TECHNICAL NOTE

UPEX: Experiment Proposal and Registration Guide

April 2025

European XFEL User Office



Germany

Revisions

Version	Date	Description
3.2	8 April 2025	 Added Section 1.2.3, "Checking your account" Added Section 2.2.4.1, "Group coordinator" Added Section 2.2.4.3, "Experiment Data Contact" Added Section 2.3.4.2, "EuXFEL and societal challenges" Updated Section 2.3.4.6, "Proposal continuation or resubmission" Added Section 2.4.2, "Interleaved-mode proposals in DiPOLE XRD standard configuration at HED" Updated Section 2.4.3, "Long-term projects" Added Section 3.1, "Beamtime acceptance" Updated Section 3.2.1, "A-form (Arrival Form)" Updated Section 3.2.2, "A-form (Arrival Form): Summary" Updated Section 3.2.3, "Personal Arrival Form (PAF)" Added Section 3.2.4, "Additional Sample Requests (ASR)"
3.1	4 May 2022	 Addition about instrument selection in general rules, Section 2.1 Update of Section 2.3.8 "Choice between custom and standard instrument configurations / beam properties" Updated Section 2.4.1 "Protein Crystal Screening (PCS) proposals" Added Section 2.4.3 "Long-term projects"
3.0	21 Oct. 2021	 Updated preface to reflect evolutions in the database allowing to enter and save symbols and special characters in proposal fields Added Section 1.1.3, "Mailing lists" Added Section 2.2.4.2, "Sample Coordinator" Added Section 2.3.1, "Choice of scientific instrument" Added Section 2.3.2, "Cross-instrument proposals" Added Section 2.3.7, "Standard instrument configurations" Added Section 2.3.8, "Choice between custom and standard instrument configurations / beam properties" Added Sections 2.4, "Special proposal forms" Added Section 2.4.1, "Protein Crystal Screening (PCS) proposals" Updated Chapter 3, "Registering for experiments in UPEX" Updated Section 4, "Feedback" Updated Appendix A, "Useful email contacts"
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1.0	14 Nov. 2016	First draft

Contents

1.1	How to	register	8
	1.1.1	Registration rules	9
	1.1.2	Email verification	9
	1.1.3	Mailing lists	10
1.2	UPEX li	ghtweight account vs. Campus account	11
	1.2.1	Changing passwords for Campus or UPEX lightweight	
		accounts	12
	1.2.2	Recovering passwords for Campus or UPEX lightweight	
		accounts	12
	1.2.3	Checking your account	12
1.3	Log-on	screen	12
1.4	Your UF	PEX homepage	13
	1.4.1	Edit profile	14
	1.4.2	Proposals	14
1.5	Icons us	sed in UPEX	16
2.1	General	l rules	17
2.2	Attributi	on of responsibilities within the user team	18
	2.2.1	Principal Investigator	19
	2.2.2	Main Proposer	19
	2.2.3	Proposers	19
	2.2.4	Participants in the experiment	20
2.3	EuXFEL	_ regular proposal form	21
	2.3.1	Choice of scientific instrument	21
	2.3.2	Cross-instrument proposals	21
	2.3.3	Navigation	22
	2.3.4	General part	22
	2.3.5	Sample and Substance Sheet	28
	2.3.6	Beam properties and instrument configuration	29
	2.3.7	Standard instrument configurations	30
	2.3.8	Choice between custom and standard instrument	
		configurations / beam properties	30
	2.3.9	Resources and Additional Instrumentation	33
	2.3.10	Laboratory access	36
2.4	Special	proposal forms	
	2.4.1	Protein Crystal Screening (PCS) proposals	37
	2.4.2	Interleaved-mode proposals in DiPOLE XRD standard	
		configuration at HED	38
	2.4.3	Long-term projects	39
3.1	Beamtin	ne acceptance	42
	3.1.1	Beamtime acceptance confirmation in UPEX	43

3.2	Registration of Experiment Team and Sample Confirmation (A-form) and			
	Person	al Arrival Form (PAF)	44	
	3.2.1	A-form (Arrival Form)	44	
	3.2.2	A-form (Arrival Form): Summary	49	
	3.2.3	Personal Arrival Form (PAF)	50	
	3.2.4	Additional Sample Requests (ASR)	53	
4.1	Experin	nent reports	54	
	4.1.1	General rules for experiment reports	54	
	4.1.2	Instructions for uploading your experiment report to UPEX	55	
42	Feedha	ck form	55	

Preface

The European XFEL (EuXFEL) is a research facility open to scientists worldwide. Beamtime is free of charge, but experiment proposals must go through a review process. Proposal must be submitted through the User Portal to the European XFEL (UPEX). As an important condition for access, after the experiments, the authors must strive to publish the results in peer-reviewed journals.

Before you start using UPEX, please be aware of some basic features, depending on database criteria:

- Fields in the registration and proposal forms should be completed in English. Names should be transcribed into standard Latin characters.
- Please be aware that symbols may not be saved if imported into a form field¹. In this case, we recommend a transcription into Latin script (e.g. α = alpha, β = beta). However, since an upgrade to the database in summer 2020, a larger number of symbols can be saved when entered in a form field. Nevertheless, please note that text entries in proposals submitted before this upgrade will not benefit from the same possibility. CHANGES IN THE PROPOSAL FORM: In the framework of the CALIPSOplus EU project, in order to offer a better service to users, all European synchrotrons and free-electron lasers (FELs) have agreed upon a common list of proposal form labels. Therefore, some labels in the European XFEL proposal form in UPEX had to be changed with respect to the past calls. You will find more information about this under https://www.wayforlight.eu/users/spf.

¹ Following the ISO/IEC 8859-1 standard

In May 2019, the EXPERIMENT DESCRIPTION template for regular proposals (see Section 2.3.4.8, "Description of proposed experiment") was amended to reflect this standardization.

XFEL.EU TN-2017-001-3.2 April 2025
UPEX: Experiment Proposal and Registration Guide 7 of 56

1 Registering in UPEX

At the present stage, prospective users need a valid account in the User Portal to the European XFEL (UPEX) to be involved in any of the following tasks:

- Submitting a proposal (Main Proposer)
- Appearing on a proposal as Principal Investigator or Co-Proposer
- Reviewing proposals as a member of a Proposal Review Panel (PRP) or as an external referee
- After a proposal has been allocated beamtime, being assigned to the experiment as a member of the user team (in case there is no perfect match with the list of proposers)

These different tasks are possible in the normal user role. This implies that none of the above is possible if registration in UPEX has not been correctly completed at a previous stage. Please allow for some time for processing in case your affiliation is not yet in our database and needs to be added by the EuXFEL User Office. In the future, more access functionality may be included.

1.1 How to register

To register in UPEX, follow these steps.

- 1 From the EuXFEL website, and click on the link to UPEX: https://in.xfel.eu/upex
- 2 At the bottom of the UPEX log-on page, click **Create New Account** to open the registration form.
- **3** Fill in all fields, as requested. Fields marked with an asterisk (*) are mandatory.

April 2025 8 of 56 XFEL.EU TN-2017-001-3.2

1.1.1 Registration rules

When registering in UPEX, follow these rules:

■ Username

Usernames can have only 4 to 8 lower-case alphabetic characters (a–z). They are case-sensitive and must be unique.

■ Password

Passwords are case-sensitive and must have at least 6 characters.

■ Email address

An existing unique email address is required to register. All correspondence relevant to the project and other important information will be sent to the email address you indicate. Please make sure you enter this information correctly.

■ Position

When attributing the Principal Investigator responsibility in your proposal, make sure that the relevant UPEX user has a staff position and that this information is stated in the profile field appropriately.

Affiliation

Select an affiliation from the existing database by clicking Select My Institute and searching by the name of the organization (mostly full name, abbreviation, or both) or town. If you do not find your affiliation, or if the name, address, or department is not correct, click the appropriate link at the bottom of the form to request support from the EuXFEL User Office by email (useroffice@xfel.eu) and give the correct information. The same applies if your department is not listed for an organization that is already in our database.

1.1.2 Email verification

After you have registered, a validation email is sent to your email address.

CAUTION: This does not apply to EuXFEL or DESY staff.

To validate your email, click the validation link in the body of the message. Before you do this, make sure that the complete validation link is fully marked

XFEL.EU TN-2017-001-3.2

April 2025

as such. If it is not, you can copy and paste the link in the body of the validation email into the location bar of your browser.



CAUTION: The validation must be completed within 24 hours from the time of registration. Failure to complete the validation in this timeframe will result in removal of the account.

1.1.3 Mailing lists

On registration to UPEX, you can subscribe to a number of mailing lists on specific topics related to our facility. Once you have a UPEX account, you can manage these mailing list subscriptions directly from your normal user profile.

Figure 1: Mailing list registration selection on registration

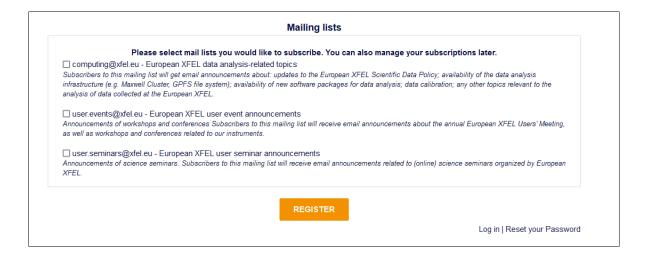
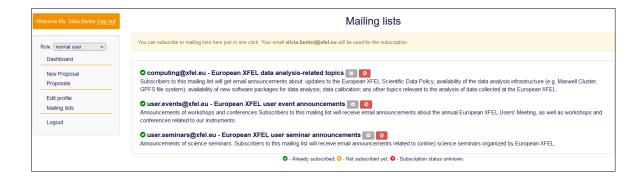


Figure 2: Managing mailing list subscriptions from the UPEX user profile



1.2 UPEX lightweight account vs. Campus account

During your registration to UPEX, a lightweight account will be created for you. This account will not provide access to any other service but UPEX.

If your proposal is awarded beamtime, you will need to access other DESY/EuXFEL campus infrastructure, resources, services, and software, such as safety training, experiment data processing system, different support resources, and so on. For this purpose, a Campus account will be set up for you (if you do not have one already). In due time, you will receive a notification email with your Campus account credentials and further instructions.

Please note:

- Campus accounts set up via UPEX lightweight accounts are provided and managed by the DESY registry. For the time being, you will get password expiration notifications from the DESY registry. However, password change or recovery takes place through UPEX. Please refer to the instructions below.
- You can create your Campus account password by clicking the link in the notification email (see above). Propagation of the new password to all of the services may take up to one hour.
- More details will be provided in the notification email, as already mentioned. Please DO NOT ignore it.

With your Campus account you will be able to access the online safety training system, metadata catalogue, and other services. We strongly recommend using your Campus account to log on to UPEX. Nevertheless, you may still use your lightweight account credentials for UPEX only (e.g. if you need to access UPEX urgently before a deadline but do not remember your Campus credentials).

If you have an existing DESY/EuXFEL Campus account (e.g. DESY or EuXFEL staff members), you are advised to use these credentials for logging on to UPEX and DESY/EuXFEL Campus services. If you create a lightweight account in UPEX first, the relevant DESY/EuXFEL Campus account will be automatically associated with the lightweight one and can be used from this moment onward.

1.2.1 Changing passwords for Campus or UPEX lightweight accounts

The passwords for both your UPEX lightweight account and your Campus account can be changed from your Edit profile page after you log on to UPEX:

https://in.xfel.eu/upex/user/edit_profile?role=1

1.2.2 Recovering passwords for Campus or UPEX lightweight accounts

For any UPEX lightweight accounts and any Campus accounts *created by EuXFEL via the UPEX account*, you can reset the password from the UPEX password recovery page:

https://in.xfel.eu/upex/password/request_reset

If you forget your EuXFEL/DESY Registry staff password, contact the IT administration of the organization to which you belong.

1.2.3 Checking your account

To resolve account issues, you can check in UPEX whether your credentials are correct and also get useful information about your account(s) on the "Check your account" page:

https://in.xfel.eu/upex/password/check

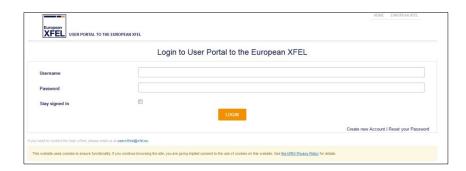
1.3 Log-on screen

Figure 3 shows the log-on screen of UPEX. At the top of the screen, you have the option to authenticate by using specific UPEX account credentials or

April 2025 **12** of **56** XFEL.EU TN-2017-001-3.2

EuXFEL/DESY credentials. If you already have an account in UPEX, enter your username and password to log on to the system.

Figure 3: UPEX log-on screen



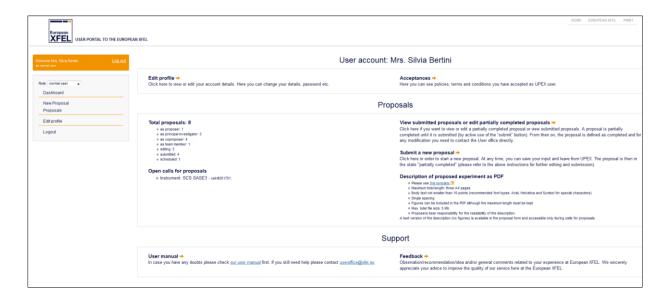
If you do not remember your password, you can click Reset Your Password, enter your username or the email address you listed when registering your account in UPEX, and confirm Reset Your Password. A password reset link will be sent to the email address (see Section 1.1.1, "Registration rules"). Open the email and click the reset link. You will be then re-directed to UPEX. Enter and confirm your new password in the form displayed. From there, you will be able to log on directly. The new password will be active for all subsequent log-ons.

NOTE: If you do not remember your username, request a reset link by indicating your email address. The username will be indicated in the form displayed in UPEX after clicking the reset link. Otherwise, contact the EuXFEL User Office (useroffice@xfel.eu).

1.4 Your UPEX homepage

When you register for UPEX, the Normal User role is assigned to you by default, as shown in Figure 4.

Figure 4: Normal User dashboard in UPEX



1.4.1 Edit profile

If you select the Edit Profile option, you can update your personal details (e.g. including password, affiliation, and other contact information). After registration, it is possible for you to update this information without limitation. However, after you first change your personal details, you will be allowed to change them again only 7 days later.

1.4.2 Proposals

You can also access all of the functions described below through the left sidebar on your dashboard. If more than one UPEX role has been assigned to you, you can switch to the relevant dashboard (and the relevant options) from the dropdown list at the top of the left sidebar.

1.4.2.1 View or edit a partially completed proposal or view submitted proposals
 By clicking the link View or Edit Partially Completed Proposals, you can view some information about the number of proposals in which you are involved.

A proposal is "partially completed" until it is actively submitted (by clicking the Submit button). From then on, you will not be able to change anything in the proposal.

April 2025 **14** of **56** XFEL.EU TN-2017-001-3.2

By selecting the link, you can access an overview of the proposals you are involved in as Main Proposer, Principal Investigator, or Co-Proposer, as shown in Figure 5. You can also view or download them as a PDF. Only Main Proposers have the permission to edit partially completed proposals (i.e. proposals in Editing status they have generated; see the green Edit icon (②) in Figure 5) and submit them before the call deadline.

XFEL USER PORTAL TO THE EUROPEAN XFEL Proposals ld ↓ Title If Instrument If 2095 test 2 Markus Scholz Markus Scholz SCS SASE3 6 Submitted 2017-09-26 08:15:34 ☑ ♠ ± Edit profile Mrs. Silvia Bertini SCS SASE3 8 Submitted 2094 Test proposal WM Dr. Wolfgang Morgenroth 2017-09-25 17:15:31 Ø⊕± 2092 test 1 Markus Scholz Markus Scholz SCS SASE3 5 Submitted Ø⊕± 2090 test for Sample sheet Mrs. Silvia Bertini Mrs. Silvia Bertini SCS SASE3* 5 Editing Ø⊕± 2089 Test Proposal with new UPEX Ms. Giulia Quondam Ms. Giulia Quondam SCS SASE3 5 Submitted Ø⊕± Ø⊕± 2085 Test Proposal GQ Ms. Giulia Quondam Ms. Giulia Quondam MID SASE2 2017-04-19 10:04:55 2073 Proposal number 2073 Ms. Halimah Shie Mrs. Silvia Bertini FXE SASE1* 4 Editing 2016-11-21 11:39:20 Ø⊕± Mr. Useroffice Mr. Useroffice Useroffice SCS SASE3* 10 Editing 2017-08-31 10:05:09 Ø⊕±

Figure 5: Overview of proposals in UPEX

1.4.2.2 Proposal withdrawal

To withdraw a submitted proposal, contact the EuXFEL User Office (<u>useroffice@xfel.eu</u>).

1.4.2.3 Submit a new proposal

Clicking Submit a New Proposal enables you to start the process of submitting a new proposal by opening the EuXFEL proposal form. Refer to the call announcement and Chapter 2, "Submitting proposals", for information about regular and special proposals.

1.5 Icons used in UPEX

In the UPEX graphical user interface (GUI), you can hover your mouse over any icon to get context-sensitive help. Clicking the icon executes the action.

Table 1: Definitions of UPEX icons

lcon	Name	Action			
0	View	View a proposal in the UPEX GUI.			
₹	Download	Download the PDF file of a proposal in which you are Main Proposer, Principle Investigator, or Co-Proposer at any stage.			
Ø	Edit (green)	Edit the document/section of a form			
Ø	Edit (grey)	Editing function is not available. For example, if this icon appears in the proposal overview on your dashboard, either you are not the Main Proposer who initiated submission and you do not have the corresponding privileges or the proposal was already submitted. For details, see Section 2.1, "General rules".			
	Delete	Delete a specific form section.			
,	Clone	Clone the current section (e.g. a sample sheet) and edit the copy to produce a new section.			
*	Group coordinator (grey)	Main Proposer or other user team member who is attributed group coordination responsibility.			
*	Select new group coordinator (green)	Select a new group coordinator among the members of the team (e.g. if the Main Proposer will not attend the experiment).			
Д	Sample coordinator	Select a sample coordinator within the team—this designation can be changed at the A-form step.			
	Experiment data contact	Experiment data contact (EDC), as selected in the beamtime acceptance confirmation form—the Main Proposer cannot edit this assignment later in the A-form.			

2 Submitting proposals

Updates on the status of the European XFEL (EuXFEL) can be found on our website (www.xfel.eu). Information on instruments available to users is found in each specific call for proposals. It is recommended contacting the scientific teams of the instruments you are interested in well before submitting your proposal. Useful contacts are provided in Appendix A, "Useful email contacts".

2.1 General rules

When submitting proposals, follow these important rules:

- To submit a proposal for beamtime at EuXFEL or be added as Co-proposer or Principal Investigator to the proposal, you must have a UPEX account.
- After a specific instrument and call is selected, in the first step of proposal submission, it is not possible to change it after this step.
- Submission is possible only <u>before</u> the deadline specified in the relevant call—note date **and time**. After the deadline, it is <u>not</u> possible to submit proposals.
- Only complete proposals are accepted.
- Editing of not-yet-submitted proposals is possible only by the Main Proposer.
- It is <u>not</u> possible to save a page of the Proposal Form (PF) that contains incomplete mandatory fields.
- After submission, you will not be able to change a proposal by yourself.
- Information requested in the fields marked with an asterisk (*) is mandatory

XFEL.EU TN-2017-001-3.2

April 2025

- The experiment description is mandatory (see Section 2.3.4.8, "Description of proposed experiment").
- Submission of the experiment report for standard experiments is required, at the latest, between 3 to 6 months after end of the last shift of the experiment. However, in the event of new proposals or continuation proposals by the same scientists (as Main Proposers and/or Principal Investigators), you must submit experiment reports via UPEX about all previous measurement(s) by the deadline for experiment reports indicated in the relevant call for proposals, including
 - Those carried out close to the proposal submission deadline
 - Experiments whose scientific area or instrument is different from those relevant to your new proposal
- Provide a reference to this experiment in your new proposal by indicating the corresponding previous experiment ID in the Continuation/Resubmission field in the General part of the proposal form in UPEX. "Continuation" refers to continuation of previous experiments conducted at EuXFEL. "Resubmission" generally refers to declined proposals submitted again to the facility, with or without changes (see also Section 2.3.4.6, "Proposal continuation or resubmission").
- On request, the User Office can generate clones of previously submitted (and declined) proposals to be edited by the same Main Proposer before resubmission. Proposers can request support from the User Office <u>useroffice@xfel.eu</u> for this purpose up to 48 hours before the deadline of an open call.

2.2 Attribution of responsibilities within the user team

Please note that the attribution of functions within the user team (e.g. Main Proposer, Principal Investigator, and descriptions of other tasks for the

April 2025 **18** of **56** XFEL.EU TN-2017-001-3.2

experiment in case the proposal is allocated beamtime) has to be done through the selection of the relevant scientists at the proposal submission stage. Each scientist mentioned in a proposal with the role of Principal Investigator, Main Proposer, or Co-Proposer receives an email confirmation from UPEX on proposal submission.

Main Proposers / Principal Investigators must seek the approval of all scientists they wish to add to the list of co-proposers of the proposal BEFORE proposal submission.

If you think that your name has been added to a proposal in error, please contact the EuXFEL User Office as soon as possible after receiving the automatic notification from UPEX.

2.2.1 Principal Investigator

Besides being in most cases the lead researcher or one of the lead researchers of the project addressed in the proposal, for the purpose of access to the EuXFEL facility, the Principal Investigator is specifically identified among the authors of the proposal and bears exclusive long-term responsibility for experiment, especially for the data generated by the experiment. Regarding this topic, reference should be made to the applicable Scientific Data Policy of EuXFEL.

2.2.2 Main Proposer

A UPEX user submitting a proposal automatically becomes the Main Proposer and may differ from the scientist designated as Principal Investigator. If this is the case, it is assumed that the Principal Investigator has delegated to the Main Proposer responsibility for acting as contact person for proposal authors (including communication of the outcome of the reviews) and practical preparations before and during the experiment, if the proposal is awarded beamtime.

2.2.3 Proposers

The (Co-)Proposers are all scientists identified as authors in the proposal.

2.2.4 Participants in the experiment

The Participants are the scientists designated to take part in the actual measurements at the EuXFEL facility. They may also differ from the authors of the proposal.

2.2.4.1 Group coordinator

By default, the Main Proposer has the responsibility of onsite group coordinator for the experiment. The responsibility can be shifted during the A-form submission (see Section 3.2.1, "A-form (Arrival Form)") to other team members, but it should be justified, e.g. if the main proposer is not able to attend the experiment.

2.2.4.2 Sample Coordinator

Designation of a Sample Coordinator must be made in the proposal submission step. It is marked with a specific icon (\mathbb{L}). If the proposal is allocated beamtime, this scientist will have the responsibility for all sample-related topics. Later, if required, this selection can be changed on the A-form submission.

2.2.4.3 Experiment Data Contact

The Experiment Data Contact (EDC) is a member of the experiment team, designated by the Main Proposer in UPEX, at the Beamtime Confirmation Form submission stage, to act as the contact person for data-related aspects of the proposal. In the A-form, this UPEX user is marked with a specific icon (\$\bilde{\Bmathbf{E}}\$).

For more information about this role, refer to our policies:

https://www.xfel.eu/users/policies/

2.3 EuXFEL regular proposal form

2.3.1 Choice of scientific instrument

Before filling in the proposal form, the choice of the scientific instrument (and, consequently, the relevant Proposal Review Panel) is made. Each Proposal Review Panel reviews all proposals submitted for allocation to one specific instrument. Only instruments available in a given call for proposals will be displayed in the relevant dropdown.

Once the step "save and continue" has been selected at the start of the form, it will not be possible to change the instrument(s) in this proposal any longer.

Figure 6: Choice of instrument (and complementary instrument for cross-instrument proposals)



2.3.2 Cross-instrument proposals

Highly targeted experiment proposals for a specific instrument have better chances of success. If, on the advice of our scientists, specific parts of your proposal should be conducted on an additional EuXFEL instrument subsequently or in parallel, the selection of a complementary instrument is possible before filling in the proposal form.

Make sure that the proposal addresses the experiment sessions on both instruments exhaustively, including the part "Beam properties and instrument configuration". For scheduling reasons, the proposal will receive individual IDs on submission and will be reviewed by both instrument Proposal Review Panels concerned.

XFEL.EU TN-2017-001-3.2

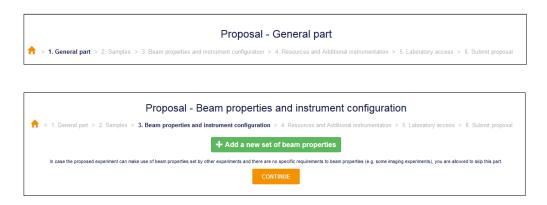
April 2025

CAUTION: The cross-instrument proposal option must **not** be used for aiming the submission of the same proposal to two different instruments—this will **not** increase the chances of allocation and may lead to withdrawal of one or both proposal(s) from the review process.

2.3.3 Navigation

Once you have opened the proposal form, the breadcrumb navigation at the top center enables you to navigate from one section of the form to the other, as shown in Figure 7. However, you have to create and save a "General part" before proceeding with other sections. It is recommended to fill in each section of the form sequentially, one section after the other.

Figure 7: Inactive (top) and active (bottom) breadcrumb navigation at the top of different parts of the proposal form



2.3.4 General part

2.3.4.1 General information

The "General part" of the proposal gives some basic information on the project and the scientists involved. Some general information, like affiliation to a user consortium or the involvement of industrial users in the project, is requested only for **statistical/informative** purposes and **has no influence on the ranking of the proposal**. The same applies to the selection of the scientific area or EuXFEL societal challenge, or a statement on expected innovative impact of the project.

April 2025 **22** of **56** XFEL.EU TN-2017-001-3.2

In this part, you must define whether the proposal is a resubmission or the continuation of a previously submitted proposal. **Make sure you indicate the correct ID of the previous proposal of reference in the text box.**

2.3.4.2 EuXFEL and societal challenges

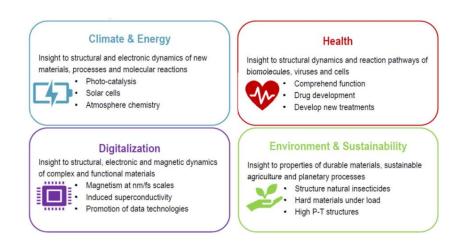
EuXFEL is committed to contribute to the progress towards the solution of specific societal challenges, also through the expected scientific output of user experiments. More information about these challenges is in Figure 8 below.

Through the corresponding dropdown in the proposal form, please try and indicate the societal challenge that is most relevant to the research topic and expected impact of your proposed experiment among the following:

- Climate & Energy
- Digitalization
- Health
- Environment & Sustainability

However, the additional option "Fundamental Science" is also available.

Figure 8: EuXFEL and societal challenges, in addition to Fundamental Science



2.3.4.3 Previous FEL experiments

Give information on previous experiments at FELs related to this proposal.

2.3.4.4 Previous FEL experience

Give details about proposers' experience at FELs, e.g. list of facilities at which they have worked already (as users or staff).

2.3.4.5 Instrument team contacted

Discussion of your proposal with the instrument scientists is strongly encouraged and even **mandatory** in certain cases (please refer to the call for proposals). Discuss the feasibility of the conditions required by your experiment with the instrument scientific team BEFORE submitting your proposal and give details in this field (e.g. name of team member, date of communication).

2.3.4.6 Proposal continuation or resubmission

By selecting continuation or resubmission of a proposal, you will be requested to select the ID number of the relevant previous project(s) from a drop-down menu listing the ones submitted at an earlier stage. All existing ID numbers are visible to all UPEX users, but you will see only the titles of proposals to which you were already related in the past (e.g. as proposer or experiment team member) and for which you have viewing rights.

In case of a proposal continuation, it is mandatory to indicate the main objectives continued in the present proposals and, in case of a proposal resubmission, the main changes with respect to the preceding version.

For resubmissions, on request, the User Office can generate clones of previously submitted (and declined) proposals to be checked and edited, as required by the same Main Proposer before resubmission. For this purpose, proposers must request support by the User Office (useroffice@xfel.eu) up to 48 hours before the deadline of an open call. Since the process is not straightforward, the User Office may not be in a position to accommodate "cloning" requests reaching us later, closer to the call deadline.

2.3.4.7 Abstract

The abstract consists of a maximum of 1000 characters. This is the first information that the reviewers will see about your project.

2.3.4.8 Description of proposed experiment

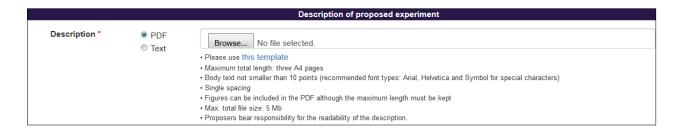
This part of the proposal is mandatory. Using the radio buttons in the form, you can choose between uploading the description to UPEX as a PDF (Adobe Portable Document Format, recommended in case of figures and/or formulas) or including the description as text, as shown in Error! Reference source not found.. The RTF (Rich Text Format) form file for the preparation of the final PDF file is also accessible on your UPEX dashboard.

In order to offer a better service to users, all European synchrotrons and freeelectron lasers (FELs) agreed upon a common list of proposal form labels at the end of 2018. The experiment description template in use at EuXFEL was amended in May 2019 to reflect this standardization.

For more information about this, see the following:

https://www.wayforlight.eu/users/spf

Figure 9: Choosing between PDF upload and text descriptions in the "Description of proposed experiment" section of UPEX



2.3.4.8.1 Description of experiment – PDF upload option

An RTF file template can be downloaded directly by clicking the link **Please Use This Template** on the UPEX dashboard.

Rules for using the PDF upload option in **regular proposals**:

■ Maximum total length:

Three A4 pages.

■ Minimum body text size:

10 points.

■ Recommended font types:

Arial, Helvetica, and Symbol (for special characters).

■ Line spacing:

Single spacing.

■ Figures:

May be included in the PDF as long as they do not exceed the page margins or maximum file size.

■ File size:

Maximum total file size of 5 MB.

■ Responsibility:

Proposers bear responsibility for the readability of the description.

Publications illustrating the scientific case should be added in this section. Mandatory information: title, authors (and their affiliations), journal name, volume, issue, and year of publication.

For special proposals (e.g. Protein Crystal and Sample Screening, Long-Term Project proposals) requirements vary. Please refer to the information in Section 2.4, "Special proposal forms".

2.3.4.8.2 Description of experiment – Text option

A text form is provided for this option. You can then type (or paste) the answers to the relevant questions directly into the form. However, it is not possible to include figures or use symbols or special characters (other than Latin and Western Europe characters) in this section.

In the regular proposal form, the maximum number of characters for this section, including headlines and questions, is 17 000. That is, your own text

April 2025

XFEL.EU TN-2017-001-3.2

26 of **56**

cannot exceed 16 650 characters when replacing the text already included in the form in square brackets ([...]) by the experiment description.

Publications illustrating the scientific case should be added in this section. Mandatory information: title, authors (and their affiliations), journal name, volume, issue, and year of publication.

2.3.4.8.3 Publications by the proposers

This section has the purpose of giving information about the scientific activity of the proposers related to the project detailed in the proposal.

List up to 15 articles, reports, and/or proceedings published by the proposers over the past three years that are related to this proposal. If possible, include the DOIs or PubMed IDs.

NOTE: The "Publications by the proposers" and the "Publications illustrating the scientific case" sections are still under development and will evolve over the next few calls for proposals to become more user-friendly. Many thanks in advance for your patience.

2.3.4.8.4 Suggested reviewers to avoid

All proposals will be peer-reviewed, as detailed in the Terms of Reference of the <u>EuXFEL Proposal Review Panels (PRPs)</u>, and will be evaluated by Members of the PRPs and, if required, by external experts. In the textbox "Suggested reviewers to avoid", you may want to give information about scientists who could have a potential conflict of interest and should therefore not review the proposal.

2.3.4.8.5 Peaceful use of EuXFEL facility

The EuXFEL pursues research for peaceful purposes only. Please confirm by selecting the appropriate box that the present proposal exclusively aims at and promotes peaceful purposes. You cannot proceed with your proposal submission until you have electronically confirmed this.

2.3.5 Sample and Substance Sheet

Fill in one form for each sample and substance to be used in your experiment.

List all samples and substances that you are planning to use in the experiment.

If your proposal is successful, after scheduling, you will be requested to confirm the samples or substances you intend to use in your experiment. Unilateral changes in the samples or substances mentioned in the experiment proposal are not acceptable. If, for serious reasons, the planned samples or substances are not available for the experiment and others need to be used, the EuXFEL Management Board will decide on the case after approval by the Safety and Radiation Protection (SRP) group and a technical assessment by the instrument group supporting the experiment. In order to inform the EuXFEL facility of this situation and request an authorization to replace a sample or substance, contact the EuXFEL User Office in writing and provide details. Ideally, this should happen at the stage of registration of the user group, in normal circumstances, four weeks before the experiment, and, in any case, not later than two weeks before the experiment. The proposers will be informed about the outcome of the change request as soon as possible.

Make sure you complete and save a Sample and Substance Sheet before you open a new one. After saving a complete Sample and Substance Sheet, you have the option of opening a new Sample and Substance Sheet, or cloning or deleting the one you are currently working on.

The Save button at the bottom enables you to save the form only if the data entered are complete. The Save and Continue button enables you to save the form if it is complete and move to the next step.

As a Main Proposer, you will be requested to certify that all details given in the Sample or Substance Sheet are complete and correct.

You will be requested to state whether a **specific sample requires long preparation** between notification of the outcome of the beamtime allocation process and the experiment (three months or longer). In this case, we will

attempt to schedule your experiment with a delay of at least three months from the moment of notification. Note that this will create an additional scheduling constraint for your experiment. Consider that long delivery time for chemicals used in sample preparation may have a similar impact!

Each Sample and Substance Sheet must include a general part and <u>at</u>

<u>least one</u> of the following specific sections: biological/isolated from

biological substance, hazardous, nanomaterial, or other samples or

substances.

NO experiments with live animals and humans are permitted at EuXFEL.

Note that it is **not permitted to bring any radioactive samples or equipment** at EuXFEL—*unless* duly authorized by the Radiation Protection Commissioner.

More information about the authorization of radioactive samples is available on the "Radioactive Samples or Substances" section of our website:

https://www.xfel.eu/users/user_safety/samples_and_substances

If you are planning to use any radioactive equipment and this was previously clarified and agreed with EuXFEL, please complete Part 4, "Resources and additional instrumentation", of the proposal form.

2.3.6 Beam properties and instrument configuration

This part of the proposal form does not give any information on the actual properties available for each instrument in a specific allocation period. The actual information is available on the webpage of each scientific instrument and may change for each specific allocation period or run. In order to verify the feasibility conditions of your project, contact the scientific instrument groups (see Appendix A. "Useful email contacts").

2.3.7 Standard instrument configurations

An efficiency advantage can be established on some instruments with the development of "standard configurations". The goal is allowing user experiments to be grouped together back-to-back without involving a major change in setup every time. In addition, these will help provide a pathway to widen the user community by reducing the need for user teams to include the expertise needed to design/construct and install specific end station components. A range of standard configurations may be offered by an instrument, alternating throughout a period that covers several calls, to limit the range of required setups on a temporary basis. Please refer to the call announcement and the instrument webpages. Contact the instrument scientists for details about available standard configurations.

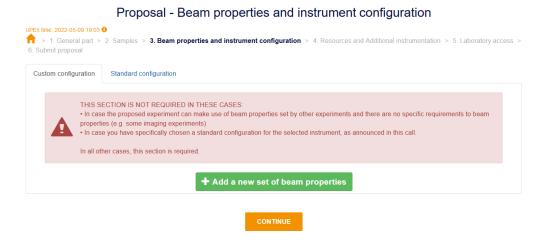
2.3.8 Choice between custom and standard instrument configurations / beam properties

At the start of the instrument configuration and beam property section, you will have to choose between a custom configuration (beam properties and instrument) and (one of) the standard configuration(s) for the selected instrument, as advertised in the call (see above).



CAUTION: Not all instruments in operation offer the option of one or more standard configurations in every call for proposals, please read the call announcement carefully before applying.

Figure 10: Choice of custom beam properties and instrument configuration



CAUTION: SECTION 3 (with custom configuration information) IS NOT REQUIRED IN THESE CASES:

- In case the proposed experiment can make use of beam properties set by other experiments and there are no specific requirements to beam properties (e.g. some imaging experiments)
- In case you have specifically chosen a standard configuration for the selected instrument, as announced in this call.

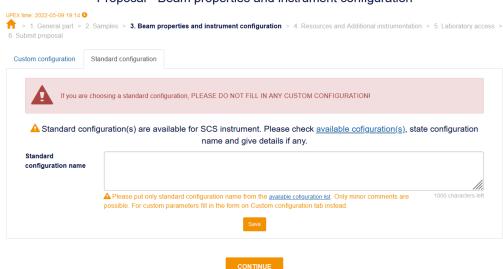
In all other cases, this section is required.

If you need specific beam properties and custom configuration information, it is possible to apply for a main set of beam properties and two secondary ones.



CAUTION: Multiple sets of beam properties may limit feasibility and allocation possibilities of your proposal.

Figure 11: Choice of a standard configuration specific to the selected instrument – these options may evolve in time specifically to each call



Proposal - Beam properties and instrument configuration

2.3.8.1 Single pulse properties

Indicate the photon energy range that would make your experiment possible.

Refer to the specific range of each instrument in the allocation period of reference:

https://www.xfel.eu/facility/instruments

XFEL.EU TN-2017-001-3.2

April 2025

In addition, you must indicate the following:

- Bandwidth
- Pulse duration
- Min required pulse energy
- Spot size (diameter)

Prioritize each of the properties requested through the dropdown menu by selecting No Priority, Low Priority, or High Priority.

Describe any special/additional requirements in the appropriate text box at the bottom of the section.

2.3.8.2 Requested pulse pattern

Refer to the information on each specific instrument for the relevant call:

https://www.xfel.eu/facility/instruments

In this section, you are requested to specify the number of pulses per train, the pulse train length, and the requirements on special patterns.

Add any special or additional requirements in the Special Pattern text box at the bottom of the section.

To edit any field contained in the Beam Properties and Instrument

Configuration section, or to add new information, click the **green edit icon**(2). To delete the set of beam properties, click **red delete icon** ()

Figure 12: Overview of a completed Beam Properties and Instrument Configuration section



2.3.9 Resources and Additional Instrumentation

In the Resources and Additional Instrumentation section, you are requested to give details about further resources and instrumentation needed for your experiment. Provide information that is as accurate as possible since, in addition to the review outcome, the planning of the proposal is based on this information.

In particular, provide information about **optical lasers**, **required detector configuration**, **sample delivery**, **and any other equipment you may need**. Enter **requirements about typical laboratory equipment** in the **Laboratory Access section**.

The use of user-supplied instrumentation or equipment in the experiments requires feasibility, safety, and integration pre-assessment. If you are planning to include in your proposal user-supplied instrumentation or equipment, please contact the relevant scientific instrument team well before proposal submission in order to verify feasibility and declare this in the specific field for each piece of equipment. Below you will find rules for user-supplied instrumentation and equipment.

2.3.9.1 Rules for user-supplied instrumentation and equipment

In general, user-supplied equipment, instrumentation, and tooling shall only be used in experiments after testing and agreement by EuXFEL. Complete information about user-supplied equipment, instrumentation and tooling shall be provided at the proposal stage at the latest (cf. 1 below).

1 If the Principal Investigators, Proposers, and/or Participants in an experiment plan to bring their own equipment to use at EuXFEL, either on the instrument or in the user laboratories for sample preparation, this must be discussed with the relevant scientists of the instrument or laboratory well before proposal submission. If needed, the scientists will then address the relevant experts from the EuXFEL support teams. The equipment shall be described in the proposal and will be subject to

- acceptance by EuXFEL in the framework of the feasibility checks about the projects.
- 2 Equipment needs to be checked by the Safety and Radiation Protection (SRP) group, and Principal Investigators, Proposers, and /or Participants may be requested to provide a risk analysis of the equipment, depending of the outcome of the proposal evaluation. All material, including samples and equipment brought to the EuXFEL facility remains entirely the responsibility of the Principal Investigators, Proposers, and Participants. Depending on the proposal evaluation, further tests or modifications to the equipment could be required to adapt it for use at the EuXFEL facility well before the experiment, generally at the costs of the user group.

2.3.9.2 Optical lasers

Click the green Add Optical Laser button in order to open the form to enter the required parameters: Description of Laser Usage, Wavelength, Pulse Duration, Pulse Energy, Focus/Beam Size, Delay Range, and Information or Required Pattern. Special requirements should be detailed in the text box.

For information about maximum laser performance, refer to Table 2, which summarizes set points at the start of operation of the EuXFEL facility.

For further information, please contact the instrument scientists (see Appendix A, "Useful email contacts") before proposal submission.

Table 2: Basic EuXFEL pump–probe laser parameters and set points (courtesy of EuXFEL Optical Lasers group)

Set point	Laser rep. rate [MHz]	Center Wavelength [nm]	Pulse duration for 800nm	Pulse duration for 1030nm	Energy/pulse at 1030nm	Energy/pulse at 800nm	
1	4.5	760 to 840 (tunable for 50 fs mode) 800 and 1030	` ns	400ps (chirped) or	1 mJ	60 uJ	
2	2.2				1,8 mJ	150 uJ	
3	1.1				3.6 mJ	250 uJ	
4	0.564				7,2 mJ	500 uJ	
5	0.282		800 and 1030 Uncompressed 250-300 fs	Uncompressed:	850fs	14,4 mJ	1 mJ
6	0.188			250-300 fs		21,6 mJ	1,5 mJ
7	0.112				36 mJ	2 mJ	

Notes:

- The laser pulses are synchronized to the X-ray pulses.
- Repetition rate and energy set points 1–7, in combination with wavelength and pulse-width settings, correspond to fixed laser set points. Arranging for a different set point requires a configuration change of the laser.
- From any set point repetition rate, pulse patterns can be selected as required, including single pulse selection on both wavelengths.
- Set points with dual wavelength output can be arranged on request.
- Variable attenuation is available on request.
- Beams are close to diffraction-limited.
- Harmonics are possible on request.
- For further details, contact EuXFEL before submitting your proposal.

2.3.9.3 Required detector configuration

Provide information and a justification on the planned use of detector(s) during your experiment:

- Detector type/name
- Sample-detector distance
- Planned use and special requirements (textbox)

For specific instructions refer to the relevant instrument page:

https://www.xfel.eu/facility/instruments

2.3.9.4 Sample delivery

Describe the required sample delivery in the text box.

2.3.9.5 Other equipment

This part must be completed **after consultation of the instrument scientists.** Provide details about the agreed requirements in the form.

2.3.10 Laboratory access

To fill out the Laboratory Access section correctly, refer to the **information about the EuXFEL user laboratories** available on our website:

https://www.xfel.eu/facility/user_laboratories

2.3.10.1 Laboratory workspace

In this section, you state the type of laboratory working space to which you are requesting (Biology Laboratory Risk Group 1 or 2 or other laboratories) with more detailed information that is useful for scheduling purposes (e.g. estimate of time needed at which type of working space, description of work, frequency of work during beamtime).

The size of a working space amounts to 1.2 or 1.5 metres each and, for biology laboratories, a max. of 4 working spaces can be requested at the same time.

2.3.10.2 Laboratory equipment

Independent of the access to workspace in a specific lab, you can separately request access to specific laboratory equipment.

To be able to fill out this section correctly, refer to the information about the EuXFEL user laboratories available on our website:

https://www.xfel.eu/facility/user_laboratories

Note that exclusive use of the equipment is not guaranteed.

In this section, you can also specify if you need to **access to gases** (Ar, N_2 , O_2 , CO_2 , pressurized air, or other).

2.4 Special proposal forms

2.4.1 Protein Crystal Screening (PCS) proposals

A specific call for protein crystal screening (PCS) at the SPB/SFX instrument combines sample characterization and injection tests in the laboratories, followed by screening beamtime at the SPB/SFX instrument.

These proposals principally aim at protein crystals; however, they can also include non-protein crystals or other diffracting protein samples (see respective call announcement and the SPB/SFX instrument webpages).

A specific ad hoc proposal form is available in dedicated screening calls, typically taking place at the same time as regular calls. However, in the near future, it is planned to allow submission of these proposals also "on demand", i.e. independently of regular calls.

The proposal form includes a general part (see Section 2.3.4, "General part").

The required experiment description focuses on the proposed sample(s) and their scientific relevance:

- Maximum total text length: 1–2 A4 pages
- Body text not smaller than 10 points (recommended font types: Arial, Helvetica, and Symbol for special characters)
- Single spacing

■ Figures can be included in the PDF although the maximum text length must be kept

Max. total file size: 5 Mb

■ Proposers bear responsibility for the readability of the description.

Proposers can choose to paste the above description into a free-text form, with a max. of 3 000 characters. However, in this case, no figures can be uploaded.

The PCS proposal form also includes a section in which more detailed information about the proposed sample(s), in the form of a number of sample sheets, is requested.

For screening proposals, the sections about Beam Properties, Resources and Additional Instrumentation and Laboratory access requirements are disabled. These are only available in the regular proposal form. In the case of PCS experiments, these conditions are pre-determined by the facility in order to reduce set-up changes.

2.4.2 Interleaved-mode proposals in DiPOLE XRD standard configuration at HED

The DiPOLE XRD standard setup at the HED instrument has proven to enable very efficient usage of beamtime, by interleaving even very different scientific projects using the same set-up. The DiPOLE shots delivered in intercalated repetitive manner allow the involved user groups to check results before going on with different samples and shot parameters.

More information:

https://www.xfel.eu/facility/instruments/hed/instrument_capabilities_call_for_proposals

The proposal form includes a general part (see Section 2.3.4, "General part"), whereas the experiment description focuses on the proposed sample(s) and their scientific relevance:

- Maximum total text length: 1.5 A4 pages
- Body text not smaller than 10 points (recommended font types: Arial, Helvetica, and Symbol for special characters)
- Single spacing
- Figures can be included in the PDF although the maximum text length must be kept
- Max. total file size: 5 Mb
- Proposers bear responsibility for the readability of the description.

Proposers can choose to paste the above description into a free-text form, with a max. of 9 000 characters. However, no figures can be uploaded to this form.

This interleaved-mode proposal form also includes a section in which more detailed information about the proposed sample(s), in the form of a number of sample sheets, is requested.

The sections about "Beam Properties", "Resources and Additional Instrumentation", and "Laboratory access requirements" are disabled for Interleaved-mode proposals in the DiPOLE XRD standard configuration. In this case, these conditions are pre-determined by the facility for simplicity and for reducing set-p change time.

2.4.3 Long-term projects

The integration of long-term project (LTP) proposals in the beamtime allocation system at EuXFEL is still in the pilot phase, and, in the relevant call, only pre-selected projects through an expression of interest process were invited to submit a LTP proposal. The successful projects have received beamtime over more than one allocation cycle. This system is under evaluation. Availability of similar options may be announced in future calls.

Generally, scientific excellence is the primary criterion for the acceptance of the LTPs.

Below are further criteria that can be used in the evaluation:

- Socio-economic added-value of the new scientific opportunity that opens up for the community.
- Commitment from the proposing user group concerning the contribution of human resources during the implementation of the project (sabbaticals, postdocs)
- Identifiable benefit to the EuXFEL user community (such as a new technique, a new instrument or new possibilities for the instrument) expected to result from the successful accomplishment of the goals for the LTP
- Involvement of research groups from underrepresented partner countries of the EuXFEL

2.4.3.1 LTP proposal form

This proposal form is very similar to the regular proposal form, whereas some sections have been adapted to the criteria for evaluation.

Especially, for LTPs, the involvement of research groups from partner countries of the EuXFEL (in particular by low-use partners) is expected. This should be clearly result from the list of proposers.

Furthermore, proposers are requested to give details about points:

- Socio-economic added-value of the new scientific opportunity that opens up for the community
- Commitment in terms of human resources by the proposers
- Identifiable benefit to the EuXFEL user community (such as a new technique, a new instrument or new possibilities for the instrument) expected to result from the successful accomplishment of the goals for the LTP

The specific LTP experiment description template can be downloaded from the UPEX dashboard only if the respective call is open (Figure 13).

Figure 13: Available templates for the experiment description part on the UPEX normal user dashboard, including the long-term proposal template

Description of proposed experiment as PDF

- Regular proposals: Please use this template (28.10.2019)
 - Maximum three A4 pages, max. file size 5 Mb
 - · More requirements in the template
 - A text version of the description (no figures) is available in the regular proposal form and accessible only during calls for proposals
- ∘ Long-term proposals (on invitation only): Please use this template (07.04.2022) 🗉
 - Maximum five A4 pages, max. file size 5 Mb
 - · More requirements in the template
 - No text version of the description is available for long-term proposals

Proposers bear responsibility for the readability of the uploaded PDF

In the same template, details about the experiment plan require the following input:

- Scheduling period: List of scheduling periods in which beamtime is requested (e.g. run 2023-01)
- Instrument(s) requested
- 8-hour shifts requested (in each scheduling period)
- Results expected in each scheduling period

In the UPEX electronic LTP form, details about the planned contributions in terms of instrumentation, services, and other resources on behalf of the proposers are required, including a brief description of the contributed resources and date of availability.

3 Registering for experiments in UPEX

3.1 Beamtime acceptance

Feedback about the outcome of the review and allocation process will be provided to all Main Proposers and Principal Investigators for all proposals submitted in a specific cycle as soon as possible after completion of the experiment schedule for the run of reference.

More specific information will be provided to Main Proposers and Principal Investigators of proposals allocated beamtime in order to prepare for the experiment, in particular about these processes:

- Submission of the beamtime acceptance confirmation form, for beamtime acceptance and designation of the Experiment Data Contact (EDC)
- Submission of the A-form, generally five weeks before the start of the experiment (including registration of the experiment team, confirmation of the samples/substances used during the experiments, user funding in case of eligibility, and request for support for practical arrangements)
- Details about the general online safety training, mandatory for all users
- Information about the shipping and customs notifications concerning samples and other items needed for the experiment

One or more local contacts among the EuXFEL scientists will be assigned to coordinate support to the experiment.

The Main Proposer is responsible for collecting information, coordinating arrangements, and transmitting details about registration of the experiment team to European XFEL (EuXFEL).

The electronic A-form has to be submitted for approval in UPEX five weeks before the start of the beamtime.

Only scientists registered through the A-form will be admitted to the experiment.

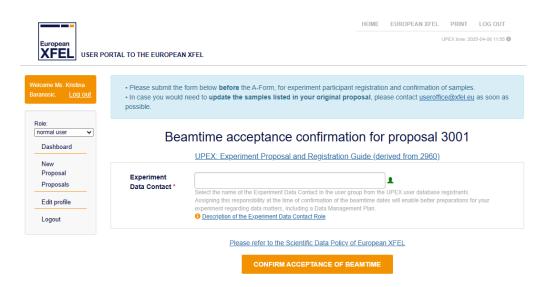
3.1.1 Beamtime acceptance confirmation in UPEX

The Main Proposer will be requested to submit a Beamtime Confirmation Form (BCF) in order to accept the beamtime and appoint the Experiment Data Contact (EDC) in the user group.

The Experiment Data Contact (EDC) is a member of the experiment team who will act as the contact person for data-related aspects of the proposal.

After submission of the beamtime acceptance confirmation form (see Figure 14), the proposal will be exported to myMdC, the European XFEL Data Management Portal and Metadata Catalogue, and the respective file system and logbook will be created well in advance of the start of the experiment, assuming that all required conditions are met and approvals by EuXFEL are in place.

Figure 14: Beamtime acceptance confirmation form



3.2 Registration of Experiment Team and Sample Confirmation (A-form) and Personal Arrival Form (PAF)

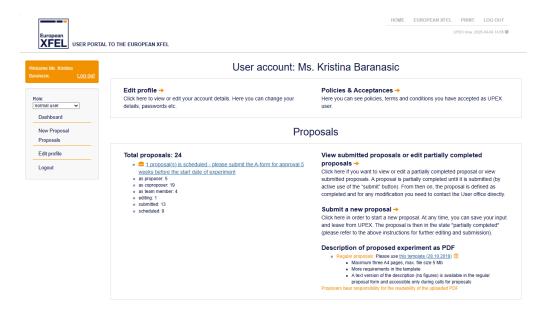
3.2.1 A-form (Arrival Form)

The A-form is the electronic form used for registering the experiment team and confirming samples and substances to be used in the experiment. Only the Main Proposer can fill in the A-form. Once a proposal has been scheduled, a yellow A-form icon () appears on the dashboard of the Main Proposer (Figure 15) with the text:

1 proposal(s) is scheduled—please submit the A-form at least 5 weeks before the start date of experiment

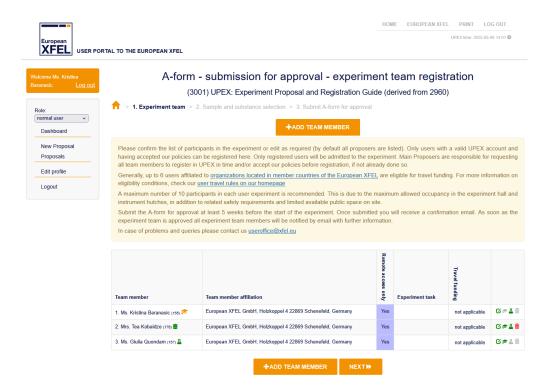
A link to the A-form in UPEX will also reach the Main Proposer with the notification about the scheduled experiment.

Figure 15: Dashboard access to the A-form generation



Clicking the icon or the link will open the list of your pending A-forms for scheduled proposals. Click the yellow A-form icon () on the right side to generate the electronic A-form.

Figure 16: First step of A-form: Registration of user group



By default, all scientists mentioned in the original proposal (Main Proposer, Principal Investigator, and Co-Proposers) are listed in the A-form as remote participants when it is generated.

By default, too, the UPEX user assigned as Experiment Data Coordinators (EDC) at the Beamtime acceptance confirmation step (see Section 3.1.1, "Beamtime acceptance confirmation in UPEX") will also be listed in the experiment team members in the A-form and marked by the green icon (\blacksquare). The experiment participation status of the EDC can be edited (see Section 3.2.1.1, "Editing the status of experiment team members").

The Main Proposer can edit the list of experiment members as follows:

- Add users by clicking on the orange Add Team Member button.
- Delete names already included in the list by clicking the red recycle bin icon (a) as required at the right of each record.

CAUTION: Only scientists registered in UPEX can be added to the A-form. It is the responsibility of the Main Proposers to make sure that all prospective members of the team create their personal accounts in UPEX in time and accept the latest versions of UPEX user policies, terms, and conditions. The A-form cannot be submitted if the users listed have not accepted all required policies and their updates. These users must log in to UPEX and accept the pending requirement to enable the Main Proposer to submit the A-form.

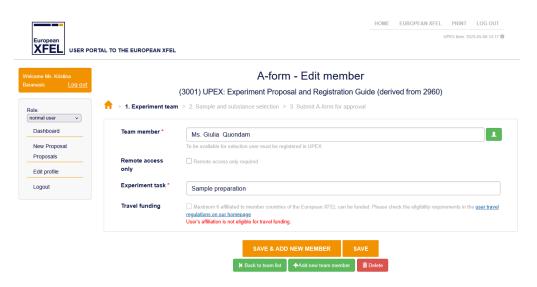
3.2.1.1 Editing the status of experiment team members

By default, the Main Proposer has the responsibility of group coordinator for the experiment. If, for serious reasons, this responsibility needs to be delegated to another member of the team, this is possible by selecting this function for the corresponding record already in the list by clicking on the green graduation cap icon (). Clicking the green edit icon () will enable the Main Proposer to edit the participation of each team member:

- Requesting on-site participation is possible by deselecting the "Remote access only" checkbox.
- If onsite participation is requested an experiment task needs to be entered for each onsite team member.
- The last checkbox is for requesting travel funding, this request is only possible for eligible users.
 - A maximum of 6 users affiliated to organizations in shareholder and associate countries of EuXFEL can be selected per proposal. Please note that users from the Hamburg/Schenefeld area are not eligible for funding. The maximum number of users that can receive travel funding per experiment may vary for special proposals (e.g. SPB/SFX PCS proposals or HED interleaved-mode DiPOLE XRD standard configuration proposals; see Section 2.4, "Special proposal forms").

- For complete information, refer to the <u>User Note "User Travel</u> <u>Regulations"</u> (XFEL.EU UN-2017-001).
- TIP: Funded users will have a slightly different Personal Arrival Form (PAF) than non-funded users (see Section 3.2.3, "Personal Arrival Form (PAF)"). The creation of a Campus account (see Section 1.2, "UPEX lightweight account vs. Campus account", for accessing the IT infrastructure needed for the experiment is triggered by submission of the A-form. The A-form can be saved as often as needed before submission.

Figure 17: A-form – Edit member of experiment team

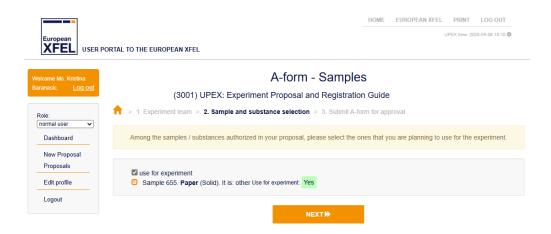


3.2.1.2 Confirmation of samples and substances used in the experiment

The form shown in Figure 18 enables the confirmation of the samples and substances used in the experiment, among the ones listed in the original proposal.

To confirm a sample or a substance, select the checkbox with the caption "Use for experiment" above the sample ID and name. Once a green "Yes" appears after the name of the sample or substance, the item is confirmed.

Figure 18: Sample/substance list



After the list is complete, you can go back to the list of experiment participants for further editing through the breadcrumb navigation at the top of the sample/substance list, as shown in Figure 19, or proceed to submission of the A-form for approval by EuXFEL by clicking the orange Next button at the bottom of the sample/substance list.

Figure 19: Breadcrumb navigation



3.2.1.3 Submission of A-form for approval

The A-form can be submitted by clicking the blue button at the bottom of the "Submit the A-form" page.



CAUTION: Please review the A-form carefully before submission. After submission, it cannot be edited. All members of the team appearing in A-form will be notified by email after the A-form is approved by EuXFEL. If corrections are necessary after submission, please contact the User Office (useroffice@xfel.eu).

3.2.2 A-form (Arrival Form): Summary

The A-form includes the following:

- Confirmation of samples/substances to be used during experiments (to be chosen among the samples/substances included in the original proposal).
 Please refer to our <u>policy for samples and substances</u> for detailed information.
- Designation of onsite users and their experiment tasks.
- Designation of funded users. Detailed information about eligibility criteria and travel funding under user travel regulations.
- Designation of remote-access users.
- Designation of group coordinator on site (if there are changes with respect to the selection made on proposal submission)—marked by a specific icon (♠)—can be managed from the A-from
- Designation of sample coordinator (if there are changes with respect to the selection made on proposal submission)—marked by a specific icon (▲)—can be managed at the A-form step.
- Designation of the Experiment Data Coordinator (EDC), marked by a specific icon (●). Even if the UPEX user assigned as EDC at the Beamtime confirmation step is not a Co-Proposer, their name will be added to the A-form by default.

The A-form must be completed and submitted at least five weeks before the start date of the experiment. Timely submission is in the interest of the user team. This is particularly crucial for practical arrangements (access, accommodation, and travel support), computing accounts, and other aspects of the experiment support. If submissions are late, the User Office cannot guarantee that the requested support is provided. A-form submission will trigger an automatic email to all registered onsite and remote participants. In this email, the onsite participants will receive with a link under which a specific form, the Personal Arrival Form (PAF) (see Section 3.2.3, "Personal Arrival Form (PAF)"), will be available. The aim of the PAF is to collect all necessary information for requested support as efficiently as possible.

XFEL.EU TN-2017-001-3.2

HOME EUROPEAN XFEL PRINT LOG OUT XFEL USER PORTAL TO THE EUROPEAN XFEL A-form - submission for approval - experiment team registration (3001) UPEX: Experiment Proposal and Registration Guide (derived from 2960) 1. Experiment team > 2. Sample and substance selection > 3. Submit A-form for approv normal user v Please confirm the list of participants in the experiment or edit as required (by default all proposers are listed). Only users with a valid UPEX account and having accepted our policies can be registered here. Only registered users will be admitted to the experiment. Main Proposers are responsible for requesting all team members to register in UPEX in time and/or accept our policies before registration, if not already done so. Generally, up to 6 users affiliated to <u>organizations located in member countries of the European XFEL</u> are eligible for travel funding. For more information on eligibility conditions, check our <u>user travel rules on our homepage</u> A maximum number of 10 participants in each user experiment is recommended. This is due to the maximum allowed occupancy in the experiment hall and instrument hutches, in addition to related safety requirements and limited available public space on site. Submit the A-form for approval at least 5 weeks before the start of the experiment. Once submitted you will receive a confirmation email. As soon as the experiment team is approved all experiment team members will be notified by email with further information. In case of problems and queries please contact us $\underline{\mathsf{useroffice}} \underline{\mathsf{wxfel.eu}}$ Team member affiliation 9 Experiment task 1. Ms. Kristina Baranasic (155) European XFEL GmbH, Holzkoppel 4 22869 Schenefeld, Germany No Experiment coordination Ø#**Z**î No No Sample preparation 2. Ms. Giulia Quondam (157) 🗸 European XFEL GmbH, Holzkoppel 4 22869 Schenefeld, Germany Ø≠4 î No

Figure 20: Designation of group coordinator and sample coordinator from the A-form

3.2.3 Personal Arrival Form (PAF)

3. Mrs. Tea Kobaidze (176)

The Personal Arrival Form (PAF) is the electronic form in UPEX that each experiment participant has to fill in before arriving at EuXFEL.

European XFEL GmbH, Holzkoppel 4 22869 Schenefeld, Germany

After the A-form has been submitted by the Main Proposer and approved by the User Office, all authorized onsite participants will be able to fill in and submit the PAF. The link to the PAF is sent in an email from UPEX and can be found on the normal user UPEX dashboard. Depending on whether travel funding has been requested, the PAF will contain different fields. The aim is to collect all necessary information for requested support and arrangements as efficiently as possible. In this form, each participant should provide access information and may request practical arrangements as described in the following sections.

The Personal Arrival Forms must be submitted **at least 10 days** before the start of the experiment. Otherwise, the User Office cannot guarantee that the requested support will be provided.

April 2025 **50** of **56**

XFEL.EU TN-2017-001-3.2

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UPEX: Experiment Proposal and Registration Guide

3.2.3.1 Site access

All onsite users are asked to state the dates of arrival at and departure from EuXFEL. This information is required in order to assign corresponding access rights.

The remote access option is available only to non-funded users. In case onsite participation is not envisioned anymore, each non-funded team member can set remote access by clicking the checkbox "I only need access to data remotely" in the PAF and submit it. Funded users have to contact the User Office (useroffice@xfel.eu) as soon as possible in case their onsite participation is not possible anymore.

By checking the lab access box in the Personal Arrival Form (PAF), users indicate their intention to work in the lab. When the Lab access box is selected, the user's account will be exported to Booked, the lab device booking system, to enable equipment reservations once lab access is granted. Please note that selection of this checkbox does not automatically grant lab access. Currently, to obtain access, users must address the Lab Contact mentioned in the beamtime invitation sent to the Main Proposer and Principal Investigator. In case no Contact has been assigned, please contact the Sample Environment and Characterization group (sec@xfel.eu) by mentioning the ID of your experiment.

3.2.3.2 Travel assistance

This part of the PAF is only available to funded users. If funding has been requested for you by the Main Proposer, the EuXFEL User Office is ready to assist you in organizing prepaid tickets and airfare for your visit to Schenefeld. This is the recommended option. Please provide correct information as requested in the PAF (full name, departure place, departure date, departure time, return place, return date, and return time).

If you prefer to make your own travel arrangements and be reimbursed after your experiment, you must provide a justification and more information on the intended trip in this section of the PAF. Self-booking requires prior approval by the User Office.

Before proceeding with travel plans, funded users should carefully check EuXFEL regulations concerning travel arrangements, accommodations, and reimbursement for funded users (see the User Note "User Travel Regulations":

https://docs.xfel.eu/alfresco/d/a/workspace/SpacesStore/c0d5e888-9c51-45cb-8895-2c61dabb32bc/UN-2017-001_User_Travel_Regs.pdf).

The EuXFEL Travel Office will contact all funded users after PAF submission in a separate email with an offer for the respective airfare or tickets and ask for confirmation before booking.

3.2.3.3 Accommodation

This section of the PAF is different for funded and non-funded users.

Non-funded users can request a reservation in the onsite Guest House by filling out this part of the PAF. The requests are accommodated based on availability. Booking requests from experiment participants from the Hamburg/Schenefeld area will not be accepted. The following information is required: Requested check-in and check-out date, payment preference, comments (if any, can also be used, e.g. in case of multiple visits for the same beamtime). After PAF submission, the Guest House will contact you via email with further information.

For **funded users**, normally the EuXFEL User Office would reserve accommodation and strive to accommodate you in the onsite Guest House. If you wish to make your own accommodation arrangements, you must provide a justification and more information on your plans. Self-booking requires prior approval by the User Office. In any case, funded users need to provide a check-in and check-out dates, and can give comments (if needed). The User Office will contact you via email regarding the reservation details or to confirm approval of your proposed arrangements.

3.2.3.4 Invitation letter for visa purposes

The EuXFEL User Office can provide official invitations for the experiment as support documentation for a German visa application upon receiving the information filled in the respective section of the PAF.

April 2025 **52** of **56**

XFEL.EU TN-2017-001-3.2

UPEX: Experiment Proposal and Registration Guide

If the letter is needed sooner than the A-form is submitted, it can be requested via email to the User Office (<u>useroffice@xfel.eu</u>).

3.2.3.5 Further information

For any other comments related to the visit or practical arrangements that are not mentioned or are additional to the rest of the information in the PAF, please fill in the "Further information" section.

3.2.3.6 PAF Submission

After entering all required information submit the electronic form by pressing the Submit button. Once submitted, **the information in the form cannot be updated by you anymore**. For any changes to your Personal Arrival Form after submission, please contact the User Office (<u>useroffice@xfel.eu</u>).

3.2.4 Additional Sample Requests (ASR)

Once the experiment is allocated beamtime, the list of samples or substances shall not be modified or extended beyond what is mentioned in the original proposal without approval by EuXFEL management. In exceptional cases, users may request authorization for a change in the planned samples or substances. In this case, the User Office must be contacted in writing (useroffice@xfel.eu), so that a specific Additional Sample Request (ASR) form can be generated in UPEX.

Under normal circumstances, this should happen at the stage of beamtime acceptance and until five weeks before the beamtime. Any Additional Sample Request (ASR) that is submitted less than four weeks from the start date of the experiment will be treated on a "best effort" basis.

The EuXFEL Management will decide on the request after approval by the Safety and Radiation Protection (SRP) group and a technical assessment by the instrument group hosting the experiment.

4 Feedback

4.1 Experiment reports

4.1.1 General rules for experiment reports

As soon as the last shift of a beamtime has been completed, a link to the experiment report template will appear on the user dashboard of the Main Proposer in UPEX, in the "Feedback" section:

https://in.xfel.eu/upex

Submission of the experiment report is required between three to six months after end of last shift of the experiment.

However, in the event of new proposals or continuation proposals by the same scientists (as Main Proposers and/or Principal Investigators):

- Experiment reports must be submitted by the Main Proposer via the User Portal to the European XFEL (UPEX) about all previous measurement(s) by the deadline for experiment reports indicated in the relevant call for proposals, including
 - Those carried out close to the proposal submission deadline
 - Experiments whose scientific area or instrument is different from those relevant to your new proposal
- Reference(s) to previous experiment(s) / report(s) must be stated in new subsequent proposal(s) by indicating the corresponding experiment ID in the Continuation/Resubmission field in the General Part of the proposal form.

If one experiment has been allocated beamtime on several occasions, you can submit a full report that covers the totality of the beamtime allocated for this experiment. However, intermediate reports are required in case of

April 2025 **54** of **56** submission of new proposals or continuations of previous beamtimes by the same scientists (as Main Proposers and/or Principal Investigators).

Experiment reports are to be directly uploaded to UPEX. Later updates must be emailed to useroffice@xfel.eu.

4.1.2 Instructions for uploading your experiment report to UPEX

Format instructions for the report:

- Maximum total length: Two A4 pages
- Body text not smaller than 10 points (recommended font types: Arial and Helvetica, as well as Symbol for special characters)
- Single spacing
- Figures can be included in the PDF, although the maximum length must be kept
- Max. total file size: 5 Mb
- Proposers bear responsibility for the readability of the description.

4.2 Feedback form

All users are welcome to share observations, recommendations, ideas, and general comments related to their experience at the EuXFEL. We sincerely appreciate all advice aiming at the improvement of the quality of our service.

For this purpose, a specific form is available in the "Feedback" section of the standard user dashboard in UPEX.

A Useful email contacts

EuXFEL User Office	useroffice@xfel.eu
SASE1 scientific instruments	FXE (Femtosecond X-ray experiments): <u>christopher.milne@xfel.eu</u>
	SPB/SFX (Single Particles, Clusters, and Biomolecules / Serial Femtosecond Crystallography): spb.sfx@xfel.eu
SASE2 scientific instruments	HED (High Energy Density Matter): ulf.zastrau@xfel.eu
	MID (Materials Imaging and Dynamics): mid-info@xfel.eu
SASE3 scientific instruments	SCS (Spectroscopy and Coherent Scattering): scs@xfel.eu
	SQS (Small Quantum Systems): michael.meyer@xfel.eu
	SXP (Soft X-Ray Port) sxp@xfel.eu
Sample Environment and Characterization group and user labs	sec@xfel.eu