

First CoPoRI Exchange of Experience workshop

11 June 2012 at DESY

Part 1:

Chair: Steven Krauwer (SK)
Rapporteur: Iwan Holleman

Invited Talk

Experiences on planning and implementing a large research infrastructure, by Rowena Sirey (RS) from ESO.

Questions/comments from audience:

LifeWatch: Could you rely on financial reviews of the project? The RI-projects are unique and therefore unique issues will arise that may be too unique for consultancy companies.

RS: In our project the consultancy companies looked at well-defined components of the project and were able to judge whether the budget/plan was a best estimate, not possible, or an overly optimistic estimate.

HIPER: Your comment on keeping the project focus on the long-term goals, 'keeping eyes on horizon', is nice but for many policy makers short-term socio-economic impact is preferred.

RS: Not everything has economic impact, e.g. not all of astronomy. When everything should have short-term impact it is the end of research. It is important to note, however, that 'upstream impact' (due to contracts issues for building the infrastructure) is often significant as well and easier to show than 'downstream impact' (due to outcomes of the project).

EISCAT-3D: How to justify national contributions versus general access, e.g. when they are out of balance?

RS: Within the global astronomical community it is customary to select proposals for access on scientific merit only. However, when all is equal member states are preferred over non-member states.

Panel discussion

Exchange of Experience Session II: **Interim phase between EC funded preparatory phase (PP) and implementation**

Members:

Environmental Sciences: Lifewatch, Jacco Konijn (JK)

Biological & Medical Sciences: EATRIS, Anton Ussi (AU)

Physical Sciences & Engineering: ELI, Florian Gliksohn (FG)

Question 1:

An interim phase is most likely characterized by no or less budget, reduced labour capacity (and employed by different organisations, new people and temporary governance coming in. How

did/do you deal with this situation? In particular: How do you take decisions if you move forward without a formal governance structure?

Answers by panel:

LIVWATCH: How to secure continuity? We identified countries that are (in principle) willing to commit money to the new RI. Through a MoU we brought them together in a Stakeholders Board that meets on a regular basis.

Who is in charge and makes the decisions? This Stakeholders Board takes decisions, but these decisions will need later confirmation once the ERIC starts. The fact that some countries already offered advance budget for the transition (start-up) phase did of course influence the decision making process in such a way that the opinion of these leading countries is leading.

Who is paying? Countries that were interested in having central ERIC facilities (LW is a distributed RI) were asked to pledge advance funding to overcome the gap between prep phase and ERIC. A total of 1.5 Meuro was offered by 3 countries for this transition phase.

Who is managing? The 3 leading countries appointed country 3 provisional directors, plus an acting managing director. The 3 country directors started working on start-up activities in each country. These start-up activities are related to the part of the ERIC activities they will provide. The directors report regularly to the Stakeholders Board, being the provisional governing body.

EATRIS: Funding: The Netherlands had won the bid to host the coordination unit. With a small amount of the funds promised as part of this bid, a very small team (2 people, less than 1FTE overall) kept the coordination and communication alive for the 8 month period between fundings, while also establishing the beginnings of an operational plan for the implementation phase, based on the draft business plan arising from the preparatory phase.

New people: indeed there was virtually no one from the original phase in the coordination unit, thus in the little overlap time that there was, we conducted as extensive a handover programme as possible. However, this is never a perfect process, so often it took some effort to ascertain, reconfirm or even redesign ongoing activities.

Governance: there was no formal governance structure during this phase, but it was run under the guidance of the current Business & Finance Director. The formal accounting for the period was then included in the next phase's first year accounting record and ratified by the Board of Governors. Significant operational decisions during this period could not be made, and the organization was effectively in 'stand-by' mode.

ELI: Background: The Preparatory Phase of ELI ended in December 2010. It had been decided in October 2009 that ELI would be implemented as a distributed research infrastructure based initially on three facilities to be located in the Czech Republic, Hungary and Romania and jointly operated under the umbrella of a pan-European consortium (preferably an ERIC). The mandate given to the three hosting countries included the responsibility to establish an inclusive "ELI Delivery Consortium", conceived as an interim structure leading to the ELI-ERIC. In April 2010, 8 months before the end of the Preparatory Phase, the three hosts signed a Memorandum of Understanding confirming their intention to work on the fulfilment of these two essential aspects of their mandate (establishment of the ELI Delivery Consortium and objective of setting up an ERIC for the joint operation of the ELI facilities).

Peculiarities of ELI's interim period between the preparatory and implementation phases: The use of structural funds in the case of a distributed research infrastructure such as ELI makes it extremely complex to manage and organise the transition between preparation and implementation. In the case of ELI, we encountered the following difficulties:

- Applying for structural funds is a very complex and demanding process which leaves the local project teams with very little capacity and time to deal with other activities, such as setting-up coordination or governance structures between the constituent facilities of the infrastructure

- The application procedures are organised at the national level, they are not synchronised and may suffer from the local political vicissitudes. This undermines the capacity of the hosting countries to commit on the establishment and funding of common governance structures, because they do not face the same risks and constraints
- At the time the Preparatory Phase of ELI ended, no structure was in place at the European level to preserve the pan-European character of the project and its continuity as a single pan-European initiative. The local project teams had very little staff available and qualified to define appropriate European structures for the project. No one had really foreseen at that time the complexity of defining a governance model combining the legitimate national interests of the hosting countries (including the objective of regional socio-economic development in particular) and the European character of the project.
- The absence of adequate structures at the European level resulted in two major threats: losing the momentum created during the Preparatory Phase within the scientific community; struggling to have partner countries on board.

In the case of ELI, the definition of a consensual governance model took almost two years. The three hosting countries shared the costs related to these activities according to their financial capacity. The governments of the three hosting countries appointed plenipotentiaries at a very early stage, thus clarifying who had to be involved in the discussions on the governance model.

Questions/comments from audience:

SK: Where have the leaders of PP gone?

AU: They left for other projects.

FG: They left for other projects.

JK: Partners were selected for maximum political impacts. Partners were given generous subcontracting budgets to have the actual work done by hired specialists (lawyers, auditors, consultancy etc.). Lead was taken over by ministries, research councils and relevant research institutes after the PP. Faces disappeared, but new faces appeared.

EPOS: Hard to place remarks up to now in a proper context and he asks for more details on the scope of the individual projects.

AU, FG, and JK briefly introduced their RI projects.

Le Duc: Was something done wrong in the PP because of the big gap between PP and implementation?

JK: You are jumping to my answer on the third question. I think there was a lack of a clear goal at the end of the PP. In the PP more deliverables should be defined on the governance and political levels and less on the technical/scientific level.

AU: The outcome of the PP was considered by some to be not strong enough. One can always be victim of one country with political motives.

FG: for many projects having low maturity at the beginning of their PP, the objectives and requirements set in the PP grant agreement look like a 'mission impossible'. This does not imply that the PP scheme is not a very useful tool, but interim phases could already be foreseen and planned well ahead in some cases.

ICOS: Template of ERIC is needed with pertinent questions to be addressed on the hosting of the legal entity. Hosting country? A strong stakeholder is needed. Lack of such a stakeholder may cause delays.

SPIRAL2: A new legal structure was needed for RIs and the ERIC is the new structure. Each RI is unique and will always face new problems/issues.

AU: Agree.

Question 2:

What were/are the key issues you had to deal with in the transition phase?

Answers by panel:**LIFEWATCH:**

- a. The composition of the Stakeholders Board is regularly changing (partly a consequence of changing positions of countries).
- b. Temporary staff in the transition phase is employed by different organisations. This implies that it is difficult to enforce a single authoritative management, also due to the separated funding.
- c. Loss of collective memory of the outcomes of the Preparatory Phase. "Distributed" interpretations of the construction plan.
- d. More limited scope of activities, due to temporary reduced funding. Danger for required outreach and communication activities with the scientific user community.
- e. Activities in the transition phase are losing synchronisation.
- f. Focus on 'in my own country' activities.
- g. Too low efforts for keeping the non-key countries informed and in the loop of developments, bringing in new interested countries
- h. No managerial decision in appointing people to jobs. This decision was made by the separate countries. Consequence was a lack of quality and professional capacity (especially on the project management level)

EATRIS: The primary challenge was proceeding in a politically charged environment characterized by deadlock. Not all countries were on the same page on how to move forward with the initiative.. This resulted in many months of lost time and delayed the process to reach agreement to the conditions of the next phase.

We learned that such consensus-based initiatives often do not have suitable structures for preventing deadlock and ensuring goal-directed leadership. It would be advisable to bear this in mind when drafting governance rules for any stage of such an initiative. The deadlock was eventually broken when it was clear that the vast majority of members were not interested in changing the result, and started to signal that a smaller group was willing to move forward.

ELI: Main lessons: It is absolutely vital to end the Preparatory Phase with basic structures in place (even in the form of a very light institutional framework) to represent the project and ensure continuity. This is particularly true in the case of a distributed infrastructure, where the absence of central management and coordination may undermine greatly the unity of the project and the involvement of partner countries.

All answers do not have to be answered (and cannot be answered) at the end of the Preparatory Phase. It is already very helpful to have a few key staff members dedicated full time to preserving and promoting the European character of the project. The appropriate structures can be developed and set up gradually, but, in the case of a distributed infrastructure, the representation of the project as a unique initiative is an essential objective. Here, communication is probably almost equally as important as finding the right answers in terms of governance.

Questions/comments from audience:

EPOS: Managerial structure of RI is important. Apparently it needs to be in place at the end of PP in order to maintain the momentum.

AU: Would be great, but too ambitious for the short duration of a PP. It is better to make proper arrangements for an interim phase.

JK: Agrees in theory, but is happy with Lifewatch's interim phase (is called start-up phase within project). The start-up tasks are divided between the three founding countries according to the foreseen division of the long-term tasks. It is hardly feasible to ask for more coordination, as this requires either much more trust (and legal arrangements, but then you enter the ERIC already) or a common customer like a funding body like the EC. Otherwise countries tend to keep their own responsibilities and control over the money.

FG: There is no straightforward answer to this problem as it heavily depends on the particularities of the RI project (need for an interim structure of not, capacity to create a pan-European consortium by the end of the PP, transfer of responsibilities to hosting countries or continuity of management by persons in charge of PP, etc.).

Warneck: Whom do you address when your project is running into problems during the interim phase?

JK: In theory everything was in place: a board with the stakeholders was founded and all the important stakeholders are represented in this board. When the project runs into trouble the issue is raised within the board. The EC (former project officer) and the ministry have offered help though, if breakthroughs need to be reached. It is probably useful to keep this in mind.

AU: As during the interim phase no funding from the EU was involved the major stakeholders of the RI are the primary point of contact in case of (serious) trouble.

FG: ELI had support from EU experts that were willing to help on an informal basis.

SK: Had many discussions with a colleague from Leo Le Duc at the ministry of Education, Culture, and Science, Richard Derksen, and that was very helpful.

BBRMI: In our case we had a phased PP and our now applying for an ERIC. One cannot escape the interim phase as it constitutes a transition from a technology-driven to an administrative-driven project/structure. This transition is unavoidable, but it should be kept as short as possible. Some limited funding by EU would be very helpful.

AU: A small budget from the EU may be counterproductive as it involves a lot of reporting responsibilities.

JK: The PP should be much more focussed than it often is and then the interim phase can be short.

Question 3:

Probably you had no influence on the duration of the interim phase. How did this affect the momentum of developments and how did you keep the scientific community interested/involved?

Answers by panel:

LIFEWATCH: The interim phase was to last 1 year. It will most probably last about 2 years. In comparison with the preparatory phase, the interim processes are less well coordinated and tend to get connected to internal, national decision-making. This results in delays, especially in the legal process (the ERIC process is very much a time restraint procedure, with months between each step). It would be an important message for current or future prep. phase projects, or for the EC, to design preparatory phase projects differently. More focus on a firm go/no-go deliverable with a well endorsed (by countries with money) plan towards implementation.

Keeping the scientific community interested is a different process. LifeWatch already installed in the preparatory phase a group of scientific representatives from the countries and Networks of Excellence to discuss from time to time the progress and plans in the individual countries and common European activities. They still are meeting in order to promote coordination of national (in-kind) efforts since the scientific community involved is much more focussed on the in-country activities. Interested countries will invest 85% in own projects, and 15% on the European level. As such the separate countries have been working on plans to finance this with their national scientific networks.

EATRIS: The momentum was almost completely lost. Among other consequences was quite a substantial change in the scientific composition of the initiative (members leaving and joining), meaning that much of the inventories' work from the preparatory phase has had to be repeated. The scientific community has been re-engaged by face-to-face meetings in which EATRIS was able to show substantial progress and strong plans for a successful implementation, thanks to a new coordination team that has added substantial value in the recent period. The meetings were used to present progress, establish strategies together with the scientists and define identify areas of attention for the medium term (up to 2 years). The focus is on creating a viable and sustainable infrastructure that meets the needs of the ERA, is not dependent on political favour, and leverages the combined power of the major stakeholders involved. In so doing, we have managed to generate significant momentum and interest.

ELI: As already highlighted above, keeping momentum within the scientific community has been very difficult in the case of ELI. By the time the Preparatory Phase ended, there was no clear framework for the involvement of the scientific community. The local project teams had generally little resources and staff to communicate on their progress and strategies and had different approaches to the involvement of the community. Some structures (scientific advisory committees) and workshops were organised by the local sites, but in a non-coordinated fashion, which added to the perception that ELI lacked unity.

Questions/comments from audience:

FG: Momentum in science community was lost. Some observers had the feeling and fear that ELI would be managed as a set of three national facilities by the three hosting countries. Transparency in decision-making and good communication, also of draft documents, were needed. The partners must be kept involved with workshops, and this should not cost too much. It was really hard to regain momentum.

JK: When the three countries decided to move on, it was agreed to develop showcases for increasing involvement of scientists and for advertisement. In addition it was agreed to submit proposals for small EU grants and thus funding the realisation of small parts of the planned RI.

SK: Organized a small conference together with sister RI DARIAH to stay alive during the interim phase. Furthermore CLARIN set up a 'transitional executive board' and asked authority for this board from the steering committee of ministry representatives from countries that had signed the MoU for the creation of the CLARIN ERIC.

CTA: Question for commission. All RI-projects are facing similar problems at the end of the PP and during the interim phase. EU should be more realistic and temper the expectations of the scientists as they are usually too optimistic.

Vasilakos: A general comment. We have heard your comments and problems and want to improve for the future. Needs clear input on problems and expectations. Thus, what are your problems and what are your expectations for the future?

Krell: It is possible to extend the duration of the PP. Some RI-projects do not use this option. Why?

Vasilakos: Indeed it is possible to extend the PP with maximum one year and without any additional funds.

JK: LifeWatch did not ask for an extension because one year of extension of PP results in one year of shifting ahead of the difficulties that have to be solved anyway.

AU: Moving forward was better than an extension of PP (=standstill)

FG: Problem was that the basic principles / working arrangements were not defined at end of PP.

HIPER: This RI-project was granted an extension of the PP and that proved very useful in our case. A complicating factor were the in-kind contributions that were offered by the partners. They were like a "jigsaw-puzzle" with missing and overlapping pieces.

11 June 2012 at DESY

Part 2:

Chair: Michael Raess

Rapporteur: Annika Thies

Invited Talk:

Report on current & planned ESFRI activities (Leo le Duc)

Leo le Duc presented the current and planned ESFRI activities regarding the implementation of the Roadmap-projects and announced that the Implementation working group would work together with an expert group on assessment (EGA), which will assess financial and managerial maturity of all 48 projects. He also announced that the implementation group would, among other further actions, prepare a draft report to the ESFRI-forum with an overview of obstacles and lessons learned.

Questions/Comments from the audience:

Rowena Sirey: Is ESFRI being used by Member States(MS) to filter projects for nat. investments?

Leo: This would be very unfair; of several hundred proposals only very few were selected; e.g. of the

150 proposals to the NL roadmap, only 5 were funded and further 20 supported in general

G. Dagher, BBMRI: Is there planned a review of the funding mechanisms of the Structural Funds?

Leo: The EC is right in pointing at the large SF budget, but SF regulations are very complicated and funding decisions depend to a large extent on the individual Member States and regions.

Also, the availability of funds of course differs significantly from region to region, but even in the north of the Netherlands 10 mio. € funding out of SF achieved

Steven Krauwer, CLARIN: Yes, it's useful to have MS involved early on in a PP, e.g. in an advisory board, but in the case of CLARIN, when invited, the reactions of MS were as follows:

1/3 we'll send somebody from research council, 1/3 no, that will be considered as a commitment already, 1/3 nominated scientists already involved in the PP anyhow

Leo: ok, indeed a catch22 situation to a certain extent..

Christos Vasilakos, EC: SF will be revised: a country can use SF for investment in other country; efforts for complementarity SF-H2020; important that MS develop smart specialisation strategy – i.e. contact

your regional funding to get involved into the development of this strategy

BBMRI: opacity of getting access to information on SF – no open calls, no peer review by DG Regio,..

ELI: transparency problem not their experience; in many MS communication problem between ministry of research and ministry of regional development in charge of SF

Smart specialisation: if you ask for 50 Mio. or more of funds, the EC asks a lot about socio-economic impact etc.; DG Regio different than DG RTD, will ask about industry involvement

Problem eligibility of funds, no time contingency, so still some work to be done

Christos Vasilakos, EC: important to establish links to managing authorities! Very good cooperation DG RTD – DG REGIO; ESFRI regional working group helps with SF – RI

Leo: in few weeks info from implementation group will be sent to coordinators; that info and the feedback of coordinators will be start of the work of the assessment group

Michael Räss: how will the assessment group work?

-Experts will develop their own working methods, will get material from workshops, will probably arrange interviews with only few of the projects.

Panel discussion

Members:

Environmental Sciences ICOS: Marjut Kaukolehto

e-infrastructures PRACE: Florian Berberich

Social Sciences & Humanities CLARIN: Steven Krauwer

Exchange of Experience Session II:

The learning curve: challenges we discovered since the beginning of the implementation phase

Question 1:

The actual cash flows, the construction planning and the implementation capacity are most probably different in the initial months/years. How did you manage this asynchrony?

Answers by panel:

Prace: legal entity a.i.s.b.l. since 2 years; CLARIN: ERIC since 3 months; ICOS: at very beginning of implementation phase (PP till march of next year)

CLARIN: robust by design – limited number of interdependencies; every country responsible for its own language(s); state of advancement very broad, economic possibilities/stabilities as well, governance level very light, ERIC funded by the MS – annual budget 1 mio €, operations take place in countries and are funded completely by the countries, who also decide what they want to invest in – only obligation to comply with data standards set by CLARIN; 9 founding members, so 600.000 € budget instead of originally planned 1 mio., so activities scaled down some; speed differs also but this doesn't endanger overall concept, just availability of e.g. Norwegian or ES language data..

PRACE: realistic approach: in-kind-contribution system; initial commitment of hosting members for 5 years (100 Mio€-commitment per partner/5 years); centrally organised peer-review for access to the computing power; headquarters financed by membership fees.

ICOS: still finishing PP , hoping to solve siting within PP, once country gets green light to host facility, they start investing/employing; continuous work on standards; distributed nature beneficial, since countries are willing to invest on their own home ground; demonstration experiment during PP: pre-ICOS (small module, to be increased gradually – after PP hopefully short period before set-up of legal entity); independent and modular structure (mostly independent - but 1 year delay in siting decision on one facility, slowing down some other decisions after all)

M. Räß: So summary would be that the solution is in providing independent national modular components.

Questions/comments from audience:

ELIXIR: how easy was it to get central funding/how does hub ensure that national data are up to standard/comprehensive?

Steven: - annual contribution very low (except host, NL, and DE (GDP-based)) and fixed for 5 years (2%-increase/year) and thus predictable – both factors helped considerably

- Making it fit together: shape of jigsaw pieces are defined, but not the picture; bottom-up movement, so many parts fit together anyhow because of on-going collaborations etc.

Measures in order to launch new data-/tool-creation projects will in the future be to be discussed, but not in first 3 years

Question 2:

How is the work power for initial implementation organized? Is the ERIC (or another new legal entity) directly operating as employer; or is staff hired by a hosting organisation; or is very construction work outsourced to third parties?

Answers by panel:

ICOS: taking place on national basis, so paid from national sources; for headquarters transition phase; plan to have set-up-team from FI; plans for headquarters to be approved in upcoming meeting (Planned Personnel: 2 persons from FI, 1 from FR) recruited by organisations and will take care of constitutional docs, preparing meetings etc.; Director General to be recruited early 2013; council might prolong mandate to the first phase of the ERIC in order to avoid offering just 1-year-contract

Headquarters personnel to be hired by ERIC

PRACE: host members organise implementation, since computers run by members, not centrally;

Intermediate structure (now advisory council) was in place - now headquarters staff is directly employed by the PRACE aisbl.

Implementation phase project funded by DG INFISO to exploit the resources; work to make codes parallel in order to efficiently use the computing resources; Calculation by PRACE director on what the cost structure would have to be if EU-project wasn't there : membership fee no longer 60.000€ but rather 300.000-400.000€!

CLARIN: people work from their home organisation, so no need for human resources department, social security provisions etc... - Envisaged for the future to possibly employ 2-3 people at most in Utrecht

Based on existing data centres/services, but they have to upgrade/improve; once they join they have to set up national consortium to support infrastructure

Want to have 20 countries in 3 years..

Questions/comments from the audience:

CTA: why did CLARIN decide to set up an ERIC ? VAT-exemption was seemingly not the main benefit?

- VAT not relevant since decentralised; foundation would have been classical solution in NL.. but what would be motivation for ES or Greek to commit? Commitment at Government level was big advantage; Data issue relevant for some countries, so country level was hoped to ensure that single beneficiaries in that country would be encouraged/forced to foresee sharing of data.

ICOS: implementation plan for all facilities at detailed level foreseen – headquarters to do global implementation plan; same for financial plan: How did you plan this?

- PRACE: important that hosting members had aligned procurement plans of their high performance computers- - part of plan of initial period

CLARIN: no implementation plan as such, but integration plan on how to integrate bits and pieces of existing data ; also technology changes continuously; dynamic environment with several sister RI; so re-configuration of RI and possibly new structures likely; Therefore main focus to make as much available to community as possible

Question 3:

Does the new governance still agree with the plans as developed in the preparatory phase? How did you deal with different views? This question is also valid for the new management.

Answers by panel:

PRACE: always careful to align voting rules in different boards in the governing structures of the PP, the implementation phase and the aisbl. Managed to also have very large overlap in those boards regarding the participating organisations (and even their representatives), which helps stability and ensures continuity

PRACE not a baby any longer but already a child developing its own ideas; important to build own ideas/select directions; parents have important role helping and influencing (MS, project and EC with dedicated implementation phase project)

ICOS: one strong body already is working: the interim stakeholder council; very important to have strong process to field documents/decisions to that body (ISIC); meetings 3/year, now rules of procedures covering also ERIC; pace of ERIC-process set by isic; concrete decisions taken there.

Users represented in forthcoming ERIC monitoring station assemblies; already meeting with services existing now; scientific advisory body of PP will also be present in ERIC; RI committee (directors of the central facilities) scientific council, which advises/supports director general in strategic implementation. Gap for interim phase hopefully not endangering project: Lol of 13 countries covering the interim phase , but will that cover the travel money of researchers..?

CLARIN: there was not much time to change, since ERIC application submitted 1 month after PP end; large continuity between PP and ERIC: exec. Director and collaborators already very active in PP – so vision shared by people (but change of director will be needed after 3 years); also technical leaders in members have largely remained on board

Questions/comments by the audience:

Ute Krell: how are representatives of MS (ministries) involved in project?

Icos: they are there, mostly in ISIC, working groups legal (ISIC-level for hosts of big central facilities and nat. measurement network) and financial (same concept) – this is temporary

PRACE: no direct representatives of ministries, but members of the association need to confirm that they are selected representatives of their country (verified regularly)

CLARIN: General assembly from ministries plus experts; decision on budgets, financial report..but real implementation left to scientists

Lifewatch: involvement of scientific users in icos: how did users imagine this and how did it work out in the reality?

Icos: structure not functioning yet, so hard to judge; user questionnaire sent out, being analysed at the moment; users can send messages to General-Assembly-representatives; Assembly of stations could also be contacted

Prace: scientific case updated (completely rewritten) in implementation phase; very strong scientific advisory group, following the motto "put user in the driving seat"

CLARIN: scientific advisory board, connected to GA; want to have connection to general director; most providers are also users, but big challenge reaching out to the potential users which are not yet aware of the possibilities ; best option probably showcases to convince historians etc. " better convert one king than 1000 peasants".. Ideas welcome!