

# Guidelines for the Easy Access SYstem

The ILL has implemented an “Easy Access SYstem” (EASY) for some powder diffraction and single-crystal instruments. This access mode is by no means a substitute for the usual access through the beamtime proposal system for these instruments, since only limited beamtime and sample environment conditions are available for EASY.

**To whom and for what EASY is intended** (you should meet one of the following conditions)

- New and infrequent users coming from the academic world.
- Research projects requiring only limited and/or occasional neutron beamtime.
- New materials programmes operating a tight loop between synthesis and structural characterisation.
- Existing users that need to characterise their samples, or to verify their sample production procedures, before a full beamtime proposal is warranted.
- Commercial users requiring only small durations of beamtime and who are willing to pay for this service on an hourly basis.

EASY is only open to scientists affiliated to laboratories in ILL member countries, subject to certain restrictions and a hindsight peer-review procedure. Each research group can apply for a maximum of 2 samples per cycle. The beamtime will be allocated on a first-come-first-served basis until the group has reached a total of 6 samples.

## Diffraction meters available for EASY

This system is reserved only for the following diffractometers: D1A, D2B, D16, VIVALDI and ORIENT-EXPRESS. The number of days per cycle dedicated to EASY is 1 day per instrument.

## Samples for EASY

Only samples not representing a risk for the people who must handle them will be accepted. The Safety Engineers at ILL will define the required specific safety conditions and the local contact can decide to reject the experiment on the sole basis of his/her own criteria. Users are encouraged to discuss their experiment with the local contact before applying for EASY beamtime.

## Sample environment for EASY

Only room temperature experiments are available for EASY. Any other sample environment required will result in the rejection of the proposed experiment.

For powder diffraction instruments, the user must use standard containers provided by ILL (see the document with the description). For single crystals, the user must provide the crystal to be mounted on a standard pin.

## Data Output

For powder diffraction experiments, fully reduced and corrected high-quality data, ready for Rietveld refinement, are delivered to the user, together with instrumental resolution files, examples and guidelines for refinement using the freely available programs FULLPROF and GSAS. The user is expected to carry out the structural analysis with minimal assistance. Further assistance could be granted on the basis of a collaborative agreement with the local contact involved.

For Laue and Low Resolution single-crystal diffraction, the obtained images are sent to the user, together with instrumental resolution and characteristics for the particular experiment.

## Data Policy

Data collected using EASY are subject to the normal ILL policy regarding the publication of scientific results. If no ILL staff is among the authors, EASY should be acknowledged in the article [eg. The beamtime was granted through ILL's Easy Access SYstem (EASY)]. The users are asked to cite a paper with instrument description in the list of references.

Subcommittees 5A and/or 5B will assess the productivity of the new access mode.

## Disclaimer

Neither the ILL nor the instrument scientist/technician will be liable for any loss or damage to samples sent for measurement. The user must state the potential risks involved in handling the sample(s) and she will be considered as responsible for any injuries/damage caused by sample handling at ILL.

## How EASY works

The application for beamtime is open all year long, and it will be granted in a first-come-first-served basis. For a given cycle, the list of proposals closes 15 days before the beginning of the cycle. After this date, all proposals will be considered for the next cycle. Once the limit of 1 day/instrument/cycle is attained all proposals for this cycle will be rejected and the users will be asked to resubmit for the next cycle.

- Use the Visitors Club (<http://club.ill.fr/cv>) for submitting an EASY application. If you are a new user, you will have to create an ILL Visitors' Club User account BUT before being able to create your EASY proposal our Scientific Coordination Office team must validate this account. Until this validation has been completed the link to EASY application will not be available.
- Provide a title and abstract for the proposal. The abstract is intended to explain the aims of the experiment and give any useful details concerning the experiment, sample handling or instrument configuration.
- Choose the instrument.
- Give details on the sample, choose a sample container and give information about safety aspects. Note that an EASY proposal can contain only **ONE** sample, thus you must submit one proposal for each sample you wish to measure.
- Accept the ILL publication policy, accept the conditions of use for EASY and submit the proposal.
- After the ILL's safety evaluation, the ILL will decide whether or not to accept experiment and then contact you.
- Sample containers will be sent to you in United Nations approved packaging. This packaging comprises a polypropylene inner carton and a fibreboard outer box. It is designed for shipping Packing Group I (one) materials (the most hazardous). Your sample must be returned in this packaging using the most appropriate method – Courier or Specialist shipper. Samples may not be sent using normal mail.
- Recent changes in the Transport of Dangerous Goods regulations and the UN ADR document mean that even small scientific samples may need to be classified as Dangerous Goods, and consequently may need to be shipped in a special way. Your dispatch department should be able to help you with this. (United Nations Web site: <http://www.unece.org/trans/danger/danger.htm>)
- After the experiment, the samples will be returned to you, once any induced activity has decayed to background levels.
- The EASY local contact will send you the collected data ready for treatment.
- You must return the empty containers to the ILL in the shortest possible delay after reception of your samples. If empty containers do not come back to ILL, no more proposals will be accepted from the concerned laboratory.