**Evaluating structuring actions**

The recommendations below on structuring actions do not follow the structure of objectives for JPI Oceans. Rather, the structuring actions are by nature multi-purpose, and contribute typically to more than one objective. Hence, the intention in this set-up is to make the evaluation approach manageable, and flexible depending on which of these actions JPI Oceans decides to choose and implement, and to what extent.

The structuring actions of JPI Oceans are here meant to be all dedicated actions or activities implemented with a clear intent to address one or more of JPI Oceans goals and objectives. More to the point, it includes actions directed on the research and innovation system as such, rather the policy system behind it, and which was discussed above. This means that structuring actions are those that intend to structure the research and innovation performing landscape and/or the very programs and policies on a national level that influence these.

While many of these actions are for the JPI Oceans' domain, they are typically also in line with the over-arching objectives of ERA. This is obviously important for the JPI Oceans, being an ERA-instrument on its own. But coherence with ERA objectives should be an evaluation indicator, ensuring that the JPI, as other ERA initiatives, make up a coherent inner market and system for research and innovation. The ERA objectives are:

* Increased effectiveness of national research systems
* Optimal levels of transnational co-operation and competition (e.g. joint programs)
* A more open labor market for researchers
* Optimal circulation, access to and transfer of scientific knowledge

Depending on the action to evaluated, the table below contains a set of indicators that may be used.

**Evaluating structuring actions**

|  |  |  |  |
| --- | --- | --- | --- |
| Type of action | Action/instrument | Key issue | Indicator example |
| Research and innovation | Design and management of joint calls | Successful launch of joint calls | * See separate doc on joint calls (deliverable 2.3) * Web link: |
|  | Joint public procurement | Implemented JPP projects | * Agreed platform for JPPs for selection and implementation * Number and scope of JPPs * Significant impact on aggregate demand * Identifiable new solutions on the market |
|  | Engaging structural funds | Inclusion of JPI Oceans activities in strategic planning of structural funds for enhanced synergies between structural funds, H2020, and national/regional funding | * Inclusion in strategic documents for selected regions * Number of co-funded activities * Scope of co-funded activities * Regional economic impact * Regional impact on research and innovation |
| Connectivity | Research alliances | Creation of strategic research alliances in marine/maritime domain to achieve a more coordinated institutional structure in Europe | * Coverage of marine and maritime research fields * Number of alliances * Identifiable coordination/alignment of strategic research programs * Number of co-publications and scientific impact * Improved science-to policy links |
|  | Knowledge hubs | Creation of dedicated knowledge hubs to achieve a more coherent institutional structure with critical mass in selected areas | * Increased scientific and tech excellence * More effective tech transfer and innovation of products/technologies * A significant improvement in critical mass * Improved external funding * Improved access to and sharing of data and results * Better visibility and communication to policy makers * Improved scientific output/productivity * Capacity to better address challenges and ensure uptake/relevance |
|  | Networks of people | Creation of networks of excellence as virtual networks to enhance structuring of the research landscape in Europe | * Greater intensity of collaboration in selected fields * Higher scientific output * Improved basis for continued funding * Better use of infrastructures |
|  | Network of bilateral agreements | Reduce the fragmentation stemming from bilateral agreements | * Number of agreements in formal networks * Achieved synergies in selected fields |
|  | Mutual opening of programs | Reduce the fragmentation stemming from independent national programs | * Number of openings * Number of countries in participation * Size of budgets in synergy |
|  | Interacting with ERA-Nets and other activities | Creation of synergies in the ERA landscape | * Synergy in funding with ERA-Nets * Alignment with ERA initiatives (ESFRI, SFIC, HGRM, etc) * Synergies achieved with KICs, JTIs and ETPs |
| Capacity building | Training | Structured actions to enhance human resources in marine and maritime research and innovation | * Organized training for young scientists * Organized training in key fields * Training in research management * Dedicated Ph.D. programs * Cafeteria system for short term courses * Industrial Ph.D.s |
|  | Mobility | Enhanced exchange of human resources in marine and maritime research and innovation | * Increased intra-Europe mobility rate in the domain * Greater participation of young researchers novel to international cooperation * Better career paths * Establishment of research management careers for female candidates |
|  | Accessing/sharing marine infrastructures | Better alignment and exploitation of infrastructural resources | * Intergovernmental agreements to share selected infrastructures * Intergovernmental agreements to a division of labor/responsibilities over key infrastructures * Significant cost reduction impacts * Significant increase in activity levels of shared infrastructures |
|  | Procedures/agreements for TNA and sharing of infrastructures | Transparent and effective procedures agreed among partners in JPI Oceans | * Establishment of a legal procedural framework for transnational access * Regulation of in-kind contributions * Agreed rules for JPP connected to new infrastructures (see action on joint public procurement for innovation) |
|  | Access to data | Cost-effective data collection and management | * Adherence to ERAs open access policy * Pan-JPI agreement on location and management of key data resources * Actual use of data in research by researchers external to location * Effective virtual infrastructures with open access to data |
| Supporting actions | Feasibility study, impact assessments, workshops | Support to decision making in governance bodies | * Transparent and manageable system for evaluation and monitoring in place * Monitoring procedures for pilot actions (see below) * Effective use of supporting actions results in governance bodies |
|  | Foresight | Forward-looking tool for decision making | * Selective use of foresight studies in priority areas related to gap analysis * Effective exploitation of existing studies |
|  | Emergency issues | Support to decision making in intervention | * Contribution to pan-European contingency plans * Contribution to and capacity in risk assessments * Reduction of time scales for intervention * Preparedness and organization of scientific input in emergency situations, e.g. expert boards |