Deliverable Number:     D 5.4

Deliverable Title:      Software package prototype to handle proposal submission and reviewing between facilities

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|---|---|
| Delivery date: | 31.01 2016 [month 48] |
| Leading beneficiary: | HZB |
| Dissemination level: | Report |
| Status: | done |
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|---|---|
| Project number: | 283883 |
| Project acronym: | NMI3-II |
| Project title: | Integrated Infrastructure Initiative for Neutron Scattering and Muon Spectroscopy |
| Starting date: | 1st of February 2012 |
| Duration: | 48 months |
| Call identifier: | FP7-Infrastructures-2010 |
| Funding scheme: | Combination of CP & CSA – Integrating Activities |

# WP5 Integrated User Access

## Software prototype to handle proposal submission and reviewing between facilities

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### Features and description

The software prototype for harmonized proposal form submission and review is a feasibility study for a web-based online proposal-handling system. The program allows the generation of facility-specific standardized proposal forms, the submission of proposals to selected facilities, future editing of downloaded proposal files, cross-beam time monitoring and peer-review on a basic level.
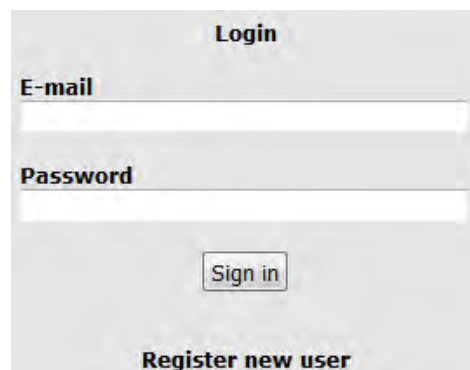
Each facility can determine what data is required and can add and remove fields to the proposal form. Cross-facility beam-time access is monitored by linking the cross-facility proposals via a specific marker. The facilities can manage their own beam time and can see the allocated and used measuring time from the other linked facilities. The facility administrator can select referees for proposal reviewing. The reviewer can read and rate the assigned applications.

The proposer is able to generate a harmonized proposal form with the requirements of the selected facilities. After correct completion the proposer can download the proposal data as XML file for future editing and submission or can directly submit the proposal form.

The software prototype shows the possibility and feasibility of a web-based tool for proposal handling. The use of the standardized extensible markup language (XML) for saving and submitting the proposal data allows the different digital user offices to implement a basic solution for proposal handling.  A working demonstration of the prototype is accessible in the internet under the URL http://nmi3.eu/proposal/   The software prototype is written in PHP version 5.5.5-dev and HTML connected to a MySQL database community server (version 5.6.15-log). For pdf creation the mPDF v5.7.1 PHP class is used.
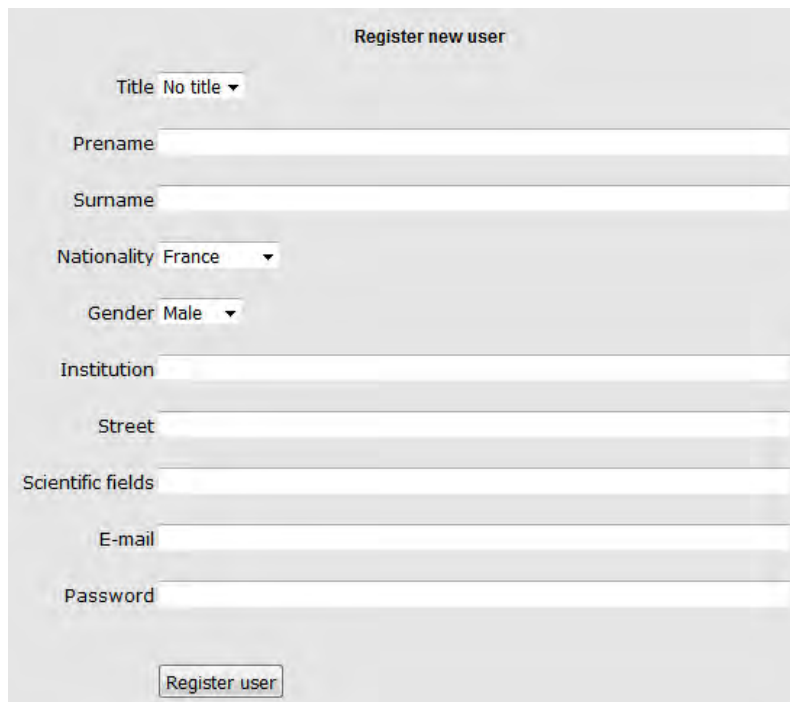
### Manual

On the starting page one can either login to an existing account or one can register as a new user.

To register as a new user one just has to type in the required information and press the "Register user" button.



One is now registered as a new user and one can immediately log into the new user account.
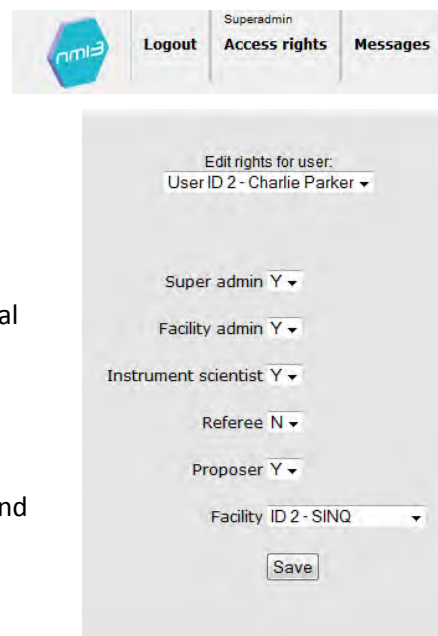
**Login to the system:**



There are several roles or access rights one can have as a registered user.

The roles are "super admin", facility manager, instrument scientist, referee and proposer.

The "super admin" can set the access rights of each individual user. He determines whether a user is a facility manager, instrument scientist, referee or just a proposer.

After registration one can log in with the access rights of a proposer. The proposer has the rights to submit proposals and to see the status of submitted proposals. Furthermore, the proposer can change his registered user data.

Once logged in, a selection menu appears. One can choose between following menu items:

**Proposer:**



- Proposal submission

Please select the facilities where one want to submit a proposal and press the 'Choose facilities' button after selection. Multiple selection is possible.

A harmonized proposal form is created with all necessary fields according to the chosen facilities. Also an attachment may be added. After completion of the harmonized proposal form it is possible to download the proposal form as XML file for later editing or to submit the proposal form to the selected facilities.

The deadline for proposal submission of each individual facility is displayed. In case of an exceeded deadline the submit button is disabled and only the download of the proposal XML file is allowed.

It is also possible to upload and submit a previously saved proposal XML file to the selected facilities. A control page displays, whether all fields are correctly filled in, afterwards one can submit and upload the proposal form.

- Own proposals

A summary table of all submitted proposals with information like proposal ID, proposal title, used instrument, allocated measuring time and the cross-facility code is shown. The proposer has the option to download the submitted proposals as XML file for later editing or as pdf file. It is also possible to add publication records to selected proposals.

- Change user data

Edit the user specific data.

- Messages



The message center allows to get into contact with other registered users. By clicking on the subject of the message it is possible to read and answer the message. To send a new message one just fills out the "new message" form and choose a recipient.

**Facility manager:**

In case you are a facility manager the following navigation menu is diplayed:



- SPF (Standarized proposal form)

The administrator can select which information is necessary (Y = required, N = not required) to fill out in the proposal form, which is displayed to the proposer who wants to make an application to the facility. It is also possible to add additional fields to the proposal form to fulfill the special needs of each individual facility.

- Instruments

You can add instruments to the facility list of instruments. This instrument list is available to the proposer. The proposer can select one or more instruments and can add them to the proposal. The facility manager can also select a user from the database to appoint as instrument scientist. This is necessary for the technical reviewing.

- Selection panel

The facility manager can add and edit the selection panels. He also can assign users from the database as members of the different selection panels.

- Facility proposals

For each proposal, one selection panel and one or more referees may be assigned. Each assigned referee is able to read and rate the proposal.
The table 'Ranking and measuring time' shows all proposals that have been made to the facility. It contains the proposal number, proposer name, the title of the experiment, the calculated averaged ranking and the requested beamtime. It is also possible to allocate beam time hours to the proposal. It also shows the assigned reviewers and the score given.
To each proposal a unique cross facility code is assigned. The code is for monitoring cross-facility beam-time access. The proposer has the ability with this code to mark cross-facility beam-time proposals additionally.



| Prop. ID | Proposer | Title | Ranking | Instrument | Req. beamtime | Alloc. beamtime | Cross fac. code | |
|---|---|---|---|---|---|---|---|---|
| 3 | Prof. Charlie Parker | Rapid X-ray photoreduction of dimetal-oxygen cofactors in ribonucleotide reductase. | Not yet rated. | HZB Inst 2 | 7 | Save beamtime | 5580240beefbc | Edit cross fac. code |
| Rating: Nils Leidel | | | 0 | | | | | |
| 1 | Nils Leidel | Bridging-hydride influence on the electronic structure of an [FeFe] hydrogenase active-site model complex revealed by XAES-DFT. | 9.50 | HZB Inst 1 | 5 | 5.00 Save beamtime | 55801e6f316c1 | Edit cross fac. code |
| Rating: Charlie Parker | | | 9 | | | | | |
| Rating: Duke Ellington | | | 10 | | | | | |

- Run-time proposal round

Under the navigation menu point "Run-time proposal round" the facility manager is able to add the dates and the names for the proposal rounds and he can determine the proposal submission and reviewing deadline. It is also possible to have a continuousproposal system.

**Run-time proposal round | Proposal pool**

Facility: HZB

Proposal

| Proposal ID | Proposer | Title | Referee |
|---|---|---|---|
| 2-2015 | | | |
| 3 | Prof. Charlie Parker | Rapid X-ray photoreduction of dimetal-oxygen cofactors in ribonucleotide reductase. | P2 |

Please select a referee ▾    Select

Referee:    Nils Leidel    Delete
Comment:    No comment available.

Instrument: HZB Inst 2 ▾    Change

Final grade: Not yet rated.
Referee:    Nils Leidel: Not yet rated.

HZB comment:    No comment available.    Edit

Proposal status: IN REVIEW.    Accept  Reject

**Continuous submission**

Continuous submission?    ○ Yes  ◉ No    Save

**Add new proposal round**

| Beamtime | Start | End | |
|---|---|---|---|
| New proposal round name | DD.MM.YYYY | DD.MM.YYYY | Add proposal round |

**Proposal rounds**

| Beamtime | | Start | End | Active round | Next round |
|---|---|---|---|---|---|
| Fac2-round1 | Edit name | 01.07.2015 | 31.12.2015 | ◉ | ○ |
| Fac2-round2 | Edit name | 01.01.2016 | 30.06.2016 | ○ | ◉ |

Save

**Add deadlines for proposal submission and proposal reviewing**

| Deadline | Date | |
|---|---|---|
| Proposal submission | 30.09.2015 | Save |
| Proposal reviewing | 30.11.2015 | Save |

- Proposal pool

The Proposal pool shows proposals, which have already been reviewed and are available for other facilities to take over. The proposer of the proposal can accept or reject the takeover by the new facility. After acception of the proposer a new technical review or a new general review may be done by the referee of the new facility.

**Proposal pool**

| Proposal ID | Proposer | Title |
|---|---|---|
| 4 | Nils Leidel | Hydride binding to the active site of [FeFe]-hydrogenase. Added: 16.06.2015 - Origin: SINQ |

Referee:
Final grade: 9.00
Count Basie: 9.00

SINQ comment:
No comment available.

Proposal status: TRANSFER POOL [Transfer proposal to HZB]

- Used beamtime

This table shows an overview of all proposals with important proposal data placed at the facility. Proposals with cross-facility beam-time access are linked together and have the same background color. The facility administrator can monitor the requested and allocated beam time from the connected proposals. Also an overview table of all summed allocated beam time days per instrument and proposal round is shown.

**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 |

- Add/Edit user

One can change the user data of an existing user or one can add a new user to the system.


**Referee:**
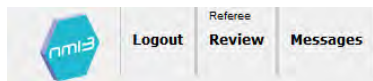


A list of all proposals to be evaluated by the reviewer is displayed. The reviewer has the option to assign a grade, give a comment or to reject a proposal. By hitting the button "Message to proposer" it is also possible to get into direct contact with the proposer via the internal messaging system. The message is anonymous to keep the confidentiality of the reviewer and copied to the attendance of the corresponding facility manager. The messages are stored in the system. In the "Show panel proposal" section all proposals from the selection panels, where the referee is part of, are shown. The instrument list shows every available instrument from each facility.
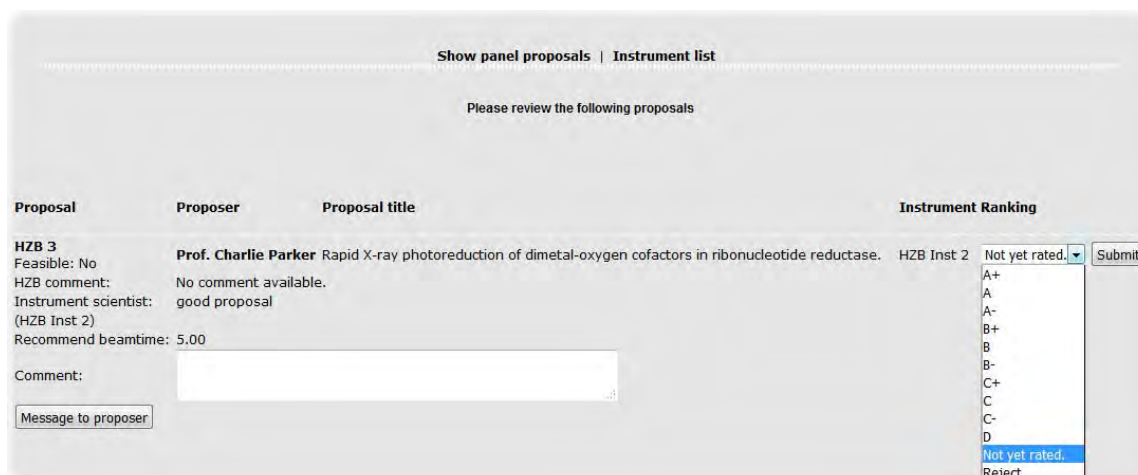



**Instrument scientist:**
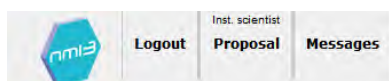


The instrument scientist performs the feasibility check. He proofes whether a proposed experiment can work with the selected instrument. The instrument scientist can choose between Yes-it is feasible and No-not feasible and he can give a comment.

**Conclusions**

This software prototype was developed as a comprehensive and flexible tool to demonstrate a harmonized and unified handling of proposal submission and reviewing between facilities. This was obtained by involving the user offices of the neutron and muon facilities in Europe during the development of the program. The resulting software prototype shows the feasibility and the possibilities of such a web-based tool for proposal handling at individual facilities as well as between facilities, which provides a novel feature to harmonize user access and administration.