Meeting of National Big Science Industry Liaison Officers and Purchasing Advisors, Copenhagen, February 26th 2018

Summary Report

On 26th February 2018, the first common meeting of National Big Science **Industry Liaison Officers** and **Purchasing Advisors** took place in Copenhagen in connection with the Big Science Business Forum (BSBF2018). It involved Industry Liaison Officers (ILOs) and Purchasing Advisors (PAs) working with one or more of the 9 Big Science organization participating in BSBF2018 (**CERN** – The European Organization for Nuclear Research, **EMBL** – European Molecular Biology Laboratory, **ESA** – The European Space Agency, **ESO** – The European Southern Observatory, **ESRF** – The European Synchrotron Radiation Facility, **ESS** – The European Spallation Source, **European XFEL** – The European X-Ray Free Electron Laser Facility, **F4E** – Fusion for Energy and **ILL** – Institut Laue-Langevin).

For the first time, more than 50 ILOs from 17 European countries gathered to discuss their role and contribution for building a common and consolidated Big Science market. This meeting was important to make connections between ILOs from different countries working with different Big Science organisations; for sharing experience and starting to gain a common spirit/understanding of the varied work and responsibilities of each ILO.

The host ILOs from Denmark (*Juliette Forneris* and *Søren B. Korsholm*) welcomed participants and introduced the afternoon program. The first talk by the European Commission representative (*Philippe Froissard*, Deputy Head of Unit - Research Infrastructure, DG Research & Innovation) summarised the key recommendations from the 2017 report on the "Long-Term Sustainability of Research Infrastructures" and in particular the aspects of the report, which were relevant to the ILO community. He also gave an overview of the actions taken by the EC throughout the FP7 and Horizon 2020 programmes as well as in the context of ESFRI to optimize the relations between Research Infrastructures (RI) and industry. The latest initiative to date is the INFRAINNOV-02-2019 Horizon 2029 call for proposal, which will support the establishment of a network of Industrial Liaison and Contact Officers engaged with pan-European RI.

Afterwards, the meeting focused on activities to get to know each other better. Differences between several ILO Networks were analyzed, explaining both some national experiences (Italy, Netherlands, Poland, Spain) and the way of working for several Big Science ILO Networks (presented by ILOs *Søren Bang Korsholm on behalf of Kurt Ebbinghaus*, F4E; *Juliette Forneris*, CERN; *Arne Jensen*, ESS; *Emir Sirage*, ESA; *Nikolaj Zangenberg*, XFEL, ESRF and ILL).

The core part of the meeting was the discussion on possible plans for future common actions, which can lead to a more integrated and prosperous Big Science common market in Europe. For this purpose, participants split in 6 thematic parallel workshops, each one coordinated by an ILO. At the end of the meeting each coordinator presented some preliminary suggestions as emerged during the thematic discussion, and the plenary assembly of ILOs assumed them as general conclusions. The thematic workshops and their main discussions and conclusions points are briefly summarized here:

Theme 1: How to work as an ILO?

Arne Jensen, Danish ILO ESS.

- Role of the ILO:
 - o To work as a "bridge" or "facilitator" between RI, industry and academia
 - Help RI find the best firms in their countries
 - o Translate the needs from the RI into readily understandable information for industry
 - Keep an active connection to relevant procurement and technical departments to identify future suppliers and follow up current needs
 - o Support the firms in the pre- and post-tender processes
 - o Identify new technologies from industry that can be interesting for RIs
- Examples of typical ILO activities:
 - o Monitoring price enquiries/call for tenders and matching them to relevant firms
 - Organizing visits or exhibitions at RI
 - o Organizing visits from RI purchasing officers or technical experts in own country
 - o Participating in industry days, exhibitions and other relevant events
 - Maintaining own supplier database and ensuring that supplier databases at the RI are updated
 - o Informing national industry by maintaining a webpage and/or sending newsletters
 - o Following-up on the firms' activities and giving them feedback to improve their success rate
 - o Giving feedback to RI's technical staff based on experiences from industry
 - Advising the national delegation to the RI's finance committee regarding contract approvals and purchasing rules and procedures

For more information on this topic, see the presentation <u>"How to work as an ILO – advice from experienced to new ILOs"</u> put together by several CERN ILOs in 2016.

Theme 2: How can the ILO help in facilitating the process of forming a consortium? *Juliette Forneris*, Danish ILO CERN & ESO.

- Who will take the lead in order to form the consortium?
 - → Active role of the ILO in getting the firms together.
- Lack of technical information and lack of time to match the right firms to different parts of the tender requirements

- → Get RIs to send more detailed information before the tender comes out. Get firms to know each other better (through industry events such as BSBF and others, through ILOs).
- → Incentives from RIs to induce more collaboration between firms (i.e., scoring points for including supplier from poorly balanced country in Best Value for Money bid).
- Sharing risk within the consortium and between the consortium and the RI.
 - → Define balanced consortium models.
 - \rightarrow ILOs can advocate for RIs to take large part of risk, when dealing with high innovative but less financially solid SMEs.
- Collaboration between firms and university/institutes difficult due to IP issues, university/institutes regulations and limited time-horizon of project-based funding.
 - → Harmonisation of different rules and regulation amongst entities. Difficult for ILOs to press forward on this type of obstacle.
- Getting formal cooperation agreements in place
 - → Use European templates in order to draft formal cooperation agreements

Theme 3: How do we bring down the barrier for SME entering and acting on the Big Science market?

Anna Hall, Swedish ILO ESS and CERN

- SMEs are important suppliers for the Big Science market;
- Big Science is a big, well defined market. During BSBF2018, 15 Big Science organizations presented estimated investments for the upcoming 5 years for above 12 Billion EUR.
- Big Science market strengthens the competitiveness of European SMEs
- The complex Big Science market will act as competence development for SME. In many cases SMEs will work with top class researcher with front end technologies.
- Business with Big Science organizations facilitate innovation, technical development, quality work and internal process development, Internalisation and new market arenas for SMEs. Business with Big Science organizations strengthens the brand and open new doors for business e.g. Oil & Gas, Med Tech, Big Data, Process industry etc. All on a global market. New Products and Intellectual Properties developed together with Big Science organizations can be used in other markets, globally.
- SMEs have competences to offer such as specialization, focused business models, innovation, spin-off and product development;
- Many factors can be considered like barriers to SMEs such as turn over demand too high, risk management, long term projects and a lot of retender;
- Consortium can help to lower these barriers thanks to EU access to risk financing;
- ILOs role have to be stressed in order to match business attitudes and scientific competencies, assistance for observe competition rules and provide documentation required, support co-development project and business experience exchanges;
- The market needs to have tender's procedures dedicates only to SMEs, following ESA experience.

Theme 4: How to make a well-functioning ILO Network?

Toon Verhoeven, Dutch ILO ESS & F4E/ITER.

- There is a need for an ILO Network for each Big Science project and interaction among them;
- Export ILO Network best practices to those Big Science projects where experience is missing;
- Each ILO Network can act as "brokerage" to make consortia with companies and laboratories coming from different countries;
- We need common procedures and common mailing list among different ILO Networks in order to be able to build a common Big Science market.

Theme 5: Do we need a European association of ILOs?

Paolo Acunzo, Italian ILO F4E/ITER.

- Yes, we need a European association of ILOs if we want to improve SMEs and Industries participation in Big Science project in order to fostering scientific innovation, economic growth and worldwide competitiveness within European Union;
- We need to elaborate a clear road map in order to build up an association among ILOs from different countries and projects but with same needs and perspectives;
- Establish a ILO working group or Steering Committee to promote an ILOs Association, based on the ILO's group promoted this first meeting and open to others interested;
- The European ILOs Association could be useful also for building up relations with new economic and Institutional stakeholders, such as European Commission.
- The participation to the INFRAINNOV-2-2019 Horizon 2020 Call could be an opportunity for structuring the Association.
- This ILOs working group should become an integrated part of BSBF organization.

Theme 6: How can ILOs improve the Big Science organisation interaction with industry? $S\phi ren$ B. Korsholm, Danish ILO F4E/ITER.

- First and foremost, ILOs should help *demystify* the Big Science market to the companies
- ILOs should help improving the company databases of the Big Science organisations
- In connection to cross border company meetings and international conferences, ILOs should invite Big Science organisations to join and explain their activities within a given industry field.
- Big Science organisations should organise dedicated meetings for industry within specific branches/categories of supplies as well as broader partner & industry days. Any kind of event can be useful to get companies closer to the great opportunities offered by the common market of Big Science and support growth of European Union;
- Create an "intelligent" database enabling industries to find interdisciplinary partners for Big Science projects.

The ILO organising committee of this first meeting has agreed to circulate these first conclusions to potential interested stakeholders and to meet in the coming weeks in order to identify appropriate follow ups to propose to all other ILOs/PAs.

The committee has now convened and taken the first steps to form a steering committee for what is proposed to be called **PERIIA** – the **Pan-European Research Infrastructure ILO Association**. In the coming months (Q3 of 2018), steps will be taken to formalize this and plan how the goals and actions discussed can be achieved.

Juliette Forneris Toon Verhoeven

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