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Photographic documentation and summary

for
Workshop on Practical Implementation of Alignment II

23 November 2016, Brussels

Date: 30 November 2016

Dissemination level: Workshop participants

Lead contractor for this deliverable: AIT in cooperation with INRA

Contributors: MIUR, UNIMAN

Description of workshop objectives and setting

In December 2008, the Council of the European Union endorsed the concept of "Joint Programming" to promote the pooling of national research efforts in view of making better use of Europe's public R&D resources and tackling more effectively global (societal) challenges. The practical implementation of Joint Programming mainly relies on alignment

Within the ERA-LEARN 2020 an 'Alignment Typology' was developed. Alignment actions cover the entire research programming cycle including research planning, strategy, implementation, evaluation and reporting, training of researchers, research infrastructure and data, dissemination and uptake. https://www.era-learn.eu/alignment/definition-typology

The workshop on 'Practical Implementation of Alignment II: Novel Activities, Guidelines and Lessons Learnt' aimed at the development of success factors and good practices for joint actions to achieve alignment. Based on a variety of investigated case studies and the alignment typology, four tables for discussion were set up for the workshop, each dedicated to one cluster that brought together alignment modalities that have a similar objective:

1. Achieving alignment via **Strategic and Policy Cooperation and Enhanced National (In-Country) Coordination**

2. Achieving alignment via **cooperation and integration of national and transnational research and innovation projects and programmes**

3. Achieving alignment **via institutional cooperation between research and innovation performing organisations**

4. Achieving alignment **via sharing of research knowledge, data and infrastructure**

    Case studies on current and novel approaches to alignment have been conducted and most of them are already available for download on the ERA-LEARN website. https://www.era-learn.eu/alignment/current-approaches; https://www.era-learn.eu/alignment/novel-alignment-modalities

The **guiding questions** for the table discussion were:

1. What are **success factors** for this joint action to achieve alignment?

    - What activities should be put in place at strategic, financial and operational level?
    - What are the necessary pre-conditions?

2. What are the **overall benefits** for JPIs or other P2Ps of this joint action to achieve alignment?

ERA-LEARN 2020 experts moderated the table discussions. Each participant could contribute to three out of four group discussions. After 30 min of discussing the guiding questions, the workshop participants were invited to change tables.

The workshop was targeted on practitioners in P2Ps concerned with alignment at both operational and strategic levels. 28 people participated on the workshop. Participants include representatives from eight JPIs, representatives of investigated case studies and representatives of the Mutual Learning Exercise on Alignment.

Achieving alignment via Strategic and Policy Cooperation and Enhanced National (In-Country) Coordination

Understanding strategic and policy cooperation and its overall benefits for alignment

Strategic and policy level cooperation in research and innovation (R&I) across countries, and improving in-country coordination around common priorities for joint programming, are **key prerequisites** to achieve greater alignment of national research and innovation strategies, programmes and activities across EU Member States, H2020 Associated Countries and beyond, and ultimately strengthen the European Research Area.

In addition, such cooperation is also key to encourage participating countries to modify their *national* R&I strategies and programmes, as a consequence of the adoption of joint R&I priorities in a specific field. The development of a common SRA, in particular, is needed for participating countries to collectively agree on areas for cooperation and joint research actions, and adapt their national programmes accordingly.

Photographic Documentation of discussion
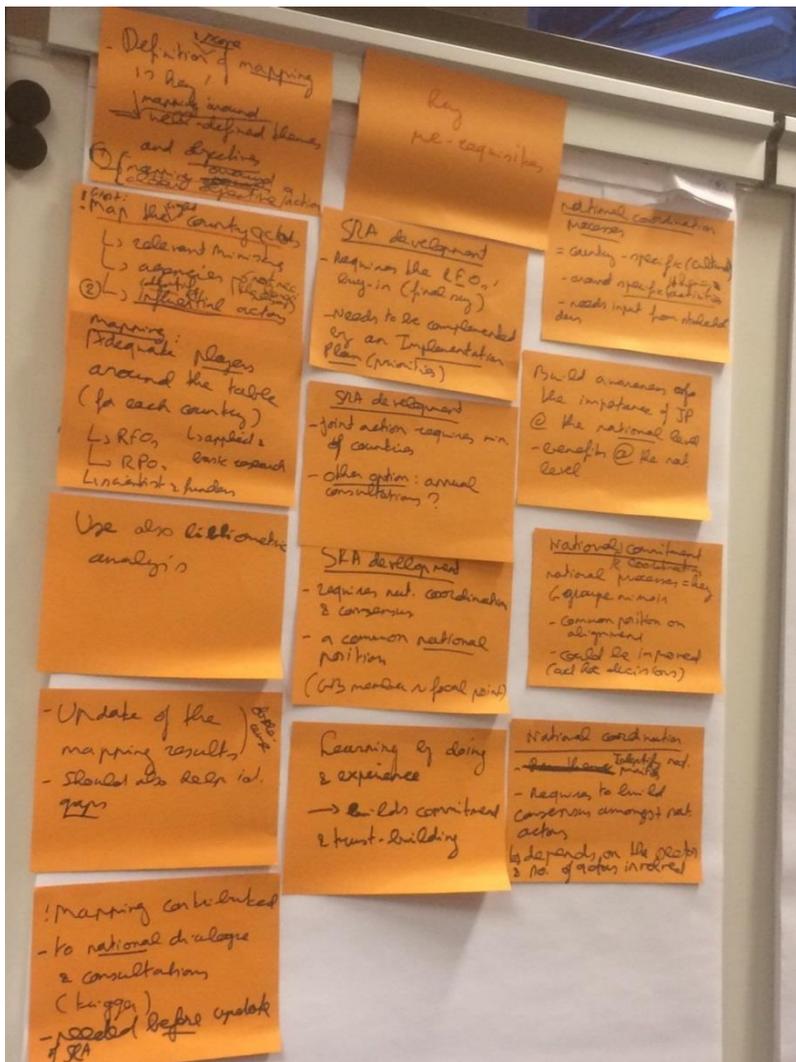
Summary of the discussion

Success factors / Good practices / Pre-Conditions

Joint mapping of existing and planned national and EU research initiatives in a specific field

- Before starting such a mapping exercise, the coordinator of this activity should clearly define the exact scope and objectives of such an exercise.

- Mapping of existing/planned national and EU research (both in terms of programmes and funding) is best done around well-defined common themes (the more specific the theme, the easier the mapping will be) or a well-defined activity (e.g., future joint research action that is being considered).

- This in turn would help identify the right actors to be invited to participate in the mapping (e.g., programme managers in RFOs, RPOs, individual scientists, non-governmental stakeholders).

- Participating actors should be given very clear instructions so as to ensure they provide accurate, complete and comparable information.

- Mapping does not only have to rely on questionnaires or posters (which take time to complete for participating agencies/ countries). It can also rely on bibliometric analysis and desk studies done by the mapping coordinator (as was the case for the FACCE-JPI mapping exercise).

- The final objective of the mapping exercise is to identify research gaps that could be addressed via joint programming.

- As mapping results are rapidly obsolete, mapping should be conducted before any SRA update and/or before a specific joint action is undertaken.

- The *process* of the mapping exercise is as important as the end-result. The process should be inclusive and interactive, in order to promote trust-building and commitment amongst all participating agencies/ countries. Mapping can indirectly also contribute to strengthening national dialogue and consultations (see in-country coordination below).

Joint development of a common Strategic Research Agenda

- The development of an SRA requires having the right national and European actors around the table, in particular RFOs. They should "own" the SRA in order to encourage strong commitment to the latter.

- Such a process also requires that each participating country has identified its (consolidated) national JPI priorities, via national in-country consultations (see below).

- The person that represents its country on the JPI Governing Board and that contributes to developing the SRA should represent the views of his/her country as opposed to his/her agency.

- A common SRA should be accompanied by a practical implementation plan, which outlines the common SRA priorities to be undertaken in the next 2/3 years and the way these should be operationalized (i.e., via what instrument/ joint action).

- Some P2Ps have not developed common SRAs. Instead, they have relied on annual consultations aimed at identifying common priorities for the next joint actions to be undertaken.

- SRAs should be developed in consultation with non-governmental actors, e.g., scientific experts and stakeholders.

*National (in-country) coordination regarding alignment/ joint programming*

- First, member-countries need to identify the most relevant and influential national R&I actors (which are not always the largest RPOs) in a specific field. Such actors may also include non-governmental actors.

- Such "mapping" may be more complicated to conduct in cases where the research field involves different research disciplines, and thus potentially many more agencies.

- Buy-in and active participation of the relevant RFOs is key

- A lead agency or Ministry should take the lead in the inter-agency/ inter-ministerial coordination, and help all actors involved in the national coordination process reach a consensus on national priorities for joint programming/ alignment in a specific field.

- There "no one size fits all" national coordination process. It depends on country's institutional features, number of relevant national R&I players, etc. and on the research field concerned. (In France: "mirror groups" have been established per JPI as well as amongst all JPIs; they are coordinated by the Ministry of Education and Research; in Austria: WG of Austrian RTI dedicated to Alignment, coordinated by the Ministry of Innovation and Technology and the Ministry, Science, Research and the Economy)

- While such processes exist in many EU Member States, their functioning could be improved (and institutionalised).

- National coordination on alignment and JP is best done around a specific theme or activity

- National coordination groups also have an important role to play in helping raise awareness amongst national R&I of the importance and benefits of trans-national alignment for national R&I actors

Achieving alignment via cooperation of national research and innovation programmes and project

Understanding cooperation of national research and innovation programmes and project

Alignment of national and transnational research and innovation programmes can be understood as the strategic approach undertaken by Member States and international bodies to modify and adapt their research programmes in a manner so that jointly agreed research priorities can be implemented across different Member States in the European research area, making use of different funding sources/programmes.

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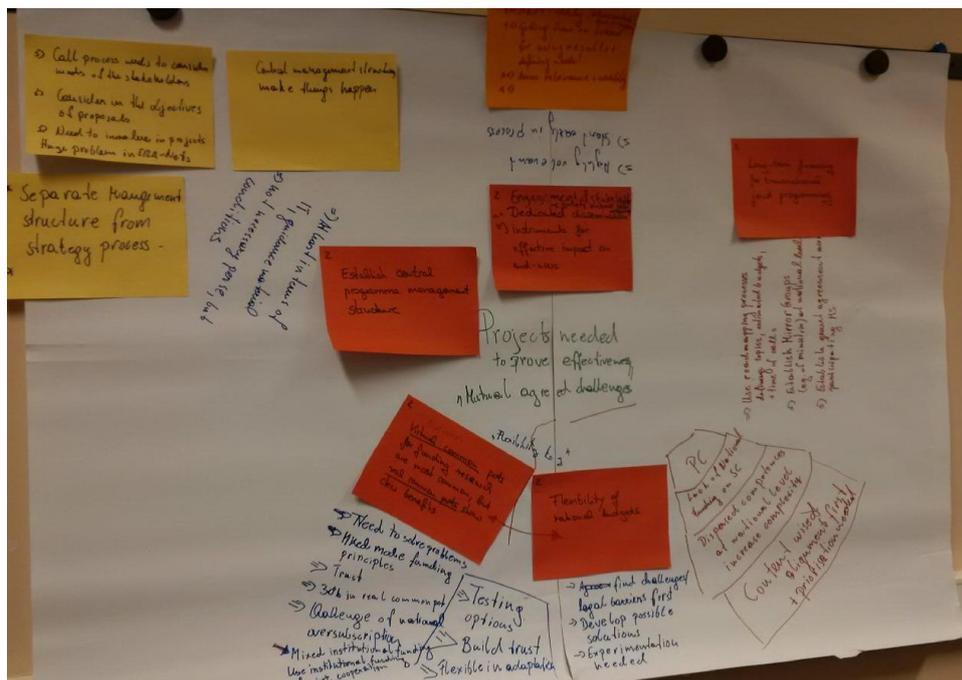
Summary of the discussion

Overall remarks on cluster:

Transnational operating R&D programmes - which launch calls and jointly fund projects - were seen as a necessary condition to effectively tackle grand societal challenges.

Success factors / Good practices / Pre-Conditions

Strategic

Strategic actions at the national level referred to the need for national co-ordination and assuring long-term financing:

- National mirror groups may help to foster national coordination among various ministries and stakeholders
- For assuring long-term financing, roadmapping processes agreed upon in Strategic Research and Innovation Agendas should allow to agree upon topics, dedicated budgets and timing in advance.

- Grant agreements among participating MS may express interest of participation and planned funding volumes well in advance.

Financial

Trust and flexibility are key when it comes to operationalisation of funding modalities of transnational R&I programmes.

- Funding options need to be tested and funding principles need to be made clear in advance.
- Legal barriers on how to spend money on a national level need to be identified in advance, in order to be able to tackle the challenges in advance to the call process
- As opposed to using either virtual common pots or real common pots for funding of trans-national programmes, mixed methods of funding are increasingly getting common. E.g. in some P2Ps it is agreed upon in advance that 30% of total funding will be spent as common pot. This allows better allocation of projects to consortia according to quality criteria
- For better operationalising the SRA, it is important also to devote national institutional funding and national programme funding better towards international agreed agendas/objectives.

Operational

- While centralised programme management structures can be very effective, this might pose challenges concerning transnational financing of management structures and centralisation of programme knowledge. Therefore, also rotation of programme management structures was suggested.
- In order to ensure consistency and allow for transparency for programme participants, IT management systems and clear guidance for reviewers of proposals and applicants need to be in place.
- For ensuring engagement of stakeholders it was stressed that dedicated dissemination instruments need to be in place for increasing end-users impact!
- For better inclusion of society and industry, specific guidance is also needed for project applicants and project reviewers.

In order to be able to launch joint R&D programmes, the discussion focused on **preconditions** for setting up joint R&D programmes:

- The most decisive precondition is to have mutually agreed challenges and objectives! Only then it is possible to think about how money could be spent and which parts of the money should go international or remain national.
- Concerning the considerations "how the money should be spent" it was made clear, that this does not only include funding for collaborative R&D projects, but also "institutional funding" (for example of dedicated national R&D performing organisations).

Main obstacles for progressing transnational R&I programming across Member States a lack of dedicated R&I funding on Societal Challenges and dispersed competences on the national level were mentioned.

Cluster 3: Achieving alignment via institutional cooperation between research and innovation performing organisations

Understanding institutional coordination

National research priorities are usually implemented via national research programmes administered by national research funding agencies and/or national research performing organisation. The approach to achieve **alignment via institutional cooperation between research performing organisations on all stages of the research programming cycle is called 'institutional alignment'**.

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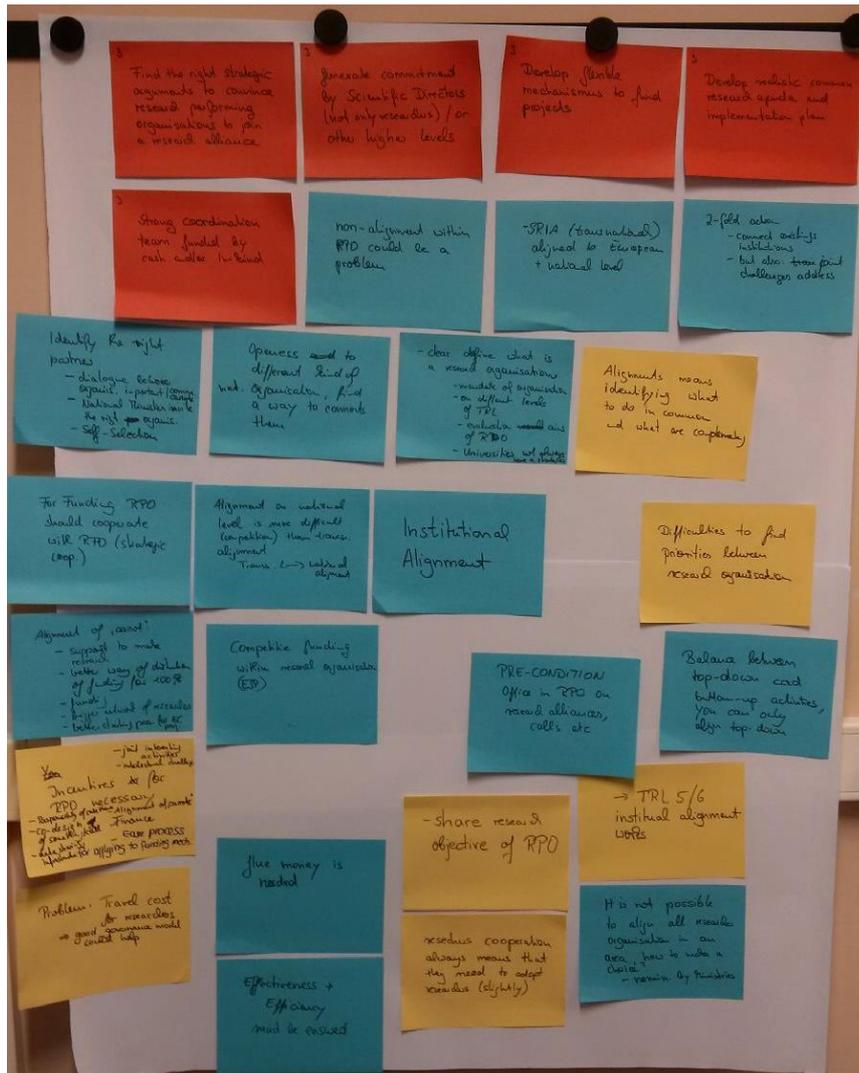
Summary of the discussion

Success factors / Good practices / Pre-Conditions

Strategic

- A research alliance must be attractive ("alignment of carrots") to join for
  - o Researchers, but also for
  - o Scientific Directors level

  Potential reasons to join a research alliance are: co-creation and co-design of research agendas and call topics, sharing of data and infrastructure, etc.

- The research strategy/objectives/priorities of the research alliance is aligned with (1) overall P2P SRIA, (2) PROs SRIA, (3) national SRIAs and (4) the European Strategy
- Find smart ways to connect a research alliance to end-users (cities, industry, civil society) to ensure a transdisciplinary approach towards research and development of solutions for societal challenges

Financial

- Funding for coordination and management of institutional alignment is as necessary as funding for integration and implementation of joint research
- Strategic cooperation between a research and a funding alliance would help to fund the implementation of joint research
- Manage to have competitive funding (peer review) within research alliances available

Operational

- Find a model for cooperation of RPO that respects the diversity of RPOs, diversity is driven by:
  - Different mandates of PROs
  - Different incentive systems with PROs
  - PROs cover different research levels: basic, applied, innovation-oriented PROs
- Make clear to RPO, that institutional cooperation and alignment always means:
  - Identifying what activities reach added value by joining forces for what PROs want to do anyway and
  - Identifying what activities better to do in a complementary manner

  Raise awareness of RPOs that joining forces (alignment) always means that a little bit of change and adaptation (also meaning extra work) is needed in comparison to the original planed work

- Development of a balanced mechanism to identify the partners for a research alliances
  - Open to all (self-selection) vs. strong added value of new partners
  - Possibilities for selection: National Ministries nominate PROs, establishing dialogue between organisations to identify the right ones

Pre-conditions

- Office in PROs available that screens appropriate research alliance for their teams

Overall benefits for JPIs or other P2Ps of institutional cooperation to achieve alignment

- Institutional cooperation is beneficial for P2Ps if it
  - Contributes to solve societal challenges in an efficient and effective way
 - Fragmentation and duplication of research (funding) is reduced

Achieving alignment via sharing of research knowledge, data and infrastructure

Understanding sharing of research knowledge, data and infrastructure

Alignment can be achieved via **capacity and community building amongst researchers**, and by providing them with the necessary infrastructural and technical resources to conduct transnational research. This requires sharing research knowledge, data and infrastructure across borders through specific joint actions that include:

- **Networks of researchers** on a specific research issue: they facilitate (i) exchange, coordination and harmonisation of good practices, research methodologies and techniques, (ii) exchange of knowledge and data, and (iii) exchange of ideas for future transnational research;

- **Sharing/joint use of research infrastructure**: research infrastructure can be made available at transnational level by opening access of existing national to researchers from other countries or thanks to the use of transnational research infrastructure;

- **Transnational data sharing/open access platforms**: they facilitate (i) dissemination, exchange and re-use of research data, publications and other research outputs, and (ii) joint training, dissemination of good practices, research methodologies and techniques (e.g. online).

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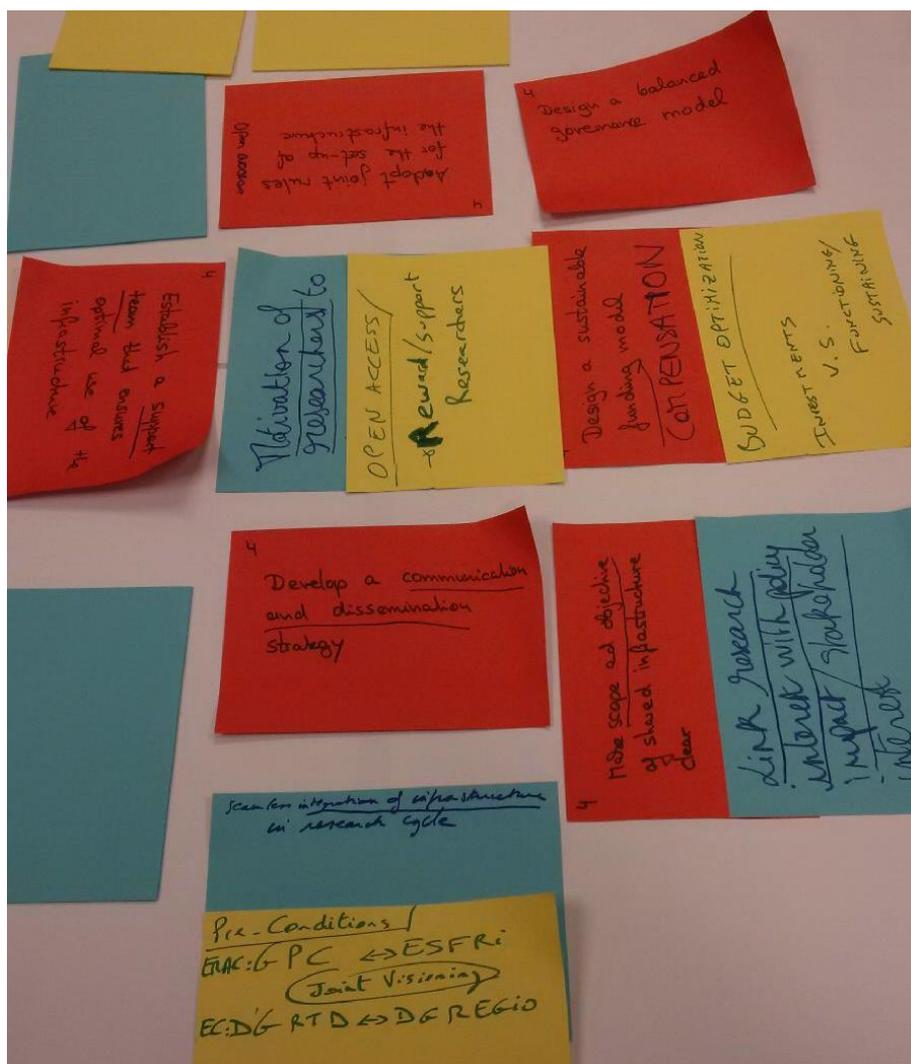
Summary of the discussion

Overall remarks on cluster:

- Distinguish (i) data/knowledge and (ii) research infrastructure: not the same questions/success factors at operational level (although more or less same overall goal of achieving capacity- and community-building)
  - ⇨ (i) Sharing data/knowledge: can be informal through a bottom-up approach (i.e. doesn't necessarily require formalised Open Access mechanisms, although the latter are of high added value)
  - ⇨ (ii) Sharing infrastructure: requires cross-border organisation between countries and political willingness
- Within a transnational approach towards research *infrastructure*: distinguish opening access of a national infrastructure (to one country, or to several countries simultaneously / i.e. joint use) from setting up a new transnational infrastructure (extremely unlikely)

Success factors / Good practices / Pre-Conditions

- *For both infrastructure and knowledge/data:*
  - "Sharing" requires trust building: e.g. confidentiality issues to open data, open access to national infrastructure
  - Importance of a support team and appropriate network tool (e.g. JPI) to raise awareness of the benefits of this transnational approach within research communities as well as amongst policy-makers that deal with data and infrastructure policies, and to link research communities with policy/stakeholders and match common interests
  - Motivate researchers to share data/knowledge and use infrastructure, especially across disciplines (i.e. challenge-based approach), without it being an extra-burden: need to integrate all related information on data availability and infrastructure in a centralised manner in order to make access easier to researchers and create opportunities for "sharing" amongst researchers (e.g. transnational research project with the joint use of national infrastructure, bottom-up networking and collaboration)

- *For infrastructure:*
  - Easier to use national infrastructure: governance, funding and management processes are governed by one country only
    - ⇨ Usually relies on the matching of national and transnational interests/priorities (alignment is not necessarily needed during the entire life cycle of a national infrastructure)
  - Requires long-term planning of use of infrastructure: funding (initial investment AND long-term operation), governance (esp. in the case of a transnational infrastructure or a national infrastructure with high European/international added value), management
    - ⇨ Identify European resources (e.g. European common pot such as ESIF) to organise and fund long-term cross-border sharing of infrastructure of European added value
  - Advisory role of transnational/European bodies in the governance of a national research infrastructure for effective coordination of national and transnational interests/priorities?
  - Requires the development of shared views and a common understanding of transnational use of infrastructure amongst member countries (e.g. at JPI level) in order to effectively coordinate national and transnational interests/priorities

- Need for coordination and joint visioning amongst ESFRI, GPC, ESIF and DG RTD in order to support P2PsCompensation of national costs related to opening access to national research infrastructure: e.g. by exchanging national infrastructure amongst countries or by covering other costs related to research activities (staff, equipment, etc.)
- Pre-condition: capacity building for less research intensive countries to fill knowledge gap in order for them to be able to use cutting-edge infrastructure at transnational level
  ⇨ e.g. integrate sharing of infrastructure in a transnational mobility and training scheme

- *For data/knowledge sharing/Open Access:*
  - Requires to develop political willingness to share results across member countries
  - Need to evaluate whether a research output is suitable for open access (confidentiality issues? E.g. regarding research data use by industry?): need for a high-level framework on data management/further use of research data/IPR (complementary to Data Management Plan at project level)
  - If formalised and easier process for re-use of open access data, requires protocols and standards for data collection and management
  - Hindrance by legal barriers: raise awareness of the latter in order to potentially overcome them
  - Encourage researchers to use open access mechanisms, make open access an asset for their carrier, e.g. through rewards for researchers, funding for OA in top-journals (publishing in top-journals is not the opposite of OA), etc.

Overall benefits for JPIs or other P2Ps context of joint programming/alignment

- Reducing costs at national level by sharing them at transnational level
- Capacity building potential, speeding up of research progress and innovation: in order to bring EU at the same level as other regions/key players on the international scene – make ERA competitive
- "Sharing" of infrastructure and data/knowledge: practical/technical instrument to achieve alignment

Conclusions and next steps

The ERA-LEARN 2020 Team thanks all workshop participants for the valuable input and provides an outlook to the next steps:

- Photographic record of flipcharts to all participants will be developed

- Based on the workshop discussion ERA-LEARN 2020 will develop **guidelines for specific joint actions** to achieve alignment (report and online) (03/2017)

- SWOT analysis specific joint actions to achieve alignment (11/2017)

Comments on the draft version of the guidelines for specific joint actions to achieve alignment from workshop participants are welcome.