



## 8. International Joint Research Programming

**Author:**

Tim Flink

**Contributors:**

Elke Dall, Alexander Degelsegger-Márquez, Sebastian Riedel

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## 1. International Joint Research Programming as a Challenge

International research collaborations have seen an enormous rise in recent years<sup>1</sup>. While for many scientific<sup>2</sup> fields (e.g. radio-astronomy, geophysics) an international setting of collaborations is most common, one should not think of this type of social interaction as a given. Numerous issues need to be resolved, such as legal frameworks to safeguard collaboration (this pertains to work permissions and mobility, the importing and exporting of material and immaterial scientific data and other related issues of intellectual properties, liability cases in case of damage etc.), specific modes of funding, questions of the type of institutional configuration<sup>3</sup> and not least quality issues. Therefore, individual and collective actors from different national states and/or international organisations must reach a common understanding before, during and after international research programming.

That the programming of international research collaborations can be challenging is reflected in joint political statements, such as the "Singapore Statement on Research Integrity"<sup>4</sup> or the "Montreal Statement on Cross-Boundary Research Collaborations"<sup>5</sup>. The latter statement urged the "world science community" to acknowledge that international collaborations are challenging, as "they may involve substantial differences in regulatory and legal systems, organizational and funding structures, research cultures, and approaches to training. It is critically important, therefore, that researchers be aware of and able to address such differences [...] that might arise in cross-boundary research collaborations"<sup>6</sup>

The complexity of international joint programming is also reflected in the necessity of regular meetings by the so-called Global Research Council that also crafted the two aforementioned statements. The GRC, though not in the focus of this report, is worth mentioning as it brings together representatives of different research funding agencies, ministries and other agencies (depending on the individual country's specific set-up) to reach common understandings of research and evaluation standards. In addition, there is a rise of bilateral International Science and Technology Agreements as of the mid-1990s<sup>7</sup> that should express goodwill of or sometimes safeguard international research collaborations. And not least does coordination and joint programming of research pose a challenge for EU Member States, which is why the European Commission launched the ERA-Net coordination instrument in the early 2000s as part of its idea to gain deeper European integration under

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<sup>1</sup> UNESCO (2015): World Science Report. Towards 2030. UNESCO Regional Office for Science and Technology for Europe.; Wagner, C. S., K. Jonkers (2017): Open Countries have Strong Science. In: Nature | Comment, 550, pp. 32–33.; Wagner, C. S., L. Leydesdorff (2005): Network structure, self-organization, and the growth of international collaboration in science. In: Research Policy, 34, pp. 1608–1618.

<sup>2</sup> By "science" we mean all actors that seek for new knowledge in a structured way of no matter what disciplinary background they have.

<sup>3</sup> cf. Laudel, G. (2001): Collaboration, creativity and rewards: Why and how scientists collaborate. In: International Journal of Technology Management, 22(7–8), pp. 762–781.

<sup>4</sup> Resnik, D. B., A. E. Shamoo (2011): The singapore statement on research integrity. In: Accountability in Research, 18(2), pp. 71–75.

<sup>5</sup> Anderson, M., S. Kleinert (Eds.) (2013): Montréal statement on research integrity in cross-boundary research collaborations. In: Third world conference on research integrity. Montreal, Canada, pp. 5–8.

<sup>6</sup> Ibid.

<sup>7</sup> Ruffin, N. (2017): Science and Technology Agreements in the Toolbox of Science Diplomacy: Effective Instruments or Insignificant Add-ons? EL-CSID Working Paper 6.

the leitmotif of the European Research Area<sup>8</sup>. As quite a variable instrument<sup>9</sup>, ERA-Nets were first and foremost a possibility for national R&D stakeholders (program owners, such as ministries, and program managers, i.e. project/funding agencies) to engage in joint learning and potentially find ways of multilateral programming and funding of R&D activities<sup>10</sup>.

We will focus on international research programming that takes place on a bilateral basis, whilst acknowledging – and marginally discussing – multilateral programming. Bi- and multilateral joint programming activities take different causes of action, they support all types of research (basic, use-inspired, applied research etc.), they are vested by different funding programs, they might be based on an explicit international legal treaty, their procedural form of assessment varies, especially as regards the type of evaluation and its expected rigor, and they might follow specific (or unspecific) political goals and apply specific standards or operating procedures (while the latter do not have to be standardized). Probably only applicable to multilateral programming, another category programming involves the European Commission, which means that actors in multilateral settings can resort to the ERA-Net<sup>11</sup> scheme and other guidelines as a blueprint for their course of joint actions.<sup>12</sup> Thereby, our focus will be on the social process of how modes of international research programming are agreed upon and how they the latter are actually set up, acknowledging that the various logics and lifeworld interpretations of actors must be bridged. Not least, in order to collaborate actors will have to reduce social complexity on two (and crossbreeding) dimensions:

- a) At the minimum level of complexity, two sovereign entities, i.e. two states, a state and an international organisation, or two international organisations that cannot rule upon each other must resort to diplomatic activities in whatever possible way in order to find an agreement *how* they would want to collaborate. Even in those cases where international research collaborations and their political advocacy date back to longstanding relationships – some have lasted for centuries –, these relationships must always be revitalized and reinterpreted anew.
- b) Politics and science, as often described in a principal agent relationship<sup>13</sup>, must find a way of coordinating each other's interests as regards the question of what kind of research should to be funded (e.g. investigator-driven research of any kind or rather thematically-driven and development-oriented research), how research should be organised (via programs or projects, individually or group-oriented, long-term or short-term etc.), how it should be reviewed (e.g. ex ante, in between

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<sup>8</sup> European Commission (2000): Making a reality of The European Research Area: Guidelines for EU research activities (2002-2006), COM (2000) 612, 4 October.; Abels, G. (2003): The European Research Area and the Social Contextualization of Technological Innovations. The Case of Biotechnology. In: J. Edler, M. Behrens, S. Kuhlmann (Eds.): Changing Governance of Research and Technology Policy: The European Research Area. Cheltenham: Edward Elgar, pp. 314–337.; Kaiser, R., H. Prange (2005): The Open Method of Coordination in the European Research Area. A New Concept of Deepening Integration? In: Comparative European Politics, 3(3), pp. 289–306.

<sup>9</sup> Edler, J. (2012): Toward variable funding for international science. In: Science, 338(6105), pp. 331–332.

<sup>10</sup> Pérez, S. E. (2010): Mapping ERA-NETs across Europe: Overview of the ERA-NET scheme and its results. EUR 24668 EN. Joint Research Center.

<sup>11</sup> European Commission: ERA-Net Cofund scheme. Retrieved from: <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/era-net>

<sup>12</sup> What will not be covered by this report, are international collaborations on a permanent basis, such as the Jurassic funding networks COST and EUREKA or international research performing and funding organisations like CERN, EMBO/EMBL.

<sup>13</sup> Braun, D., D. H. Guston (2003): Principal-agent theory and research policy: An introduction. In: Science and Public Policy, 30(5), pp. 302–308.

and/or ex post; summative or formative, written or orally, open to the public or not), and what role each actor should fulfil in this social undertaking. In particular, this coordination entails sorting out questions about procedural standards and about quality in general.

Each of the two dimensions in itself provides for ample social complexity. The mainstream of International Relations (as the scholarly field of studies on international affairs) has, for example, dealt with the intricacies of 'double-edged diplomacy' and 'double chess' delegation games: Actors must attune domestic and foreign affairs in the absence of a global leviathan if they want to successfully carry their points in policymaking<sup>14</sup>. Under this premise, it is an empirically open question as to whether foreign policy is decoupled domestic policymaking and their actors, if – in light of a multi-governance perspective<sup>15</sup> – foreign policy is in line with domestic policy or even employed to influence domestic actors. In addition, scholars and practitioners have to cope with the challenge of attributing events and actions to 'actorhood', which can only be done by presupposing that actors conceive of the world as being lawful, that they can understand these laws and that they apprehend a connection between such laws and their own and others' actions<sup>16</sup>. However, as actorhood is an abstract correlate that gets continuously reconfigured in the course of social interactions and interpretations, it remains an empirical question if something or someone gets accredited with actorhood and not least what actions, roles and underlying expectations are thereby inscribed. In this respect and despite revivals of state-centrism and categories of power<sup>17</sup>, IR has come to acknowledge that a plethora of multiple-networked subjects (individual and organizational ones) can neither be attributed to individual states nor steered by governments (let alone their individual departments) or quasi-governmental regimes<sup>18</sup>, none of which can be presupposed to featuring coherence.

On the other hand, science policy research has devoted much capacity to investigate into the political steering of scientific actors that are expected to contribute to economically and socially attainable products and services. Despite recent paradigm shifts in science policy that have disclosed an uptake of more outspoken and targeted strategies to state-coordinated scientific activities<sup>19</sup>, scholars have become aware of a potentially huge information asymmetry between scientists and political actors as well as of the idiosyncratic self-governing norms of scientific groups<sup>20</sup> that render the governance of science as being

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<sup>14</sup> Keohane, R. O. (1984): *After Hegemony: Cooperation and Discord in the World Political Economy*. Princeton: Princeton University Press.; Marks, M. P. (2011): *Game Theory Metaphors*. In: *Metaphors in International Relations Theory*. Springer, pp. 137–160.; Moravcsik, A. (1997): *Taking preferences seriously: A liberal theory of international politics*. In: *International Organization*, 51(4), pp. 513–553.

<sup>15</sup> Bache, I., M. Flinders (Eds.) (2004): *Multi-level Governance*. New York: Oxford University Press.

<sup>16</sup> Drori, G., J. W. Meyer, F.O. Ramirez, E. Schofer (2003a): *Introduction: Science as a World Institution*. In: G. Drori, J. W. Meyer, F. O. Ramirez, E. Schofer (Eds.): *Science in the Modern World Polity. Institutionalization and Globalization*. Stanford: Stanford University Press, pp. 1–20.

<sup>17</sup> Skocpol, T., P. Evans, D. Rueschemeyer (1999): *Bringing the state back in*. Cambridge.

<sup>18</sup> Albert, M. (2010): *Modern Systems Theory and World Politics*. In: M. Albert, L.-E. Cederman, A. Wendt (Eds.): *New Systems Theories and World Politics*. Basingstoke: Macmillan Palgrave, pp. 43–68.; Albert, M., B. Buzan, M. Zürn (Eds.) (2015): *Bringing Sociology to International Relations. World Politics as Differentiation Theory*. Cambridge: Cambridge University Press.; Brenner, N. (2004): *New state spaces: Urban governance and the rescaling of statehood*. Oxford: Oxford University Press.; Lacher, H. (2003): *Putting the state in its place: The critique of state-centrism and its limits*. In: *Review of International Studies*, 29(4), pp. 521–541.

<sup>19</sup> Ruivo, B. (1994): 'Phases' or 'paradigms' of science policy? In: *Science and Public Policy*, 21(3), pp. 157–164.; Whitley, R. (2011): *Changing governance and authority relations in the public sciences*. In: *Minerva*, 49(4), pp. 359–385.

<sup>20</sup> Daston, L. (1995): *The moral economy of science*. In: *Osiris*, 10, pp. 2–24.; Fleck, L. (2012): *Genesis and development of a scientific fact*. University of Chicago Press.; Merton, R. K. (1973): *The Normative Structure of Science*. In: N. W. Storer (Ed.): *The Sociology of Science: Theoretical and Empirical Investigations*. IL: University of Chicago Press, pp. 267–278.

in a constitutive dilemma<sup>21</sup>. In this respect, the social expectation that policymakers confine themselves to acting in boundless trust as fiduciaries<sup>22</sup> vis-à-vis scientists is over<sup>23</sup>. Scientific work has got increasingly conditioned via selective third party funds, specific types of research evaluations and the introduction of comparability regimes that empower an elitist system of scientific capitalism<sup>24, 25</sup>.

The previous discussions allow for two tentative hypotheses. First, social complexity increases, as entities need to be coordinated beyond national boundaries and from the realms of science and policy. Second, complexity does not necessarily increase as for example compared to national settings – in fact it might even decrease –, because actors cannot assess each other's social position as they do in national settings. We can also expect that they good-natured and encounter their international partner with in an extra amount of courtesy and principles of charity. And not least does complexity vary depending on whether collaborations are a single-shot game or a recurring one, if actors know each other or face a first-encounter situation, and if their properties feature huge differences, such as in terms of socioeconomic development and scientific infrastructural levels. Not least, actors bring in their specific convictions and expectations into the programming of research collaborations. While some actors expect clearly outlined and mandatory procedural rules, others expect more room for maneuver. Again, the entire notion of scientific research may be borne by different convictions. Some expect immediate and palpable results whereas others stick to the notion of non-directional or indirect knowledge production<sup>26</sup>, and yet others hold international collaborations sacred no matter what they contain.

## 2. Research Programming: Processes and Actors

Joint international research programming is a social process. In fact, it can be viewed as a sequence of special communication, because participants do not only take part in its communication but also discuss the principles of their communication concurrently. The process of joint programming can be regarded and analyzed as a sequence of social actions that features a series of phases.

An **initial cause of motivation** for participant(s) to collaborate internationally. Such an initial cause can derive from academic researchers, policymakers, business men, and other advocacy groups. The cause can be palpable, finite and direct. The German Egyptian Year

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<sup>21</sup> Guston, D. H. (2000): *Between Politics and Science. Assuring the Integrity and Productivity of Research*. Massachusetts: Cambridge University Press.

<sup>22</sup> Braun, D. (1993): *Who Governs Intermediary Agencies?: Principal-Agent Relations in Research Policy-Making*. In: *Journal of Public Policy*, 13(2), pp. 135–162.

<sup>23</sup> Whitley, R., J. Gläser (2007): *The changing governance of the sciences*. In: *Sociology of the Sciences Yearbook* 26.

<sup>24</sup> Musselin, C. (2013): *How peer review empowers the academic profession and university managers: Changes in relationships between the state, universities and the professoriate*. In: *Research Policy*, 42(5), pp. 1165–1173.; Slaughter, S., G. Rhoades (1996): *The Emergence of a Competitiveness Research and Development Policy Coalition and the Commercialization of Academic Science and Technology*. In: *Science, Technology, & Human Values*, 21(3), pp. 303–339.

<sup>25</sup> Ironically, financially mechanisms to manipulate the behaviour of individual researchers, i.e. via incentivisation and control, yield no desired outcome no matter what disciplinary background. Biester, C., T. Flink (2015): *The Elusive Effectiveness of Performance Measurement in Science: Insights from a German University*. In: I. M. Welpé, J. Wollersheim, S. Ringelhan, M. Osterloh (Eds.): *Incentives and Performance: Governance of Research Organizations*. Cham: Springer International Publishing, pp. 397–412.

<sup>26</sup> Callon, M. (1994): *Is Science a Public Good? Fifth Mullins Lecture, Virginia Polytechnic Institute, 23 March 1993*. In: *Science Technology Human Values*, 19(4), pp. 395–424.

of Science and Technology<sup>27</sup>, for example, can be regarded a politically driven point of reference that triggered concrete bilateral science policy planning and collaborations between researchers of the two countries. On the other hand, a collaboration can also stem from a gradual rise of mutual interests, i.e. researchers might have read about the works of others or met them on conference and build up a trustful relationship over years (including visits or long-term stays). At some point this may lead to the point where policymakers set up a research funding program.

The **preparatory phases of setting up a transnational program** defines the purposes, scope and conditions of a collaboration. International research funding requires from organisations of each state to develop and openly communicate a reason for why the collaboration is deemed necessary. It also defines the financial and programmatic scope of an initiative: Who can apply (public and/or private entities, natural persons or body corporate etc.)? What topics are funded and what are the funded results needed for? What is the global budget of an international initiative, how much funding should be devoted to individual projects and how long can funding periods last? These questions only represent a limited number of issues that organisations must agree upon from the earliest possible state of planning. But even more so: participants of international joint research programming activities must actually acquiesce in discussing these questions. Because touching upon them without having agreed upon it can be interpreted as an act of outside interference into sovereignty. Needless to say, the preparatory phase also includes the setting up of organizational bodies, such as bilateral decision or advisory boards, peer review/expert panels, ethics committees and a (shared) data management infrastructure. Probably the most crucial distinction in this programming phase is the degree of integration. Will joint programming mean that a real common pot system is going to be installed in which all partners pay in their share? The same question is to be answered with respect to the evaluation principles: Will each party have *their* peers evaluate *their* domestic applicants or will one pool of reviewers be defined that will organize a joint review process? Will research managers or policymakers from one side decide for the entire international joint program (e.g. with annually changing responsibilities) or will each side decide separately?

In the actual **implementation phase**, the joint program will be finalized until the point of inviting tenders or disseminating calls for proposals. This includes finally agreeing upon rules for participation, all (first) terms of procedures necessary for partners to engage into the selection and payment of beneficiaries, their rules for participation and the standards and procedures of evaluation. This phase also entails agreeing upon the specific timing of the project's application phase, as most joint calls must be based on rigid time schedules in order to pass muster with national administrative regulations. For example, in some countries and organisations projects must start until a fixed deadline in the winter due to cameralistic accounting principles.

The **application and evaluation phase** starts with the official announcement of the call for proposal and ends with project consortia being selected for contracting and thus starting their research and developing work. Among the biggest issues of joint programming lies the question of what kind of evaluation should be used and going along with this: what criteria should apply whilst running an evaluation. Do the program designers think of scientific quality criteria (originality, novelty, relevance, the applicants' merits etc.) only or do they include other criteria (sustainable development goals, societal impact, and how are criteria weighted? Moreover, all participants must know how to operate according to

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<sup>27</sup> Federal Ministry of Education and Research: The German- Egyptian Year of Science and Technology. Retrieved from: [https://www.bmbf.de/upload\\_filestore/pub/German\\_Egyptian\\_Year\\_of\\_Science.pdf](https://www.bmbf.de/upload_filestore/pub/German_Egyptian_Year_of_Science.pdf) as accessed 13.06.2019.



the established principles. A seemingly trivial but crucial question is how much time experts have for reviewing a proposal, that they know how rate and grade research proposals and that everyone knows what to do in the likely case of different contradictory grades being given to proposals. Finally and also concerning evaluations, it will be necessary to define if the projects are assessed whilst running (e.g. mid-term reviews) or afterwards (ex post assessments), and whether they may include stakeholders other than those who evaluated them in the first place.

Similar to criticism as regards policy cycle models<sup>28</sup> or the linear model of innovation<sup>29</sup>, one might quickly come to realize that research programming does not need to follow the sequential logic as sketched above. Features that would be common for e.g. later phases can appear at the beginning, and certainly can programs be set up without any feedbacks from ex post ante evaluations. On the other hand, procedural evaluations can take place in all phases, and certainly is it possible that joint programming participants can change criteria in the course of action. And one should forget the possibility that sometimes there might be no formal procedures in place but haphazardness, informality, spontaneity or even governance by capriciousness.

In a similar vein, actors' positions in international joint programming can vary in the course of the generic programming and depending on the country of collaboration. In some countries there is a relatively clear and functional differentiation between (i) program owners represented by ministerial staff, (ii) program managers e.g. represented by funding/ project agency staff that run the actual programs, (iii) peers that are responsible for judging project proposals or running consortia. In other cases, program owners and administrators are the same, and yet in other cases program administrators are scientific experts of highest professorial rank that also fulfil the duty of working in funding/project agencies. In some countries, research funding agencies enjoy high degrees of independence vis-à-vis policymaking, while in others they are bound to the level of program owners<sup>30</sup>.

### 3. Case Selection And Operationalization

The case study report revolves around the question how international joint programming can be organised, provided that actors from different states as well as from politics and must find a common understanding of the purpose and process of international research funding. So how does joint international research programming get negotiated? Who takes part in it when, and how are understandings about aspects of quality in research dealt with by actors from different countries/political entities? How is contingency/conflict mediated as regards different convictions about what makes good scientific practice, especially when representatives of science (funding) organizations or ministries of differently developed countries are dealing with one another to jointly program or evaluate funded research programs?

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<sup>28</sup> Howlett, M. (2009): Process Sequencing Policy Dynamics: Beyond Homeostasis and Path Dependency. In: *Journal of Public Policy*, 29(03), pp. 241–262.; Howlett, M., M. Ramesh, A. Perl (2009): *Studying public policy: Policy cycles and policy subsystems* (Vol. 3). Oxford university press Oxford.

<sup>29</sup> Godin, B. (2006): The Linear Model of Innovation: The Historical Construction of an Analytical Framework. In: *Science, Technology & Human Values*, 31(6), pp. 639–667.; Rosenberg, N. (1991): Critical Issues in Science Policy Research. In: *Research Policy*, 18(6), pp. 335–346.

<sup>30</sup> Braun, D. (2003): Lasting tensions in research policy-making – a delegation problem. In: *Science and Public Policy*, 30(5), pp. 309–321.; Gulbradsen, M. (2005): Tensions in the research council – research community relationship. In: *Science and Public Policy*, 32(3), pp. 199–209.

These questions are dealt with in comparative perspective. The comparison features three settings, two of which will be discussed in more detail: a) a multilateral initiatives will be cursorily discussed in relation to the ERA-Net coordination mechanism. b) three bilateral initiatives between organizations from EU Member States and three different non-EU countries, i.e. Turkey, Egypt and the Palestinian territories that hugely differ in terms of territorial and demographic size, socioeconomic and S&T development status as well as their science policy. It is important to note that no organisation will be disclosed, as the highest possible level of anonymity has been granted to the interviewees who would not have shared their knowledge otherwise. As some collaborations in the world are unique – as is the case here –, even the slightest hint to either countries’ organizations would almost certainly lead back to the identity of interviewees and their institutions.

The empirical backbone of this case study is a selection of ten expert interviews, eight of which have been carried out by the author alone, while two had been done in collaboration with the EL-CSID project team of the Berlin Social Science Research Center. The interviewees are representatives from the European Commission’s DG RTD, research funding agencies and research ministries of European states. If applicable, expert interviews were compared with a document analysis, while documents were rarely to be found or hardly shared by the experts. Needless to say, making explicit references would compromise the reviewers and can for most of the time not be made explicit in order to guarantee that promised anonymity will not be compromised.

The following empirical section will present three joint programming settings individually before drawing a comparative conclusion. For each of the cases we will, as best as possible, highlight its idiosyncratic structures and identify its positive and negative aspects, as identified by the interviewed experts.

#### 4. Bilateral Collaborations in Turbulent Times

Classical for a policy-driven agenda-setting, the new international joint programming between the European state and Egypt and Turkey emerged as a result of a series of bilateral meetings organised by the two national ministries that are responsible for education, science and technology.<sup>31</sup> For some it is the usual case that such bilateral initiatives are launched in the course of high-level meetings between ministers or state secretaries. As an interviewee states:

*„Often we get this on our tables as a request from the outside, for example from a foreign politician, or very often as the result of a bilateral meeting of two ministers that will lead to the proposal of one party to do something together...you know these kinds of delegation visits where broad interests of a country are discussed, and then both sides shake hands and conclude that they want to collaborate. At this stage, it remains open where exactly they would want to collaborate, it’s just a declaration of goodwill. And finally, staff from the ministry approach the agencies and others to fathom what could be done.“*  
(Interviewee T)

That said, some agencies in Europe follow a multiannual heuristic with two variables: countries and topics of strategic interest:

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<sup>31</sup> The actual science and technology policy interactions between the two states’ ministries (or their precursors) dates back to the 1970s and was geared toward research and development especially in nuclear energy technologies.



*"We are a national research agency, and so our money must not cross borders, it's a co-funding thing. And our principle is to finance excellent science. That means, whenever we find in this pillar collaborating partners from developing countries to co-finance projects, they have to compete with our own domestic science or intra-European collaborations. But we also have more strategic projects, where the country and the topic are of governmental concern. Often the funding is not so important then but to build up capacities in the funding agencies abroad of these countries." (Interviewee A)*

In the bilateral collaboration with Egypt, the first meetings that sought to find topics of mutual S&T-interests were organised in the mid-2000 years, i.e. about six few years before the Arab Spring led to the political turmoil and the Egyptian crisis as of 2011. Amidst the regime change in Egypt, the bilateral science policy collaborations have been explicitly sustained to symbolise support for civil societal actors, to point to science as a modernization force for socioeconomic progress and to keep up communication channels.

In the case of Turkey, hitherto well-going research collaborations were terminated after the presidential elections in August 2014, which widely empowered the president constitutionally vis-à-vis the parliament and was followed by a veritable purge against intellectuals, journalists and academic scholars, many of whom left the country. In general, the Arabic Spring, the Turkish convergence into a presidential regime, the civil/proxy wars and a persistently tensed situation within and between states and the state-like regions of Middle East do not allow for stable scientific research planning. One of the interviewee who is heading the entire department responsible for the Middle East describes this situation:

*"Over somewhat the last ten years, you never knew what would happen next. One week before a contract should have been signed, your partners would just cancel it out of the blue. You'll find out that a regime change has now also reached the research ministry and its funding agency. In another we could have started a collaboration, but then a President would purge the academics of his country."*

Back to Egypt: In the initial meeting, a bilateral task force was formed to start its work. It consisted of representatives from the ministries, two research funding agencies from the European state and the Egyptian Science and Technology Development Fund, a spin-off and soon project agency of the Ministry of Higher Education and Scientific Research (MHESR). The meetings were accompanied by the respective science attachés of the EU member state that, based at the embassy in Cairo, mainly provided logistical support. In the strategic meetings, a series of public science (policy) events were planned that flanked the official launch of a bi-national fund. Over a period of three years, the binational group met twice a year, while preparatory work was also assisted by numerous individual face-to-face and virtual meetings.

For agenda-setting purposes, these public events are not to be underestimated, because they constitute focal points that structure actors as regards their timing and commitment of resources and might leave the ceremonial mark on individuals<sup>32</sup> of having done something meaningful and of importance.

A similar cause and structure can be observed for the collaboration with Turkey. There has been a well-established exchange between individuals from scientific communities as well as between ministries and intermediary organizations in the field of science and technology. Moreover, a new bilateral initiative was founded after the 2010er years to underpin and boost the scientific and policy relationships with this country.

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<sup>32</sup> Meyer, J. W., B. Rowan (1977): Institutionalized Organizations: Formal Structure as Myth and Ceremony. In: American Journal of Sociology, 83(2), pp. 340–363.

For both bilateral collaborations, i.e. the one with Egypt and the one with Turkey, each side is paying about 50 per cent of the budget for each project into the fund, and in both cases should the bilateral S&T-collaborations help achieve applied-oriented research goals of mutual interest. It was decided to finance research and technological development activities e.g. in the areas of agriculture, biotechnology, health, ICT, material sciences and mechanical engineering, renewable energies, and urbanisation, while each side also consulted with their domestic peer groups to get input. The funds are also supposed to aid each consortium side on a 50 per cent basis for a funding period of three years.

As interviewees report, it was clear from the beginning that these funds had to abide to national administrative law and accustomed procedures, however, this is not as simple as it might sound:

*"Often we think, oh well, it's just administrative rules. But these are not trivial because you don't know to what extent you can bend or even defy them. In some countries including our own, projects, for example, must start on a fixed date or be terminated at a given point of time. Sometimes at the end of the year, sometimes in...let's say the 1<sup>st</sup> of March. Otherwise they cannot start at all, no matter how much you want that or how much have already invested resources into them. So, joint programming...well it's a tricky process of mediating. And you know, while sometimes you don't even know how flexible your own political program owners are, how can you anticipate this for your foreign partners?"*

In line with the statement, all interviewees reported that the attuning of different administrative procedures (including of codes of practices, timing, the distribution of earmarked funds etc.) poses a challenge, whenever a bilateral collaboration are to be installed. The reason is that international research policies are bound to social institutions. As we know from generations of social scientists, "[i]nstitutions by definition are the more enduring features of social life...giving 'solidity' across time and space"<sup>33</sup>. Yet, viewed as collectively stabilized expectations, institutions are not necessarily taken-for-granted assumptions or mere tradition<sup>34</sup>, as they experience being constantly "created, maintained, changed and decline"<sup>35</sup>. For analytical purposes, scholars<sup>36</sup> differentiate institutions into three pillars: institutions can be *regulative* (rules enacted via coercion of actors), *normative* (they persuade actors due to beliefs in what is morally right/wrong and what is mannered/appropriate) and *cognitive* (actors share the same beliefs in causal mechanisms). With respect to the setting up of research funding in general, administrative rules *can* structure in the form of *regulative* institutions, at least if they coerce actors into abiding to their demands. Funds are not freely distributed but are always conditioned, they depend on review procedures and timespans of spending financial resources etc. However, even in domestic science policy regulative institutions only apply seldom, for example when ethical lines are in danger to be stepped over or whenever third party funds should be spent in accordance with administrative and budgetary law. Moreover, due to the different logics of science, politics and other social spheres, regulative institutions can hardly stand

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<sup>33</sup> Giddens, A. (1984): The constitution of society: Outline of the theory of structuration. Cambridge: Polity Press.

<sup>34</sup> esp. DiMaggio, P. J., W. W. Powell (1983): 'The Iron Cage Revisited' Institutional Isomorphism and Collective Rationality in Organizational Fields. In: American Sociological Review, 48(2), pp. 147-160.

<sup>35</sup> Hatch, M. J., T. Zilber (2012): Conversation at the border between organizational culture theory and institutional theory. In: Journal of Management Inquiry, 21(1), pp. 94-97.

<sup>36</sup> Scott, R. W. (1995): Institutions and Organizations. Thousand Oaks, CA: SAGE.

on their own feet, as rules must be embedded in normative and cognitive assumptions about the purpose of distinct positions in the social contract for science<sup>37</sup>.

With respect to the social dimensions of international research funding initiatives, regulative institutions can hardly ever work. These collaborations are voluntarily set up, which crosses out most possibilities to command actors to abide to rules. This does not mean that one cannot agree upon mutually valid norms and codes of practices. However, these are borne by shared assumptions about the functioning of processes as well as about the appropriateness of behaviour.

At the outset of a concrete phase of joint programming, i.e. the setting up of the actual funding mechanism, actors must resort to interpreting the other's positions, procedures, demands, their understandings of the purpose of science policy and of science collaborations in general as well as notions about the functioning of evaluative scientific expertise in funding procedures. For the observer just as well as for the participant of such bilateral programming, the challenge is to differentiate between tacit organizational practices on the one hand and overarching social institutions<sup>38</sup> on the other hand.

## 5. The concrete programming procedure

In both cases, the collaboration with Turkey and Egypt, all involved actors had to ensure legal accordance with domestic funding procedures and budgetary law. In the case of the EU member state, legal clearance included the allowance of state subsidies with respect to the EU's internal market paradigm.<sup>39</sup> With this clarified, the funding agencies and ministries informed each other about how competitive research can be funded according to their rules and best practices. For example, in the case of Egypt and Turkey, the principal investigator must be a member of an Egyptian or Turkish legal entity, which is not necessarily the case of the European member state's principal investigator. Also, both sides must regulate their terms of collaboration in a cooperation agreement. And the call for proposal must be officially advertised in English. There are many other technical details that regulate the joint and the individual conditions of funding. Also that an IT-system from one of the partners is used to operate the entire evaluation process. Speaking of which, the most important part is that actors needed to decide upon the concrete evaluation procedure.

It was agreed that consortia can send one joint proposal that will be evaluated by each side. This means, each elect scientific/expert reviewers that would write review reports and rate the proposals following an A-B-C-logic with A being of the highest grade, B meaning "good" but not outstanding, and C meaning a reject. The reviewers rate the research proposal *and* the participating persons and their host institutions, whereby each side assesses only their country's applicants and institutions. Then, the reviewers that each side would have had selected meet during one day in order to discuss their proposed shortlist and their hitherto existing rejections, also in light of available funding. On the

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<sup>37</sup> Flink, T., D. Kaldewey (2018): The New Production of Legitimacy: STI Policy Discourses Beyond the Contract Metaphor. In: Research Policy, 47(1), pp. 14–22.; Guston, D. H. (2000): Between Politics and Science. Assuring the Integrity and Productivity of Research. Massachusetts: Cambridge University Press.

<sup>38</sup> Drori, G., J. W. Meyer, F.O. Ramirez, E. Schofer (2003b): World Polity and the Authority and Empowerment of Science. In: G. Drori, J. W. Meyer, F. O. Ramirez, E. Schofer (Eds.): Science in the Modern World Polity. Institutionalization and Globalization. Stanford: Stanford University Press, pp. 23–42.; Holzer, B., F. Kastner, T. Werron (Eds.) (2015): From Globalization to World Society. London: Routledge.

<sup>39</sup> See European Commission: Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty Text with EEA relevance. Retrieved from: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014R0651> as accessed 20.06.2019.

second day, it is the board of each binational research funds (the Euro-Turkish and Euro-Egyptian) that meets up to present their own assessment, based on or at least compared with the reviewers' preference list of day one. At the end of the process, successful applications will be selected and offered to set up a contract.

The reality of this phase of programming reveals – again – a complex mediation process, which also calls upon actors to revisit their cognitive and normative institutions that research funding mechanisms bear upon. An interviewee reports:

*"You know, our and their researchers and ministries collaborate for decades. Their scientific basis builds on a longstanding tradition and, indeed, is quite strong in international comparison. No wonder, it's quite English- or US-oriented. But imagine: it took us four years until 2011 to agree upon a joint evaluation procedure, a structure, how we would evaluate, which means what evaluation levels we would go for, when the evaluators are brought in, if they should be exclusively consist of scientists or also include other experts, and what we do in the case of this or that, what kind of reporting we would want, and so on and so forth."*

Asking further how mutual agreements could be reached, the interviewee as well as other interviewed staff said that the best "rhetorical" strategy was to simply report about past experience of joint evaluations and funding with other countries – good examples as well as bad ones. This mode was then adopted by everyone in the group, because it acknowledges everyone's experience, and neither does it obligate nor blame others, which was described very important as a start condition. In this respect, the interviewee goes on, such meetings also contain important aspects of understanding the other's and one's own culture<sup>40</sup> as well as its social positioning of individuals:

*"You know, in all modesty I can say that I am an expert of the Middle East. I studied Arabic and regional studies, I have immersed myself into the region to live and work there for many years, my better half is also from the region. But even if you know most customs and conventions and you speak the Standard Arabic and some dialects, these meetings you refer to are still quite challenging, even to an old stager like me. The most important aspect is your social status in this setting. This is decisive to be seen as a competent speaker or not."*

The interviewee specified that this with few exceptions, being treated in a gender-differentiating way was not an issue. Both sides have had women and men of all ranks sitting at the table. Rather, it is the question of academic title and position (which implicitly goes in line with social positions). On the Egyptian side – the same holds true for Turkey – professors who carry out research and teaching also work for the funding agency as staff members. On the European side, staff members of funding agencies have a university degree (M.A. or equivalent) or a doctoral degree, while neither the degree nor the subject background defined their domain of work within the funding agencies.<sup>41</sup> Hence, in comparison, the staff from Egypt and Turkey were reported to act with greater assertiveness both with respect to setting the terms and assessing research proposals.

*"I am no scientist anymore. Many years ago, I did my PhD in the field of [xxx], and dropped out. For example in the field, where I come from I somehow understand the content of the proposals, but just on a superficial level, but I know the community of people and can ask competent scientists if they are*

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<sup>40</sup> Sammut, G., G. Gaskell (2010): 'Points of View, Social Positioning and Intercultural Relations'. In: Journal for the Theory of Social Behaviour, 40(1), pp. 47–64.

<sup>41</sup> Only some interviewees hold a doctoral degree but worked generically for all funding initiatives in their agencies,

*interested in reviewing for us. And I can see from a managerial point if a proposal is sound or not, if its institutions have a standing or not, if applicants promise too much or if a topic is relevant on the policy level...you know?"*

This said, the interviewees state that collaborating with active researchers from the other side is an asset but also quite challenging, as it is more cumbersome to disagree or getting one's own position fully accepted. This is not a sustained problem, but one that often recurs in situations of concrete decision-making:

*"The reviewers have met one day before and put the proposals in the three baskets – no problem. But in our meeting, we decide at the very moment. And then [x] has an issue with a proposal, and you don't get to know why. But she's acting as an eminent professor, while you're only the science officer from the agency. Do you want to argue scientifically then? This is what I call tough diplomacy."*

Another aspect of hierarchy pertains to the institutional cultures of the involved organizations. According to the European interviewees, one should not expect large degrees of self-responsibility and independence in their counterparts despite their high academic ranks. Neither do their institutions allow for self-responsible actions nor have they laid out clear marching orders or business plans that the Egyptian and Turkish representatives can clearly follow. This led to a tedious stop-and-go decision-making whilst deciding upon the procedure and the evaluation criteria, because even (seemingly) insignificant decisions needed clearance from a non-transparent ministry in the back. In a similar vein, continuity of procedures, once decided upon, had been an issue, particularly in the course of the political upheavals when new staff members changed.

*"It's like this situation: You run a program the way you do it for good reasons, and you build that on incremental steps, you go back and forth, every side clarifying all sorts of legal issues and administrative procedures with their ministries, you know. And then, the others present a new member to the funds, who questions everything. I don't know why, maybe just to play top dog for a moment. And then, his colleagues must explain to him that there are good reasons that things are running the way they run. And they must explain to the new staff member who everyone is and that we are all quite long in this game. That's just tedious, and it also has to do with new doctrines of lean management in their agency. It's ironic, you know. They are supposed to be more self-responsible, but the opposite happens. They start wondering about the most trivial and taken-for-granted practices of our joint funds."*

Yet, the interviewees also reflect on how their own institutional position is observed by the other side. All interviewees research project/funding work for agencies in EU Member States that have seized science policy importance for various reasons. First and especially due to reforms of the public sector, agencies were either founded or strengthened in order to disencumber ministries – at least that followed the "doctrines" of New Public Management<sup>42</sup>. Bound to lean management, a human resource planning that adapts more flexibly to the concurrent "projectification" in research funding<sup>43</sup> and, allegedly a closer link to interests of scientific disciplines, many research project/funding agencies have managed to expand to their portfolio of actions in recent years. Funding agencies do far more than

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<sup>42</sup> Moynihan, D. P. (2006): Ambiguity in policy lessons: The agencification experience. In: Public Administration, 84(4), pp. 1029–1050.

<sup>43</sup> see the seminal works by Marc Torca, *Die Projektförderung Der Forschung* (Torca, M. (2009): Die Projektförderung der Forschung. Baden-Baden: Nomos.); Torca, M. (2018): Projectification of Doctoral Training? How Research Fields Respond to a New Funding Regime. In: *Minerva*, 56(1), pp. 59–83.



just administering research funds for governmental program owners (the ministries). They engage in elaborate foresight activities, observe S&T and respective policy development, often on the entire globe and backed by liaison offices abroad, and they develop funding schemes for their program owners. A large amount of staff of these agencies hold academic degrees. One should not forget, however, that agencies are not primarily responsible for policymaking.

In the case of binational joint programming, interviewees from funding agencies report that despite their close interactions with their program owners they have experienced surprising interferences from the ministries' staff that spawned unintended consequences on the collaboration. To provide examples, in concrete calls for proposals, the responsible agency from Europe followed its peers' assessment and decided against a certain number of research proposals. But the non-European agency/ministry wanted some of these proposals to be funded or at least considered for possible funding, in case if enough budget was available. Suddenly, the ministry from Europe agreed to finance these projects. An interviewee stated:

*"You know, of course I was happy that more projects can receive funding, and it's not a big deal if the ministry interferes for whatever politically acute reasons. Just, the problem is that we signal inconsequent behaviour to our partners. So guess what happens in the next round? It was tacitly expected that we have money stored in the back. It's like you just need to tickle us a bit, because in the end, for political reasons the ministry would take it easy with decisions. So to some extent you lose your credibility at once. It's these situations of 'give them an inch, and they'll take a mile. Needless to say, your own scientific peer evaluators – I am sorry for this to say – feel really pranked. So it's less likely that they review for you next time."*

The interviewees make it clear that they do not blame the others by any means. Their own position vis-à-vis their ministries led to these problematic situations. Some also stated that in these instances do not depend on the shares of budgets that each partner is investing into a collaboration. Also agencies from smaller and developing regions would anticipate that interest in collaborations might rather be borne by political than scientific reasons. In this situations, staff members describe their activities as essentially "diplomatic." The afore-described interferences undermine the development of normative and cognitive institutions as to what is appropriate behaviour in bilateral research funding collaborations and what consequences follow specific causes.

## 6. Multilateral Joint Programming and Soft Coordination

While binational joint programming revealed challenges due to their relative absence of guiding principles, in contrast the European Union has for more than 15 years tested and implemented policy instruments that developed such principles.<sup>44</sup> Originally, these instruments were implemented as part of the Open Method of Coordination<sup>45</sup>, and their purpose was to foster better cooperation especially between Member States actors but also with other transnational and supranational research performing and funding institutions in

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<sup>44</sup> See European Commission: H2020 Online Manual. Retrieved from: [http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/era-net\\_en.htm](http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/era-net_en.htm) as accessed 26.06.2019.

<sup>45</sup> Kaiser, R., H. Prange (2005): The Open Method of Coordination in the European Research Area. A New Concept of Deepening Integration? In: Comparative European Politics, 3(3), pp. 289–306.; Tholoniati, L. (2010): The Career of the Open Method of Coordination: Lessons from a 'Soft' EU Instrument. In: West European Politics, 33(1), pp. 93–117.



order to foster integration into what has been called the European Research Area (ERA). More specifically, under the Sixth Framework Programme (FP6), the instrument of the ERA-Nets were founded as the first explicit attempt engage national member state programme owners and programme managers into a joint cooperation and coordination of research activities, carried out at national or regional level (member + associated states); by networking of research activities or mutual opening of national/regional research programmes. The scheme applied a four step logic of integration intensity reaching from 1. information exchange on best practices of existing programs, 2. identifying common strategic issues, 3. developing joint activities of national/regional programs and 4. implementing joint activities. It is important to note that these activities were solely bottom-up defined, with the Commission's DG RTD only supporting actors via a lean administration and information brokerage within and across individual ERA-Nets.

The Seventh Framework Programme and especially paying attention to calls for combining this bottom-up initiative with some strategic top-down elements<sup>46</sup>, in FP7 the Commission launched both the ERA-Net and the ERA-Net Plus schemes that provided for top-up funding and strengthened administrative (as well as legal) support not least to intensify joint funding collaborations.<sup>47</sup> The ERA-Net Plus actions thus supported a limited number of cases with high European added value by additional financial support from the Commission in order to facilitate joint calls for proposals between national and/or regional programmes. Under FP8 (H2020) the ERA-Net Cofund merged the ERA-Net and ERA-Net Plus scheme mostly for reasons of simplification.<sup>48</sup>

The development of the ERA-Nets can be considered a veritable success story, in the sense that it had an impact on national funding institutions within Europe to learn from each other and to collaborate with each other. As Harrap and Boden (2012) report, not only have some ERA-Net joint programming initiatives lasted far beyond the official administrative support by the Commission. In this respect, European coordination was backed by further instruments, such as Art. 185 initiatives or Joint Programming Initiatives (JPI).

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<sup>46</sup> Edler, J. (2010): International Policy Coordination for Collaboration in S&T. Manchester Business School Working Paper 590. Retrieved from: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1542583](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1542583); Harrap, N., M. Boden (2012): ERA-NETs and the realisation of ERA: increasing coordination and reducing fragmentation. European Commission, Joint Research Center. Retrieved from: <https://ideas.repec.org/p/ipt/iptwpa/jrc73451.html>; Horvat, M., K. Guy, V. Demonte Barreto, J. Engelbrecht, R. Wilken (2006): ERA-Net Review 2006. The Report of the Expert Group. European Commission, DG Research. Retrieved from: [https://ec.europa.eu/research/evaluations/pdf/archive/fp6-evidence-base/evaluation\\_studies\\_and\\_reports/evaluation\\_studies\\_and\\_reports\\_2006/eranet\\_review\\_expert\\_group\\_report\\_2006.pdf](https://ec.europa.eu/research/evaluations/pdf/archive/fp6-evidence-base/evaluation_studies_and_reports/evaluation_studies_and_reports_2006/eranet_review_expert_group_report_2006.pdf)

<sup>47</sup> One should not forget that soft governance instruments were not an act of infinite wisdom but rather a reaction to the EU corruption scandal that led to the resignation of the Commission under Jacques Santer in 1999, while it was initially caused by research commissioner Edith Cresson in a clear-cut case of favouritism (Ringe, N. (2005): Government-opposition dynamics in the European Union: The Santer Commission resignation crisis. In: European Journal of Political Research, 44(5), pp. 671–696.). As a reaction, the Prodi Commission from 1999 – 2004 embraced a different take on governance that also called for greater integration between European entities on different regional and functional levels via soft governance (Pfister, T. (2009): Governing the knowledge society: Studying Lisbon as epistemic setting. In: European Integration Online Papers, 1(13), pp. 1–14.). The new research commissioner Philippe Busquin and his DG architects placed emphasis on networking instruments, including the funding of Networks of Excellence, the roadmap initiative of jointly setting up European large scientific infrastructures (ESFRI) and, in general, engaging research funders into a process of mutual exchange – and this was an entirely new approach in EU research policymaking Borrás, S. (2003): The Innovation Policy of the EU. From Government to Governance. Cheltenham: Edward Elgar.; Edler, J. (2002): The 'European Research Area' Initiative. Reflections upon a potential take-off in European RTD policy. In: *Technologiefolgenabschätzung*, 1(11), pp. 136–141.; Kuhlmann, S. (2001): Future Governance of Innovation Policy in Europe – Three Scenarios. In: *Research Policy*, 30(6), pp. 953–976.

<sup>48</sup> For an overview of all joint programming instruments, see JointProgramming.nl: Instruments for joint programming. Retrieved from: <http://www.jointprogramming.nl/instruments1/> as accessed 28.06.2019.

Again, it is essential to note at this point that it was the Commission that had encouraged national actors to test these new instruments which led to a new and positive awareness about the possibilities of transnational collaborations within Europe. And in a positive sense, numerous stakeholders in Europe, including the Commission, underestimated the indirect impact of information exchange and joint programming initiatives. As a soft governance instrument *par excellence*, the ERA-Net schemes revealed in particular where greater and deeper coordination between Member States was possible. Moreover, it also encouraged actors to reflect on the best possible procedures to set up international research funding programs. In this respect, the ERA-Net scheme and its succeeding and cognate instruments have helped develop a European standard model of joint programming, especially due to the fact that the model is flexibly adaptable to theme-specific and organisation-specific requirements.

In light of collaborations with non-EU actors in S&T, representatives from funding agencies have recently realized the advantages of having developed a quasi-European standard model of joint programming, not least because individual ERA-Nets integrated non-European partners in their collaborative efforts. As a member from the Commission's DG RTD makes it clear from the beginning in an interview:

*"You know, nowadays there is hardly an issue with third country participation, and this is also thanks to the experience that national funding agencies and performers reported to the Commission. So either we have clear rules for participation how to participate in the ordinary Framework Programme funding. The Americans and others sometimes have an issue with them, but anyway, they are articulate and indisputable. And then, all sorts of European agencies have developed the ERA-Net guiding principles that also apply whenever a country outside the EU wants to take part. Because one can only participate by abiding to the principles. [interviewer further inquires] You know, there's no wheeling and dealing: Third parties either accept the rules, or they cannot take part. That's the beauty of it."*

Indeed, interviewees from national research funding agencies agree that integrating partners from non-European states in multilateral collaborations was tested in the course of the ERA-Nets, and that co-developing principles can be considered a challenging but rewarding experience:

*"The ERA-Nets I have been involved developed a neat and now widely accepted panel solution. Two steps, an A-B-C-assessment, clear division of labour, model contracts that are in accordance with most national regulations and open for ameliorations. I mean you still have to find agreements in every step, but you have a driving direction, landmarks and traffic lights. I really wish we would have had that in our collaboration with region in the Middle East."*

Apparently, the ERA-Nets have changed the experience of national funding agencies, not least because setting them up and trying to deepening dimensions of collaborations is reported as a resource intensive process no one wants to start all over again. In this respect, the ERA-Net guidelines to set up multilateral programming initiatives seem to have created path dependencies and their outline on how one can proceed in joint programming is convincing:

*"You know, from my experience there were hardly big issues with third countries, I mean big ones. My collaborations focused on the Southeast Asian region, and if we leave few examples aside, one must say that the science evaluation systems in most of the countries function more or less the same way than ours. And we should not forget that we have different approaches within Europe too. The thing is, everyone was thankful for a blueprint or call it a model*

*for joint programming. And, you know, of course sometimes there were issues but that does not question the procedure as such."*

Another interesting aspect that representatives from agencies broached, was the role of the Commission. In the case of joint programming with third countries abroad, particularly developing countries, agency representatives would want to see the European Commission as a more strategic leader and mediator of interests.

*"Initially it was chaotic with the Commission. It was very chaotic until three or four years ago. Now they are beginning to be a little more strategic, that's better. I would say is that they are not really taking the responsibility. Often they say they want to do this or that but then they come to us and say 'please, set it up!'. Now, we have set up an ERA-Net with Africa, and here is where I want to see science diplomacy from the Commission, to put a light on it. Why should it be us? We need the Commission, but they keep saying they rely on us to come up with funding agreements. A little bit frustrating."*

The interviewee tries to explain her/his point further:

*"All the initiatives, all these JPIs, ERA-Nets, co-funds and Article 185 things, all of this is nice within Europe. You need these things to get regions in Europe to work together. But these things only work because there is European law and sanctions. If you want to do this with the world, the EU must have a clear mandate. Science diplomacy is not enough, you know like 'oh I have just negotiated with Russia a bit on this and that.' We are at this edge where if we want to go further and to coordinate with the full thing. What we need is the logic of the Framework Programme applied to the outside world. Then you have a strong form of science diplomacy."*

The statement clearly illustrates the dilemma of the EU's missing legitimacy<sup>49</sup> to take action in specific policy areas. Since neither a clear-cut mandate nor a division of labour allows for a supranational foreign science policy, national agencies have restricted authority to negotiate with stakeholders abroad. The Commission with its different DGs and services, however, can only sometimes act as a strong and well-coordinated leader vis-à-vis non-European partners, while agencies would exactly prefer that, especially in multilateral research funding settings that are already plagued by a plethora of actors and soft recommendations rather than hard rules.

## **7. Conclusion on bi- and multilateral Joint Programming**

The coordination of binational collaborations clearly poses a challenge to its actors. Next to missing common grounds what is concretely meant by coordination and international administrative collaborations<sup>50</sup>, staff members face the specific challenge of dealing with each other and with their own domestic program owners at the same time, while concrete guidelines how to set up and shape collaborations are absent, which increases the uncertainty for actors. This does not mean that agencies do not have developed models for international research funding collaborations. On the contrary, it is quite conventional e.g. to separate review processes in the sense that each side "sovereignly" (explicitly described by interviewees) assesses proposals and that scientific peers and administrative

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<sup>49</sup> Majone, G. (2005): Dilemmas of European Integration. The Ambiguities & Pitfalls of Integration by Stealth. Oxford/New York: Oxford University Press.

<sup>50</sup> Metcalfe, L. (1994): International policy co-ordination and public management reform. In: International Review of Administrative Sciences, 60(2), pp. 271-290.

decision come together in order to select proposals for funding according to jointly agreed procedures. Yet, what agency staff members miss are blueprints or guidelines that everyone would instantly agree upon, both European actors and foreign collaborating partners from outside the EU. The difference between integrating third country partners into ERA-Net programming and bilateral collaborations to establish a joint funds, is thus the existence of meaningful guiding principles. The latter must be worked out from scratch, just as well as the meta-principles have to be settled before and often in the course of joint programming.

Moreover, actors from funding agencies made it clear that they consider their activities as essentially diplomatic. Interests must be mediated in a tactful manner all the time, cultural habits and conventions, including the social position of individuals must be considered, but even more so, the geostrategic and sociopolitical situation of a partnering actor must be paid heed to. The latter can rapidly change, as political upheavals, such as the Arabic Spring or regime changes, as briefly touched upon, have illustrated in our case study. And not least, the specific principal-agent logic of *all* involved actors, including one's own, has to be taken into account in the context of international coordination.

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