DELIVERABLE REPORT

**WP11** NA – Innovation and networking activities

# D11.12

## First Report on the incentivised knowledge transfer and feasibility work with industry

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- ☐ PP - Restricted to other programme participants & EC: (Specify)
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- ☐ CO - Confidential, only for members of the consortium

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# Executive Summary

This first report on the incentivised knowledge transfer and feasibility work with industry aims at describing the work carried out by the Technical Liaison Network to raise more awareness on the feasibility studies and on the next steps to upgrade the portal to harvest industrial requests. A survey on feasibility studies in the NFFA-Europe offer has highlighted a temporary under-exploitation of this tool by potential industrial users.

Incentivised knowledge transfer is available to industrial users when they request an experiment which presents a level of uncertainty. In this case, the facilities can decide to grant a feasibility access to the user and run a rapid measurement which can clear the doubts and help identifying the most appropriate way to proceed. This access mode has been established to reduce the risks associated with industry experiencing long feasibility and pilot studies and enable a following peer-review or proprietary access.

The report shows how all the NFFA-Europe work packages have been planned to hinge on a consistent feasibility process and how this process connects with the other activities supported by NFFA-Europe (e.g. added value by having a peer-review by ARP, the help by the transnational access activity, JRA outputs could be eligible for technology transfer and industrial exploitation).

Moreover the document reports on practical aspects of the feasibility studies connected with the incentivised budget allocated to each NFFA node and describes the multiple experiences that these nodes have so far had with feasibility study candidates. Finally, the conclusions enlist the incoming efforts (four actions) that each TLNet/ILNet member will undertake to grant top priority and visibility to feasibility studies in the next NFFA-Europe discussions.

# 1. Overview

## 1.1 Principle

NFFA-Europe is equiped with a portal for academics and industry, that is meant to harvest their needs and challenges, offer a problem-solving approach to locate the installations available and most appropriate and then assist the user in the submission of a well-structured proposal in terms of technical feasibility. To help building the case with industry, an incentivised knowledge transfer is also available for industry via the WP11. This access mode is granted to industrial users when they request an experiment which presents a level of uncertainty. In this case, the facilities can decide to grant a feasibility access to the user to run a rapid measurement which can clear the doubts and help identifying the most appropriate way to proceed. This access has been established to reduce the risks associated with industry experiences to concerning feasibility and pilot studies on the NFFA-Europe facilities and enable a following peer-review or proprietary access.

## 1.2 How it works

The Single Entry Point (SEP) is a portal that is going to be upgraded to harvest industrial requests.

The Technical Liaison Network is the organ in charge of giving a feed back to management on feasibility of the projects. One of its main objectives is to manage the proposal work flows and provide the technical feasibility on the submited proposals.

The Access Review Panel (ARP) is a fully independent selection panel that provides independent scientific evaluations. The ARP covers all necessary competences including experts from the Analitical Large Scale Facilities (ALSF) that are co-located with the TransNational Access (TNA) sites.

## 1.3 Connections with other activities

**Transnational Access:** The peer-review access is scored by the ARP and the TLNet, via each node contact person, participates in the assessment of the technical feasibility and to the management of the proposal work-flow. The possibility to have incentivised feasibility can help to reduce the uncertainty about the technical viability of certain experiments which would risk to be refused and could be in this way reconsidered for submission.

**Joint Research Activities:** The Joint Research Activities proposed by NFFA-Europe address notable nanoscience research topics valuable to develop novel services for the users. Five Joint Research Activities with common needs across the consortium have been identified. These concerns experimental, methodological and instrumentation and data management aspects. Some of the JRA outputs could be eligibles for technology transfer and industrial exploitation. In this case this incentivated access could possibly support the process.

# 2. State of the art of the feasibility studies in NFFA-Europe nodes

## 2.1 Budget

Each node of NFFA-Europe has a dedicated budget to handle, under WP11, the task 11.5 Innovation and knowledge transfer for industry and the related activities, the feasibility studies being part of this WP. In table 1 below, we report the initial budget for each node.

Table 1. Budget for each node

| Summary | CNR | ESRF | CNRS | FORTH | Juelich | KIT | LU | Promoscience | PRUAB | STFC | PSI | EPFL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Res PM | 1 | 7 | 2 | 2 | 2 | | 2 | | 2 | | 2 | |
| Tech PM | 4 | | | | | | | | | | | |
| Travel | 6000 | 18000 | 6000 | 6000 | 6000 | | 6000 | | 6000 | | 6000 | |
| Other goods/services | 18000 | 13000 | 6000 | 6000 | 6000 | | 6000 | | 6000 | | 6000 | |
| Subcontracting | | | | | | | | | | | | |
| TOTAL no overheads | 45721 | 80581 | 26200 | 18400 | 26080 | 0 | 26000 | 0 | 24596 | 0 | 35000 | 0 |
| TOTAL with 25% overheads | 57151 | 100726 | 32750 | 23000 | 32600 | 0 | 32500 | 0 | 30745 | 0 | 43750 | 0 |

The incentivised budget can support manpower cost for very limited access, but in no case will contribute for equipment rental/depreciation costs.

The first consideration to be made is that there is no real budget allowed to incentivised feasibility, nor objectives dedicated to this task. The reason is that this access has been clearly conceived as an awareness tool to be used when and if necessary in the context of our activities with industry.

Nevertheless this mode operandi can result in under exploitation of this very useful tool in working with industry. It happened in fact that some institutions, very strict about budgets administration rules, present difficulties to let the dedicated TLNet to know the remaining budget from each node.

## 2.2 Experiences with feasibility

The only case of incentivised used so far has been operated by the Grenoble node. The feasibility has been granted to a large tyres manufacturing company, which was interested to evaluate the possibility to use USAXS for the characterisation of some novel methodologies of lattice synthesis from aqueous system.

The incentive allowed the possibility to exploit 1 shift on the beamline ID02. The reason for the need of a feasibility access was that the company was potentially interested to operate a proprietary access or to put together a proposal for TNA, but before this, they needed to understand if SAXS was a suitable technique for their needs.

The experimental results have been promising and the data is at present under analysis.

# 3. Focus on the feasibility

In the first half of the NFFA-Europe programme, the incentivised feasibility access has been poorly exploited, since the focus has been mainly placed on the dissemination and building awareness. Now that NFFA-Europe matured, and a starting community is being established, the next focus for TLNet and ILNet would be the feasibility studies.

The next actions to be taken are:

1) clarify the modus operandi to exploit this tool with all the TLNet partners

2) fix clear objectives and better identify the potential industrial partners that could benefit from this access mode from the TNA programme

3) increase visibility on this tool also communicating with the industrial liaison offices of partner organisations

4) continue communicating on feasibility.