



WP 4 Industry Consultancy

Work package leader : Marc Thiry (HZG)

Venue : FORTH, Foundation for Research and Technology – Hellas, Heraklion/Crete

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List of participants

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Agenda :

- Strategy Paper/Deliverable 4.6
- Final report on feasibility studies and events
- LENS: Contributions by SINE2020

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1. Strategy Paper and Deliverable 4.6 - Business Model for scope, access and IP for "neutrons and industry":

	Strategy Paper	SINE2020 Deliverable 4.6 Business Model for scope, access and IP for "neutrons and industry"
Content	The idea is to provide main outcomes from SINE2020-WP4 and former EU projects to facilities' management in order to provide a baseline for discussions about "sustainable" way to manage industry-related activities (outreach, sales of beam time and expertise, network). The Strategy paper has been circulated several times since the last WP-meeting in Parma. In this meeting, some parts had to be redefined and open questions to be discussed.	"neutrons and Industry": we have to provide an overview of possible processes (and associated manpower) This report is also the opportunity to report lessons learned from SINE2020 actions (using a SWOT based analysis for instance): quality of the service/expertise given, outreach actions, follow-up of prospects/customers, IP issues.
Recipients	Neutron facilities Directors LENS chair and vice-chair	The EU commission. Publicly available
Available draft	SINE2020 - Strategy paper industry service_05-04-2019.docx	None: in preparation Some sections of the position paper will be included in this report

Compact Neutron Sources

Alain Menelle (LLB) brought up, by email, the topic of compact neutron sources which might play a stronger role in the future for the European neutron user community as well as industry. They are indeed seen as a way to compensate gaps in neutron beam time availability after the shutdown of some neutron facilities in the near future.

The WP partners agreed that this topic should not be discussed in detail in the strategy paper, since it was not part of the work in WP4. We will recommend, though, that this will be a topic in LENS, where the large facilities have to find a position towards compact sources and how they will influence the industry service strategies.

SYNERGI 2018/2019

It was stated that, while mentioned in the paper, the readers might not fully understand what kind of event the two issues of SYNERGI have been. We will include a description of the concept and the outcome (number of participants etc). Also we will make a statement about the future of SYNERGI, since we are still facing the problem of too few participants from industry.

Strategy Paper: Recommendations

The most important part of the paper are the recommendations regarding the improvement of the industry service at our facilities. In addition to the actual content of the paper, the following topics were discussed in Crete and will be implemented in the document.

NDA: Important to mention that it is available, but not worth the effort creating a common NDA template. Companies prefer their own NDA template anyway.

Single Entry Point: Should be available similar to how it is handled now in SINE2020 but not exclusively. Requests by industry based on personal contacts will be served by the contact's facility first, but can be forwarded to other network partners, if they have more suitable instruments. Another necessity for direct contacts is, that a company may want to talk to one partner only about sensitive topics.

⇒ Suggestions:

- Keep the SINE2020 request form online (e.g. on future LENS webpages), even if no free studies (as in SINE2020) can be guaranteed. Requests will be handled transparently: the request will be sent automatically to one contact point in each facility. A process how to handle such requests has to be defined
- Make use of the network but without the online application form. ILOs can decide on their own when feeding a contact into the network

Common networking and outreach activities: Recommend neutron sources to allocate budget to participate in activities (EARIV, organisation of joint events, annual ILO meeting...). Implementation to be discussed in LENS WP2.

Sustainable service: Personnel needed (**up to 1 FTE per facility¹ + 0,5 FTE for overall coordination**)

Use one or two examples to describe the detailed work necessary to process one SINE2020-application from first contact to reporting the results

Catalogue/Price list: This was discussed controversially. While it could be done for one facility for some routine measurements (e.g. <https://www.tudelft.nl/en/faculty-of-applied-sciences/business/facilities/reactor-institute-delft/research-instruments/inaa/pricelist-2019/>), a general pricelist for the whole network is impossible.

To lower barriers: Facilities should decide themselves if they would like to show prices for typical examples (although this might be very different from a special request).

Academic route: Reach out to universities, early stage researchers, engineers, students to raise awareness at early career stages.

¹ Depending on the level of industrial activity that is wished/expected by each facility. The idea (common sense) is that the PM invested yearly by the facility should be covered by the income generated from industrial projects (at the monetary level and/or measured with socio-economic impact)

Establish cooperation programs (supported by policy makers!)

- Education: Training courses, PHD programs
- Cooperation: research programs (as by VINNOVA) for academia/industry projects utilizing RIs

Mediators: Specialised companies providing contract research including RIs

- Coordinated programs to strengthen RI-mediator cooperation (as in CAROTS)

Discussion about “open questions” in draft paper

(will be implemented in the final document)

Which markets, which Technology Readiness Levels (TRL) to target?

- maybe TLR no criteria at all
- Markets: EU Scoreboard of R&D spendings; is there a correlation with SINE2020 applications? If yes, mention in paper. => CB: with input from a report written in 2017.
- Include the “societal challenges” and how neutron sources can contribute to address them in the paper’s introduction.

Access routes rated by economic impact rather than scientific excellence (especially for SMEs). For instance considering routes like “ISIS Collaborative Research Programm”².

Test measurements after SINE2020: Legal, financial framework to be set up by each institute. Test should remain only a test. It should not solve the problem.

How are the mechanisms for beam time allocation designed and how can it be arranged in a way that does not interfere too much with the scheduling of academic beam times?

Can we imagine to have dedicated (or half dedicated) instruments and appropriate manpower for industry? Overbooked instruments (from Academia) are often also demanded by industry: stress scanning, imaging and SANS.

Institute should have clear, transparent policy how to distribute beam time/personnel time between industry and academia.

Marketing

Is more professional marketing possible?

Improvement of marketing strategies: yes.

Subcontract marketing agency: no, our targets and products are too specific and diverse at the same time.

We know we need to get better here. Concrete Ideas?

- ⇒ Go to the **right** events (feedback expected from the review of all event attended by SINE2020 WP4)

² ILL is currently experimenting an internal review panel to allocate beam time to industry related projects (non-proprietary research) at SALSA (stress scanning instrument).

- ⇒ Learn how to address industrials effectively (e.g. dedicated training for the people involved: ILO and few scientists)
- ⇒ Produce video clips with testimonials

Standardisation:

Menno Blaauw explained that the laboratory for INAA went through an accreditation process (ISO 17025) in 1993 and remained accredited until 2016. During all those years, no customer companies were interested in the accreditation or required it. This leads to the question if accreditation is necessary at all. Standardization (i.e. the ability to express a measurement result correctly in a unit like the kg) of course is a necessity in virtually all measurements, for science or industry, in order to have reproducible measurements and the possibility to compare results from different sources.

Accreditation is the process where an external accreditation organization audits a laboratory and states that the results obtained with a specific method in a specific way are indeed correct and traceable to (S.I.) standards.

Not discussed => comments welcome

- What is expected from facility scientists, how can scientists be motivated to dedicate time to industrial measurements?
 - Possibilities for publications: more collaborative projects than confidential measurements.
- Where is potential for automation, standardization, mail-in service etc.?
- How are contracts/offers designed?

2. Final report on feasibility studies and events

Because of the approaching end of SINE2020 the following actions will be taken:

- The application portal will be closed on 30/04/2019
- Feasibility studies have to be finished till August and reports finalised before 15/09/2019 the latest (CB to send report template or instructions individually)
- Report about events, in the Excel table available in our shared folder: <https://cloud.ill.fr/index.php/s/kb0Bj4g9fL9tGHU>
- Events missing? Was it useful or not? General comments?
- Feedback about follow-up after SINE2020 measurements (CB to collect info)
- How much additional/new activities did SINE2020 WP4 actions bring to your institute: in terms of number of prospects, paid-for measurements, collaborative projects, new users/contacts in the academic sector?

3. LENS: Contributions by SINE2020-WP4

For LENS webpages: case studies, news articles to be included in LENS web pages.



For WG2 sub-goup “Industrial Users”, as summary of our work and recommendations for the future: Strategy Paper and SINE2020 WP4 reports (deliverables).

People involved in WG2 sub-working group “Industrial Users”

Name (Affiliation)	Status
Ralph Gilles (TUM)	Already member
Chris Frost (STFC)	Already member
Pavel Strunz (NPI)	Joint request by Marc/Caroline
Menno Blaauw (TUD)	Joint request by Marc/Caroline
Caroline Boudou	Request already made
Marc Thiry	Joint request by Marc/Caroline
Tibor Kun, Rozsa Baranyai (BNC)	Request by Laszlo Rosta?