Introduction to the Working Groups

For our discussion in the workshop we suggest to use the concept of the “Research Ecosystem”. It is a model to capture and illustrate which inter-organizational dynamics take place in the process of planning, funding and conducting research and the use of research results. Despite carefully designed strategies, planning and management at national and institutional level, predicting the organizational and individual behavior of all actors in the research sector is very difficult. Rather than seeing the research sector as a set of mechanically linked institutions we emphasize the role that people play as the core component in the research process. The ecosystem image illustrates the system’s important characteristic of being in constant flux created by the interactions between actors, the context in which research takes place and the incentives (or a lack thereof) provided to ensure that certain research is conducted.

The metaphor of the “Research Ecosystem” allows us to try to identify which actors shape research and what tools they have at their disposal to manage research. At the same time it is also a model which helps to understand the factors that contribute to an enabling environment and its dynamics. In an ideal world a dynamic “Research Ecosystem” is characterized by a continuous realignment of synergistic relationships of people, organizations, knowledge and resources. It would promote harmonious collaboration within the system allowing for agile responsiveness to changing internal and external forces.

Fig: 2: The diagram depicts the “Research ecosystem” and the interaction between its components. The model should be “read” from the bottom to the top. Interventions can only be undertaken at the action level. The external factors comprise the dimensions which strongly influence how people and organizations behave although the different actors have only limited control. The results, outputs and outcomes describe a selection of immediate and indirect products of the research process. Beyond this level, we could elaborate on impacts of research for society.
Working group I: Balancing research and innovation (focus on stakeholders)

The working group on Balancing research and innovation is about the decision-making processes used in priority setting and balancing between different objectives of research investments. It should address issues like applied vs. basic research priorities, short-term vs. long-term research objectives, public vs. private investment, or national vs. global research topics.

Participants are asked to reflect on the following questions:

**Actors**
- Which actors influence the decision-making processes mentioned above?
- Which tools do the different actors use to influence the research ecosystem?
  (see the actors level in Fig. 2: Strategies, Structures & approaches, Activities, and Framework conditions)

**Strategies and approaches**
- What are the current research and innovation (R&I) priorities of your institution?
- How are these R&I priorities embedded in institutional plans or strategies?
- What are the national R&I priorities and how does your institution contribute to them?
- What is the role and place of international research cooperation in your institutional R&I systems?

**External factors**
- What major drivers are affecting the current institutional R&I priorities?

Working group II: Instruments and modalities for international research collaboration (focus on country strategies)

The objective of the working group on Instruments and modalities for international research collaboration is to relate the inputs of the first 1.5 workshop days to the reality in one’s own country. While WG I primarily addressed the institutional level, WG II will mainly focus on the national level.

Participants are asked to reflect on the following questions:

**Actors**
- What are your current and expected institutional capabilities to enter into and pursue international collaborations?

**Strategies and approaches**
- What are your existing and desirable regional and international collaborations?
- What is and will be the role and place of international research collaborations in your national R&I systems?
- How does your national policy framework encourage (or hinder) international collaborations?
- What are available funding mechanisms?
- What do you need going forward?
- What are the ways to sustain integrated international collaboration in the R&I sector?
- Pros and cons of engaging international partners (national agencies, institutional partners and individual researchers)

**External factors**
- What are the main drivers, trends and obstacles for international research collaboration?
- What changes and continuity do you expect that will affect international research cooperation?