Work Package 4

Innovation and Industries

Work Package 4 objectives

- The Innovation and Industries workpackage will focus on actions towards industrial users and on action on industrial valorisation and innovation

- It will provide
  - access dedicated for new applications to the existing GANIL accelerators and to the new SPIRAL2 facility
  - proposal on involvement of industrial users within the GANIL organisation
  - general support for industrial applications and technology transfer
  - increase of innovation potential for GANIL

Tasks of the Innovation and Industries workpackage and associated coordinators

- Task 1 : Limited pilots of access provision to research teams from industries and involvement of industrial users **(GANIL)**
- Task 2 : Industrial Applications and Technology Transfer **(Nucleopolis)**
- Task 3 : Increase of innovation potential **(GANIL)**

Description of the tasks

- Task 1 : Access provision for research teams from industries and involvement of industrial users (GANIL)
  - This task's goal is to convince the industries of the interest of the new accelerator SPIRAL2, for their measurements and applications, and to attract more industries for new applications through the use of the GANIL accelerators.
  - The Task 1 will finance 240 hours of beam time (and travel expenses) for some new industrial experiments that would like to test the capabilities of the GANIL facility in order to confirm industrial's interest in the available beams.
  - The task will include the Creation of an international selection panel to assess the proposed experiments

Description of the tasks

- Task 2 : Industrial Applications and Technology Transfer (Nucleopolis)
  - **Sub Task 2.1** : Provide industrial application tools to GANIL
  - **Sub Task 2.2** : Operational implementation – *General Case*
  - **Sub Task 2.3** : Operational implementation - *Support for the technology transfer of the beam profile monitors (already completed)*
  - **Sub Task 2.4** : Operational implementation - *Innovative radio-isotope production*

Description of the tasks

Sub Task 2.1 : Provide industrial application tools to GANIL

- Realize the mappings of the existing potential (technologies – Know-How)
- Identify new areas for industrial applications (market research)
- Identify companies :
  - Potential customers for the use of beams, equipment or research skills
  - Candidates to transfer industrialization of devices from GANIL
- Build the implementation arrangements for transfers (financial and legal aspects)
- Build tools to promote this activity in connection with the communication service

Description of the tasks

Sub Task 2.2 : Operational implementation – *general case*

To allow the "matching" between industrial application opportunities and the companies

- B2B meetings
- GANIL-SPIRAL2 Week conference and GANIL conferences
- Set up a virtual trading place on the website
- Participation in exhibitions (WNE / EANM...etc.)

Sub Task 2.3 : Operational implementation - *Support for the technology transfer of the beam profile monitors*

Technology and pre-existing know-how transfer (legal, economical and marketing aspects) and research agreements – *This sub-task is completed (started in June 2016 because of urgent need)*

Description of the tasks

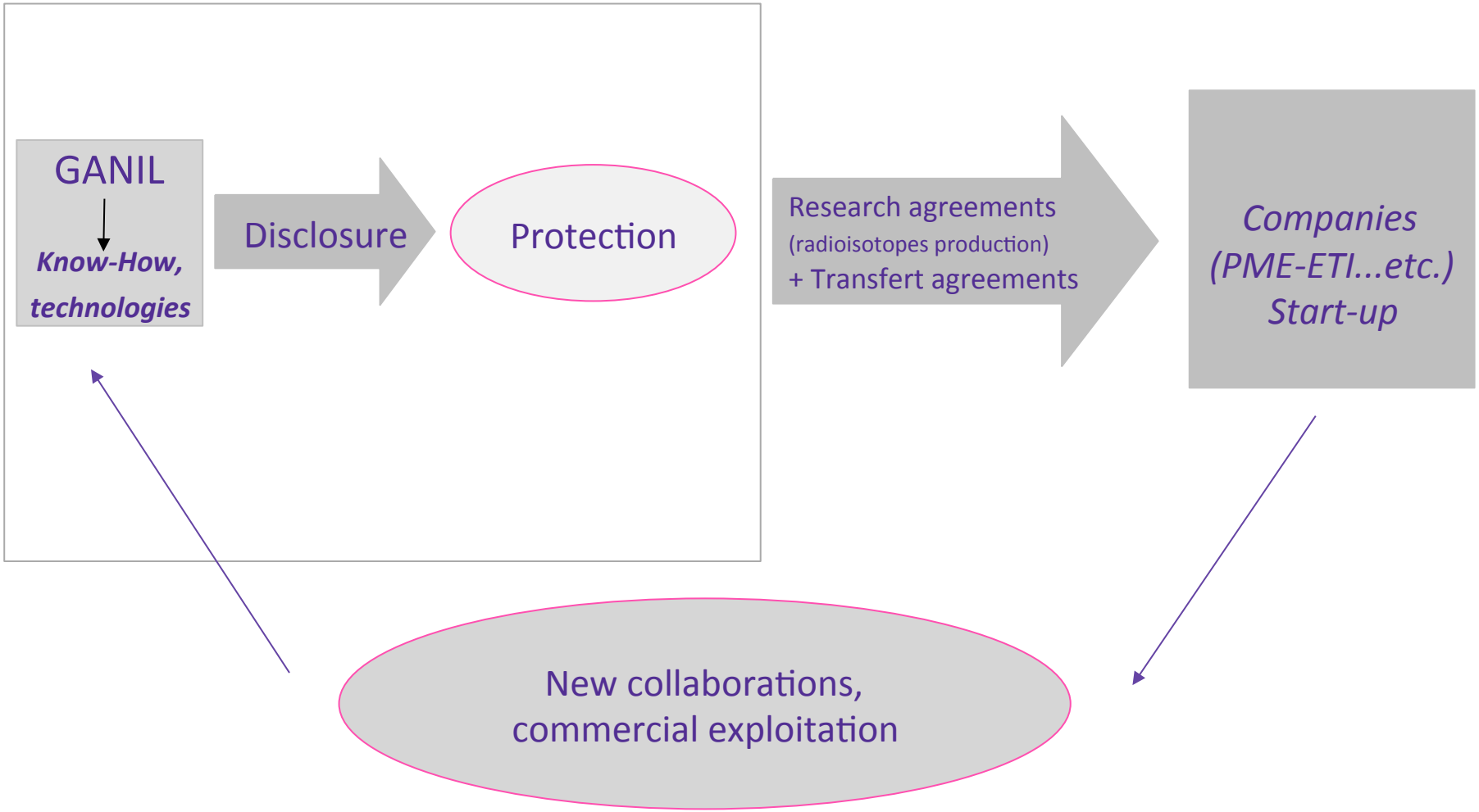
Sub Task 2.4 : Operational implementation - *innovative radio-isotope production*

Radioisotopes are a new research topic at GANIL

Since 2014 : collaborative project aimed at studying the production of an innovative radioisotope: astatine-211 with ARRONAX

⇒ Develop R&D programs for innovative radioisotope production
=> Identify possibilities and methods of transfer

Description of the tasks – Task2



Description of the tasks

Task 3 : Increase of innovation potential (GANIL- CEA)

The objectives of this task are to study the possibilities of increasing the innovation potential of the GANIL laboratory.

- In order to do so, the study will have to identify :
  - New applications to heavy and light ions beams, in order to replace the reactor technology with the accelerator technology, for as many applications as possible.
  - New R&D subjects that might lead to innovative technologies and application
  - The possibility of technical, organizational and operational changes of the SPIRAL2 facility in order to provide more beam time for the industrial application purpose, and the R&D activity

Common actions with Communication Workpackage

WP4 Task 2.2 and WP5 Task 2: Web Page for industrial Users

WP4 Task 2.1 and WP5 Task 2: Communication Tools

WP4 - Participants

- Workpackage leader: Marie-Hélène MOSCATELLO **GANIL**
- Workpackage deputy leader: Elise DUVAL **Nucléopolis**

- Task 1 : Access provision to research teams from industries and involvement of industrial users: Marie-Hélène MOSCATELLO – Xavier LEDOUX **GANIL**
- Task 2 : Industrial Applications and Technology Transfer: Nadine RENARD – M-Hélène MOSCATELLO **Nucléopolis/GANIL**
- Task 3 : Increase of innovation potential : XXX – Arnaud LESERVOT **GANIL/CEA**

Innovation and Industries deliverables

- **Task1: Limited pilots of access provision to research teams from industries and involvement of industrial users**
  D4.1 Business plan for the industrial application activities at GANIL (M36)

- **Task 2: Industrial Applications and Technology Transfer**
  D4.2 Report on the technology transfers developed in the framework of the project (M36)

- **Task 3: Increase of Innovation Potential**
  D4.3 Report on the increase of innovation potential study (M36)

Innovation and Industries milestones

Milestone number	Milestone name	Due date	Means of verification
MS9	Beam profile monitors: Licence contract and R&D collaboration contract with the company	Months 6	Report
MS10	Report on the methodology for the technology transfer for radioisotope production	Months 30	Report

Budget and human ressources

Partner	Budget (Euros)	Human Ressources Person.Month
GANIL	485000	30 (6 p.m GANIL staff)
NUCLEOPOLIS	222500	30
CEA	83585	6

Thank you for your attention