

Water Joint Programming Initiative

Alignment Workshop:

Taking Forward European Alignment of National Water RDI Activities – Challenges, Opportunities and Recommendations for Action.

CSIC Offices, Brussels, Belgium 22nd October 2014

Purpose of the Meeting

To review existing alignment mechanisms and experiences (including those adopted by other transnational initiatives) leading towards an operational plan for JPI Water alignment activities 2014/2015.

Success of the Water JPI is dependent upon willingness to share and to proactively encourage alignment of national research agendas, existing and in future. Many of the activities in the Co-ordination and Support Action of the Water JPI (WatEUr) facilitate and strengthen alignment. These include the mapping of national research projects and programmes, development of agreed pan-European priorities, as demonstrated by the Strategic Research and Innovation Agenda (SRIA), common agreement on instruments to be applied by the Water JPI, Joint calls and participation in ERA-Nets. One of the tasks within WatEUr is specifically focused upon harmonisation of agendas with the objectives of:

- Examining opportunities for alignment
- Reducing duplication and fragmentation
- Increasing and monitoring coordination and collaboration

Across all JPIs there is an increasing emphasis upon alignment activities, most recently reinforced by the GPC, whose Alignment Working Group produced a draft report in July 2014, finalized in October 2014.

This meeting will also draw upon experiences from other related national and international initiatives. Many of the speakers provided PowerPoint presentations, which are referenced through web links (shown in parenthesis in this summary).

Attendees

WatEUr WP4 Participants, EC officers, GPC and representatives from the Belmont Forum, Climate, Oceans, FACCE and Anti-Microbial Resistance JPIs.

Petra Manderscheid	BE (JPI-Climate)
Willem De Moor	BE (JPI –Oceans)
Ángel E. Muñiz Piniella	BE (JPI –Oceans)
Sabine Sorge	DE
Johannes Karte	DE (Belmont)
Enrique Playán	ES
Rosa R. Bernabé	ES
Miguel Ángel Gilarranz	ES
Carmen Castañeda	ES
Moira Torrent	ES
Panagiotis BALABANIS	EU Commission
Luisa Prista	EU Commission
Julia Prikoszovits	EU Commission
Rosella Riggio	EU Commission
Frederique Martini	FR
Heather Mckhann	FR (JPI-FACCE)
Alice Wemaere	IE
Giuseppina Monacelli	IT
Elena Giusta	IT
Cecilia Bibbó	IT
Alexandre Fernandes	PT
Laura Marin	SW (JPI-AntiMicrobial Resistance)
Graham Leeks	UK

Record of the meeting

The responses to questions (including very active discussion by all participants) have been incorporated into the reporting of each section of the meeting. The meeting was divided into four main parts.

Section I - Introduction and Context

The first part of the meeting considered the context of alignment activities in the JPI's including the development of the Water JPI, guidance from the GPC and the perspective of the European Commission.

Enrique Playan, Water JPI Programme Coordinator briefly reported on overall progress in the Water JPI and noted that Alignment activities were a very important and challenging part of the JPI, as demonstrated in many of the presentations and discussion at the SRIA and Implementation Plan Launch Event on 21 October 2014.

Graham Leeks, WatEUr Work Package Leader for Implementation introduced the purpose of the Workshop. At the outset it was acknowledged that alignment was a challenging task, but that there were already useful activities and outputs from the Water JPI upon which to build. These include the national research mapping, the consideration of instruments and measures of the Water JPI and the Strategic Research and Innovation Agenda. There are also actions identified in the Implementation plan, which will be integrated into the Alignment plan and recommendations to be developed in this Workshop.

Julia Prikozovits, DG Research and Innovation, European Commission presented the main points from the report of the GPC Working Group on Alignment as well as some own reflections on the topic. The report has just been adopted by the GPC. Alignment is challenging, but must be realistic and practical – Not a “theoretical activity” (see Mogen Horder in the GPC Working Group report on JPI Alignment Activity). The group had set out to define what alignment really is and has suggested a definition in the report which now serves as guidance for the JPIs.. In the future, the GPC will continue follow-up on alignment and its measurement. . Circumstances in which alignment may be resisted by some parties or become more difficult to achieve were also discussed. Alignment becomes more complex in dealing with multiple Agencies within National partners or systems which are predominantly “bottom up”. There were also differing perspectives on whether Joint Calls may also be regarded as a form of alignment. The GPC report suggests that all actions leading to a joint call and resulting after a joint call are alignment but the mere joint call is not, just as ERA-NETs do not require alignment of research policies for creating a joint programme. , However, workshop participants note that there were instances in which the subject areas of transnational

joint calls may provide a nucleus, often attracting interest and facilitating engagement with RDI communities across Europe. In some cases, this extended well beyond those individuals or institutions directly funded from the Joint Call. The interaction between the GPC and JPIs is very important and national JPI representatives should seek communication with the national GPC representative and vice versa. It is also notable that ERA-Learn now has a module on alignment.

Panagiotis Balabanis, DG Research and Innovation, European Commission gave an oral presentation on the expectations for alignment in relation to the Water JPI as a basis for further discussions. There were many benefits to reaching a common understanding and developing a strategic approach to alignment. This needs to take account of the strategic approach in each Member State and the timing of these processes. The SRIA may provide feedback into national strategies. In some cases it may not be necessary to pursue some themes at national level, in the knowledge that specific gaps in knowledge in specific areas are being covered by other partner countries or institutions. Lessons from Joint Calls and ERA-nets are potentially useful in alignment activities. Knowledge Hubs can also be of value. Luisa Prista added that alignment of RDI in Member States may be encouraged in a very positive way through examples which demonstrate the added value from these activities at national levels. Regarding the alignment of the timing of activities, Alexandre Fernandes mentioned that the lessons learned from H2020 WP Synchronized Calls initiative could be useful. Laura Marin, based in the Swedish Research Council and Project Manager for the JPI on Antimicrobial Resistance, also pointed to the merit of measures of alignment being included at the evaluation stage.

Section II – Some Case Studies of National Programme Structures: The synergies and contrasts in programmes and funding models – Perspectives from the National Funding landscapes.

For alignment of national RDI to take place, mechanisms and actions have to be used which recognize the range and diversity of approaches and practice across the Water JPI. This section of the workshop was designed to consider the variations and commonalities between programmes being carried out at the national level, in addition to exploring the variety of structures, ways and timing of programme development. Presenters, drawn from the Water JPI community involved in WatEUr, were also encouraged to mention examples of existing bi-lateral and multi-lateral alignments. Please note that these reports were intended as informal personal perspectives, produced at short notice, and therefore do not represent definitive statements by national funders.

United Kingdom: Graham Leeks described the system operated by the UK Natural Environment Research Council, UK. NERC is the UK's largest funder of environmental science with budget of around 400m Euros p.a. It has a devolved authority to make funding decisions. NERC supports approximately 1000 research projects in over 50 universities and 20 research institutes. NERC is funded mainly through the UK Government Department of Business, Innovation and Skills, but also other Government Ministries and with private and public sector partners. There are 3 main funding modes – Discovery Science, Strategic science and National Capability. There are also three main Science themes or 'Grand Challenges'. These are: Benefiting from Natural Resources, Resilience to Environmental Hazard and Managing Environmental Change. Strategic Research Programmes often have programme offices with 3-15 projects in each one. Timescales on development of new programmes can take up to 2.5 years, with both bottom up and top down components in the development process. Changes are being made to reduce this lead-in time down to around 6 months to one year. In terms of multi-lateral and bilateral initiatives, these include roles in Belmont and Future Earth, with China, India and the USA amongst others. There are also many European collaborations through FP7 and H2020, in addition to roles in JPIs including Water, Climate and Oceans.

Portugal: Alexandre Fernandes described the structures within Fundação para a Ciência e a Tecnologia. FCT is a bottom-up research agency. In 2012 they started a joint effort between ministries and agencies to develop a national strategy for research and innovation for smart specialisation. This involved 2 stages: Firstly, a SWOT analysis of the Portuguese research system was performed, to identify its strengths and gaps; this led to a second stage where strategic research areas were selected, based on the competitive advantages and interests of Portugal in those areas. Workshops were held with stakeholders and a revised

version of the strategy is being developed, following public consultation. This will likely lead to the creation of instruments to implement the strategy. In addition to the bottom up approach, these instruments may include thematic calls for the research areas identified in the smart specialization strategy. In line with the recommendations of the GPC, research priorities are aligned with the JPIs, including Water and Oceans. Portugal is also working on interministerial coordination to approach some of the national strategic research areas. For example, FCT is under the aegis of the Ministry of Education and Science. Currently, there are discussions going on with the Ministry of Health in order to align research programmes. There is also the possibility of having joint calls with other governmental agencies, such as the Portuguese Environmental Agency. The GPC report also recommends the creation of networks, centers of excellence. FCT is currently finalizing the national roadmap of research infrastructures of strategic relevance. This roadmap includes several research infrastructures in the natural and environmental sciences (including infrastructures involved in Water RDI). The researchers are aware of the processes developed over the last two years and one of the major challenges is to run “top down” and “bottom up” processes in complimentary ways.

Italy: Giuseppina Monacelli of the Istituto Superiore per la Protezione e la Ricerca Ambientale described the situation in Italy. The research system is quite complex. Although the ministry level is the main actor in research planning, but there are many other diverse players, not all of whom answer directly to one ministry. ISPRA and others are engaged in development of strategy in relevant research areas. There are also several ministries and agencies involved, who directly or indirectly finance research. Substantial funding is directed towards cataloguing and implementation of EU Directives. The overall research plan is planned to mirror the H2020 and the research ministry has asked the agencies to support the plan. The process of alignment has begun and is expected to be a long one. Giuseppina is actively involved in Societal Challenge 2 and 5 in Italy, and has roles at EB and GB in the Water JPI.

In addition to funding for research entities, part of the national funding from ministries is intended to involve participation from private companies in research and innovation activities (eg. patents, etc.). The Water JPI mapping exercise has helped to identify international cooperation in this area. In Italy, another level of funding is also significant. This is research supported at the regional level, including significant funding from regional banks.

Ireland: Alice Wemaere of the Environmental Protection Agency of Ireland provided an example from a small country. In Ireland there are 8 or 9 agencies funding Water RDI. The EPA is a small agency and has been developing a new program, with research priorities covering a 7 year period. Public consultation,

ended in 2013. The EPA research programme is subdivided in 3 pillars (water, climate and sustainability) with calls on an annual basis. In each year there is a consultation identify the needs. The research program in water is aimed to implement directives.

Water RDI funding in Ireland can be from many agencies, covering basic through to applied research. Some act through bottom-up processes, whilst others are top-down. There is now a national research prioritization exercise, focused on 14 priority topics (not specifically water) with an emphasis on Jobs and growth. No national roadmap of water research currently exists, although there is an awareness of fragmentation and there are efforts to provide additional co-ordination, pool resources and avoid duplication, through a National Co-ordination Group for Water Research.

Germany: Sabine Sorge of Jülich described Water Research in Germany. Water research is very multifaceted in Germany and executed at three levels: Institutes/ Research Funding bodies (ministries) / Industries and SMEs.

In 2010 the Federal Ministry of Education and Research Ministry (BMBF) launched its funding priorities strategy in Research for sustainable development. This formed part of the higher strategy of the national government.

Sustainable Water management (2010-2014) covers 5 thematic areas. BMBF is providing 200 M€ over 5 years in applied science. The implementation planning will include topics from the SRIA. All coordinators are in close contact with a cross-cutting trans-project involving management similar to a Co-ordination and Support Action that makes sure that all the results are joined up.

Section III – Experiences in transnational alignments: The lessons from other international initiatives

Alignment, in many forms, is a challenge which is faced in many international initiatives. This section of the meeting explored the experience of other international programmes and sought to learn lessons and find useful areas of commonality and potential future interaction with them.

Case Study: The Belmont Forum – Johannes Karte, Programme Director, Physics Mathematics and Geosciences, Deutsches Forschungsgemeinschaft

The Belmont Forum is an alliance of 14 major funders across the globe including France, Germany, UK, Sweden and the EC. ICSU and ISSC have observer. The instruments to take forward collaboration include networking, strategic activities and research projects (involving at least 3 countries in each project and sometimes up to 10-12 partners). The agreed processes are voluntary and non-binding. Participation in each call is dependent on countries having existing national programmes on the theme or relevant infrastructure. Voluntary contributions can be in kind or in cash, usually between 1 to 2 or 3 M€ per funding agency over 3 yrs. The Belmont Forum has collaborated with G8, ERA-nets and JPIs. The collaboration with JPIs has widened collaborations in Europe and has been an attractive way to open calls with wider groups of funders. It is notable that the scientific community is far more advanced than the funders in collaborative networking (eg. Leading through to co-authorship of publications). Multidisciplinary working across natural and social science has proved weak at the proposal stage, but much stronger during the operational stages.

Across the Forum there is a wide diversity of funding models, with many different rules and lengthy lead-ins to funding. The responsibilities for managing calls rotate across the different agencies, with a small secretariat. A further listing of the Lessons Learned is given in the presentation cited above.

Case Study: Alignment as seen by The Joint Programming Initiative on Agriculture, Food Security and Climate Change (FACCE) JPI – Heather McKhann, INRA, France

FACCE Involves 21 participating countries. Development has been a three stage process, starting with development of a common vision with long term objectives, translation into a SRA (Strategic research agenda) and implementation of the SRA.

From the start of FACCE, it has been working with 18 ERA-nets making links, avoiding duplications and finding synergies. They work in Platform ERA-net (putting together ERA-nets knowledge) and have organized two international workshops in Dublin and Bonn. There have also been collaborations in actions with the Belmont Forum.

Specific tools for alignment include a Knowledge Hub which brings research groups together in a specific area of FACCE science (known as MACSUR, this includes 76 groups from 18 countries and 265 people), Knowledge network (with a wider remit) and Thematic Annual Programming (TAP) again focusing on specific science areas in which most partner countries have new or foreseen programmes. There also other ideas which will be developed. These are outlined at:

<http://www.facejpi.com/facejpi/Document-library/Toolbox-of-potential-funding-instruments>

Other JPI Case Studies

Short oral and PowerPoint presentations were given from 3 other JPIs. These were represented by:

- Laura Marin, Project Manager, JPI - Antimicrobial Resistance, based at the Swedish Research Council.
- Ángel E. Muñiz Piniella, Scientific assistant, JPI Oceans secretariat and Willem De Moor, Advisor, JPI Oceans.
- Petra Manderscheid, Executive Director of the Central Secretariat, Joint Programming Initiative – Climate.

This was followed by further miscellaneous comments and points of discussion:

The GPC report had covered many areas. Petra indicated that if the GPC could gather examples of success stories of alignment, this could be very useful for the JPIs. Heather flagged the value of material on alignment being prepared within the ERA-Learn project, including examples and tools. Several people felt the material from this meeting would be useful if made available. Graham said this record of the meeting would be prepared, including access to the PowerPoint presentations.

Panagiotis flagged the importance of policy impacts from alignment. The alignment actions have an added value, in the sense of trying to avoid fragmentation, duplication at European level, but we also need to see the impact all the actions will have at national level at policy and strategic levels. Heather indicated that this is likely to be a long term process with substantial impacts of alignment being over 5-15 year timescales. Ángel described how specific cruises, intercalibration, joint data collection and analysis, plus workshops (at national and international meetings covering specific subjects) have provided mechanisms for alignment in JPI- Oceans. Panagiotis also flagged the process of alignment which is taking with partners beyond Europe. Some countries are linked with several JPIs (eg. Canada is collaborating in five JPIs). The possibility of JPIs linking or finding common approaches to potential partners beyond Europe was discussed.

Section IV- Existing and new approaches to be taken forward in the Water JPI:

Possible actions for 2014/2015 and Prioritisation.

The final two sections of the meeting focused upon the development of plans for action within the Water JPI. This particular section was intended to encourage workshop participants to consider the priorities in taking forward actions, as recommended by the GPC report on alignment, and to incorporate additional ideas and comment generated during this workshop. The priorities are also based on the practicality, achievability and relevance within the Water JPI, given the resources available and existing Implementation Plan. In this early version, the scoring, ordering and additional possible actions have been based on a short session in the Alignment Workshop. It is therefore subject to revision. Where actions are fully covered by the existing overall Water JPI Implementation Plan, this is referenced without further scoring.

Each action is scored by:

Timescale of Action - **Short** (within 6 months), **Medium** (within one year) or **Longer term**

Degree of Difficulty - **High/Medium/Low**

Priority for Water JPI – **High/Medium/Low**

LIST OF POTENTIAL ACTIONS	Preliminary Scoring at Workshop (Timescale/D-o-D/Priority)
Networking and capacity building among research groups and stakeholders - eg Knowledge Hubs and Thematic groups	L/H/L
Calibration and standardization of methodologies	See Implementation Plan
Identifying capacity building approaches to facilitate better networking across and between disciplines and researchers	M/L/H
Any activity heavily building on large infrastructures or large institutionally funded players Definition of approaches that may facilitate wider access to national technology platforms or infrastructure, and promote the sharing of data and resources	L/M/M (May benefit from other European initiatives in this area)
Standardize – where possible - internal procedures in Member States where relevant for joint actions	See Implementation Plan (Already actioned in Pilot Call)
Focus on research areas where nationally funded research is existing aiming at building joint critical mass – eg centres of excellence	L/M/M
Alignment leads to joint transnational calls (eg funded by ERA-NET Cofund) and joint transnational calls lead to alignment	See Implementation Plan
Development of transnational procedures for prioritising, evaluation and decisions on funding	M/M/M
Coordinated funding decisions in each country (time, amount and topic).	Partly covered by joint calls, as in detailed in Implementation Plan
Catalyzing development of national strategies	S/L/H
Linking, harmonizing and sharing information between investments under national programmes in the JPI research field	M/L/H (Degree of difficulty higher for “Bottom-up” systems)
National level dissemination/meetings targeted to specific groups – Researchers, Funders, Policy (eg. National Parliamentary Water Groups)	M/L/H
Cross JPIs Communication to the European Parliament	M/L/H
Co-ordination with other JPIs on national agency links (within and beyond Europe)	M/L/H

Section V – The Plan for Alignment Activities in 2014/2015: Final Recommendations and Prioritising the Actions

The concluding part of the meeting highlighted the actions (shown in green), which were given high priority over the next year for the Water JPI. These actions will form the early version of a plan for key actions to be achieved before the end of 2015 (i.e. within the period of the current WatEUr CSA).

The next stages in finalising this current document are to check that contributors to the workshop are in agreement with this record of the workshop. Governing Board members will also be provided with this draft for comment. Based upon these comments and corrections, a more detailed working document describing how each of the highest priority actions will be taken forward will be developed before 15 December 2014. Further consideration will also need to be given to measuring and monitoring of alignment activities.

Finally, the organiser of this workshop and Water JPI Co-ordinator would like to thank all of the participants, particularly the guest contributors from the European Commission, Belmont Forum and the other JPIs, for their valued contributions to this workshop.

Supporting Documents

- GPC Alignment Report
- Water JPI SRIA 1.0
- List of web links to national funders
- Web Link to WatEUr archive of national projects focused on water issues research:
http://www.waterjpi.eu/index.php?option=com_wrapper&view=wrapper&Itemid=714

Meeting Presentations

Web Link to Meeting presentations:

http://www.waterjpi.eu/index.php?option=com_content&view=article&id=331&Itemid=758

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