	

Allocated beamtime hours per instrument

Instrument	Allocated beamtime hours
2-2015	
HZB Inst 1	5.00
HZB Inst 2	0.00
HZB Inst 3	0.00
HZB Inst 4	0.00

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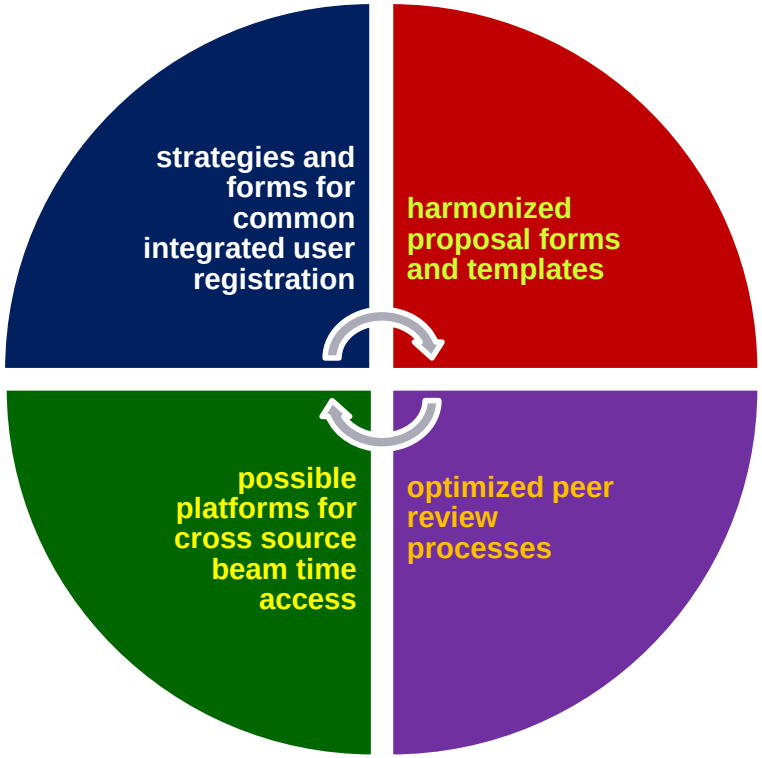
Achievements

- Integrated user registration (Umbrella)
- Standardized proposal form
- Web based review process for small facilities
- Cross facility beam time access process
- Software prototype: http://nmi3.bplaced.de/



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Thanks to

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- Klaus Pranzas, HZG
- Pavel Strunz, NPI