



ARIES and Industry

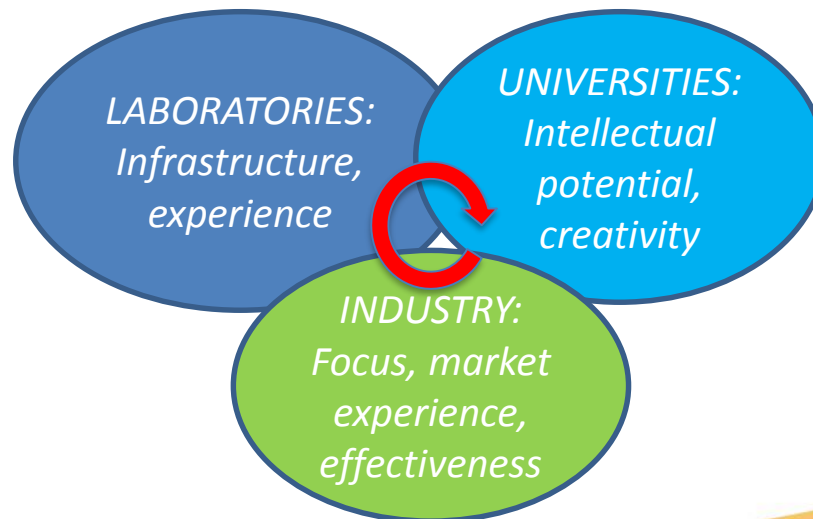
Role of industrial partners

Maurizio Vretenar, CERN – Project Coordinator

Kick-off, CERN, 4 May 2017

The ARIES magic formula

- For the first time in an accelerator integrating activity project we have a **consistent industrial participation**.
- The main reason is that we don't want to consider industry as a mere supplier, but as a **crucial partner in achieving common R&D objectives**.
- We are convinced that we have a lot to learn the one from the others and that we have to further **integrate the three main actors** of accelerator development: **laboratories, universities and industries**.
- Beyond the short-term goals of the ARIES project, our long-term goal is to **create a common language and a common working ground** between academia and industry.



The 8 industrial partners

- RHP Technology, Austria (materials)
- Ion Beam Applications, Belgium (accelerator systems and components)
- Bruker HTS, Germany (superconductors)
- Fraunhofer Gesellschaft, Germany (electron linac applications)
- Heidelberg Ion Therapy, Germany (accelerator operation)
- Consiglio Nazionale Ingegneri, Italy (industry association)
- Cosylab, Slovenia (control systems)
- Brevetti Bizz, Italy (materials)

Contributing to:

- Development of accelerator applications (IBA, FEP)
- Consultant for Innovation Workpackage (CNI)
- Development of materials for extreme thermal management (RHP, Brevetti)
- Co-development of HT superconductors (Bruker)
- Co-development of timing electronics (Cosylab)

Note that our goal was to select for participation to ARIES companies that are the **only reference in Europe in a given field**, i.e. we wanted to avoid giving preference to a company if there is possible inter-European competition.

The future

- In ARIES we have only 3 subjects where we do common R&D (**co-innovation**) between laboratories and industry, with financial support from the European Commission.
- Our goal for future projects is to have **many more** collaborations of this kind, but before we need to:
 1. identify topics of common interest
 2. define the modalities for the collaboration: co-funding, IP management, exploitation of results, etc.
 3. define transparent criteria for the selection of the company and of the partner laboratory.

All these points could/should be addressed in ARIES

The Industry Advisory Board

- In ARIES there will another way to involve industry, the **Industry Advisory Board**.
- This is a small committee (3 to 5 members), foreseen by our Consortium Agreement, formed by industry members that are invited to our Annual Meeting to provide advise on industry related topics.
- From our Consortium Agreement: The Industrial Advisory Board shall be composed of representatives of industry that are relevant to the Project activities. Its members shall be proposed by the Steering Committee and approved by the Governing Board. It shall provide to the Consortium bodies **industry opinion regarding the potential of the technologies developed in the Project** and **help defining suitable business plans**.
- The idea is to go from a “technology-push” to a “**market-pull**” approach. The expertise in the IAB will complement the existing expertise in ARIES (e.g. CNI).
- Additionally, we scientists need some help in understanding and developing **business plans**...
- The composition of the IAB is still **under discussion**; we want to give priority to countries not represented among ARIES industrial members (e.g. France, UK, Spain, Scandinavia).

A final note: we are all on the same boat

It is our interest to help companies develop their business because we are all part of the same socioeconomic system, i.e. **we are all on the same boat!**

Companies create economic growth and jobs, which pay taxes, which are used (among the rest) to pay for scientific research, which in turn could also contribute to the development of companies: **a virtuous circle.**

We are all on the same boat, and we need to row in the same direction – especially when the sea gets rough!



But we can find in front of us a land of opportunities waiting to be explored.