REALISING AND MANAGING INTERNATIONAL RESEARCH INFRASTRUCTURES



RAMIRI

HANDBOOK

Introduction by Carlo Rizzuto

Making the case

Life cycle of a Research Infrastructure

Legal and Governance Issues

Finance

Human Resources

Research Infrastructures Management The RAMIRI Handbook (HB) is intended as an introductory instrument for people who need a quick access to the main definitions and references on the major issues related to Research Infrastructures. Many of these issues are similar to those affecting Research (as distinct but strongly interacting with Development and Innovation) and have to deal with the perceived or expected socioeconomic results, with the ensuing management aspects.

Research Infrastructures (RIs) have, compared to Research, the additional burden of being often very expensive and visible, as well as of needing to outreach and serve researchers well beyond the "owners" and "paymasters" ("the shareholders"): this may open completely different aspects,

compared to Research activities, in the expectations of and interactions with both the "shareholders" and the "stakeholders" (i.e. those individuals, communities and institutions which should feel the advantage of the existence and activity of an RI and, therefore, be the "political" base for their existence).

The Handbook will follow closely the structure of the RAMIRI2 course and start by giving, in *Making the Case and Setting the Scene* the essential definitions of the issues and of the "rules of the game" involving and affecting the success of RIs and of the research performed in them. It will, then, go through the *Life Cycle of a RI, Legal and Governance Issues, Finance, Human Resources* and *RI Management*.

The content of the RAMIRI HB has been developed having in mind the following questions:

- How can we explain the advantages of RIs for science and beyond (by using numbers if possible or by using convincing narratives and examples, if numbers are not available)?
- How can we achieve the best results in developing and operating RIs (and achieve success both in fund raising, and in using the funds in the most effective way)?
- How can we reach a long term sustainability in their operation/upgrade and eventual phase-off?
- How can we manage the personal and institutional interactions within a complex environment of different and differently motivated scientists, funders, and stakeholders?
-while dealing successfully with something very different from "normal" economic culture?

The scope of the Handbook reflects the scope of the RAMIRI initiative which aims at developing a common understanding and cultural basis between RIs managers, users and policy makers at the various levels. The context in which this initiative was started is Europe and the European Strategy Forum on Research Infrastructures (ESFRI), but the reference frame is Global, and the knowhow we want to share with the users of the Handbook has been developing in all fields

of Science and over many years (in some cases, centuries). Some of the definitions (i.e. "pan-European Interest") reflect the environment where the initiative has started, but most of these are valid and applicable at all geographical scales, from local to global, and relate to the wider need of outlining the best ways in which RIs can support the pursuit of new knowledge and be connected to the challenges facing all of us in everyday's life.



RAMIRI 2 Amsterdam Learning Programme

Tuesday, 14 June

| 12.30 | Arrival and registration of delegates, optional lunch |
|-------|--|
| 14.00 | Introduction and keynote talk (Professor Carlo Rizzuto) |
| 14.30 | Learning session: Making the Case |
| 16.00 | Coffee / tea break |
| 16.30 | Learning session: Making the Case |
| 18.00 | End of workshop |
| | |
| 18.15 | Drinks at restaurant Polder (next to the Faculty building) |
| 19.00 | Buffet dinner |
| 21.30 | Bus transfer to Casa400 |

Wednesday, 15 June

| 08.30 | Learning session: Finance |
|-------|--|
| 10.30 | Coffee / tea break |
| 11.00 | Learning session: Finance |
| 13.00 | Lunch |
| 14.00 | Tour of e-infrastructures based at Amsterdam Science Park |
| 16.00 | Learning session: Legal and governance issues |
| 17.30 | Brief transfer to hotel, before transfer by coach to the canal tour |
| 18.30 | Canal tour with drinks and hors d'oeuvres; dinner on board |
| 21.30 | End of cruise. Delegates dropped off in city centre to explore Amsterdam or make |
| | their own way back to hotel. |

Thursday, 16 June

| 08.30 | Learning session: Legal and governance issues |
|-------|---|
| 10.30 | Coffee / tea break |
| 10.45 | Summary session |
| 12.15 | Optional lunch and close |



RAMIRI 2011 Learning Programme: Trieste 24-26 October 2011

Monday, 24 October

a.

| 13.00 | Arrival of delegates and buffet lunch at NH Hotel |
|-------|--|
| 14.00 | Welcome and Amsterdam recap |
| | 14.00 Safety/practical announcements: NWV, Flavia Bottaro |
| | 14.05 Welcome, 'Setting Together a Route for our Meeting' Carlo Rizzuto |
| | 14.10 Questions from Amsterdam |
| | Considering the feedback |
| | 14.20 Keynote, 'Planning the End Before You Start' John Wood |
| | 14.40 Introducing the HR scenarios <i>Michel van der Rest, Peter Wittenburg</i> |
| 15.00 | Learning Session: Project Management (Topic 4) |
| | 15.00 Introduction: What is management? Objectives and Agenda Florian Gliksohn |
| | 15.10 The various dimensions and tools involved in the management of an RI project (1/2) |
| | a. Scope management Florian Gliksohn |
| | b. Time management <i>Florian Gliksohn</i> |
| | c. Cost management and cost containment Karl Witte, John Wood |
| | d. Quality management Michel van der Rest |
| 16.00 | Break |
| 16.30 | Learning Session: Project Management (Topic 4) |
| | 16.30 The various dimensions and tools involved in the management of an RI project (2/2) |
| | |

Risk management Florian Gliksohn

| | b. | Procurement management Alfonso Franciosi |
|-------|---------|--|
| | 16.45 | Long-term strategic planning Allen Weeks |
| | 17.00 | A Week in the Life of a Research Infrastructure Manager Karl Witte |
| | 17.30 | Key Factors for Success in RI Project Management Wolfgang Meissner |
| | 17.45 | Final questions and discussion |
| | 18.00 | Close |
| 18.40 | Bus de | parts from the hotel to Cattedrale di San Giusto |
| 19.00 | Tour of | f Cathedral and visit to Museum |
| 20.00 | Dinner | at Bottega del Vino |
| | | |

Tuesday, 25 October

| 07.00 | Breakfast available in NH Hotel |
|-------|---|
| 08.30 | Bus departs NH Hotel for Elettra Sincrotrone Trieste |
| 09.00 | Learning session: Human Resources |
| | Session led by Michel van der Rest, with Peter Wittenburg, Tim Wess, Catherine Stuck. The group will split into groups to work on one of two scenarios. |
| 11.00 | Break |
| 11.30 | Learning session: Human Resources |
| | Plenary discussion of groupwork. Roundtable discussion with Michel van der Rest, Peter Wittenburg, Catherine Stuck, Tim Wess, Andrea Crivelli |
| 12.50 | Group Photograph |
| 13.00 | Lunch |
| 14.00 | Tour of Elettra Sincrotrone Trieste |

| 14.30 | Tour of FERMI |
|-------|--|
| 15.00 | Learning session: Managing an Established Facility Roundtable discussions led by Kimmo Koski and Carlo Rizzuto |
| 16.15 | Break |
| 16.30 | Learning session: Managing an Established Facility Roundtable discussions |
| 17.15 | Presentation of OGS (National Institute of Oceanography and Experimental Geophysics) |
| 17.45 | Bus departs to <i>Grotta Gigante</i> |
| 18.00 | Introduction to and tour of the cave |
| 19.30 | Drinks reception |
| 20.00 | Dinner at Cave Museum |
| 21.30 | Bus departs for hotel |

Wednesday, 26 October

| 07.00 | Breakfast available in NH Hotel |
|-------|--|
| 08.30 | Learning session: Managing an Established Facility |
| | Group work and plenary discussions. |
| 10.00 | Break |
| 10.30 | Conclusions from the 2011 RAMIRI Learning Programme |
| | Locating yourself in the RI-management landscape John Wood |
| | Next steps Carlo Rizzuto |
| 12.00 | Lunch |
| 13.00 | Departure |



REALISING AND MANAGING INTERNATIONAL RESEARCH INFRASTRUCTURES

RAMIRI 2 Learning Programme (provisional)

Prague, Czech Republic – Hotel Diplomat

12-14 March 2012

Sunday, 11 March (optional)

20.00* Dinner at Hotel Diplomat21.30* Walk in city centre

Monday, 12 March

| Morning | Arrival and check-in of participants |
|---------|---|
| 11.00 | Registration of participants |
| 11.20 | Welcome address by Professor Vlastimil Růžička (Institute of Physics of the ASCR) |
| 11.30 | Introduction to the RAMIRI 2012 Learning Programme by Professor Carlo Rizzuto, |
| | Naomi Wynter-Vincent and Florian Gliksohn |
| 12.00 | Participant introductions |
| 12.30 | Lunch |
| 14.00 | Learning session: Making the Case (part 1) |
| 15.30 | Refreshments |
| 16.00 | Learning session: Making the Case (part 2) |
| 17.00 | Learning session: Legal and Governance issues (presentation of case studies and |
| | group work) |
| 18.30 | End of learning session |
| | |
| 19.00 | Transfer to Strahov Monastery |

^{*}Indicative time (will be adapted on the basis of arrival time of participants)



| 19.30 | Guided tour of Strahov Monastery |
|-------|---|
| 20.30 | Dinner in Monastery |
| 22.00 | Visit of the Monastery brewery OR first departure to Hotel Diplomat |
| 23.00 | Second departure to Hotel Diplomat |

Tuesday, 13 March

| 08.30 | Learning session: Legal and governance issues (group work on case studies) |
|-------|--|
| 10.30 | Refreshments |
| 11.00 | Learning session: Legal and governance issues (feedback from case studies, and |
| | conclusions) |
| 12.00 | Lunch |
| 13.00 | Transfer to Institute of Plasma Physics of the Academy of Sciences |
| 13.30 | Introductory talks by representatives of the Institute of Plasma Physics, Institute of |
| | Physics and Prague Asterix Laser System Facility (PALS) |
| 14.00 | Visit of PALS and of the Tokamak of the Institute of Plasma Physics |
| 15.00 | Transfer to Hotel Diplomat |
| 15.30 | Learning session: Human resources (introduction and presentation of case studies) |
| 16.00 | Refreshments |
| 16.30 | Learning session: Human resources (group work) |
| 18.00 | End of learning session |
| | |
| 18.30 | Departure to city centre by metro |
| 19.00 | Guided tour in the city centre |
| | · |
| 20.15 | Dinner in restaurant |
| 22.00 | Departure to Hotel Diplomat |

Wednesday, 14 March

| 09.00 | Learning session: Human resources (group work on case studies) |
|-------|---|
| 10.30 | Refreshments |
| 11.00 | Learning session: Human resources (feedback from case studies, and conclusions) |
| 12.30 | Lunch |
| 13.00 | Latest check-out of hotel rooms |
| 13.30 | Summary session |
| 14.30 | End of workshop and departures for airport, etc. |



RAMIRI 2012 Learning Programme: Trieste 17-20 June 2012

Sunday, 17 June (NH Hotel - Optional)

19.30 onwards Dinner at NH Hotel

Monday, 18 June (NH Hotel)

| Morning | Arrival and check-in of participants | | | | | |
|---------|--|--|--|--|--|--|
| 10.30 | Registration of participants and hand-out of material for case studies | | | | | |
| 11.00 | Welcome address, <i>Carlo Rizzuto</i> Recap of RAMIRI 2012 Learning Programme and feedback from Prague Announcements | | | | | |
| 12.00 | Keynote, 'Planning the End Before You Start', John Wood | | | | | |
| 12.30 | Lunch | | | | | |
| 13.30 | Learning session: Managing an Established Facility moderator: Kimmo Koski | | | | | |
| | Introduction to the topic, Kimmo Koski | | | | | |
| 14.00 | Case Example: EMBL (including ELIXIR), Silke Schumacher, (35 + 10 min) | | | | | |
| 14.45 | Case Example: Elettra, Carlo Rizzuto, (35 + 10 min) | | | | | |

| 15.30 | Refreshments and networking | | | | |
|-------|---|--|--|--|--|
| 16.00 | Collaboration possibilities of established facility, Michele Bertolo, (20 + 10 min) | | | | |
| 16.30 | Industry collaboration/Pre-procurement/Procurement, <i>Marco Marazzi and Ileana Gimmillaro, (20 + 10 min)</i> | | | | |
| 17.00 | Panel for questions, Speakers for topic 6 + John Wood | | | | |
| 17.45 | Wrap-up, Kimmo Koski | | | | |
| 18.00 | End of learning session | | | | |
| 19.00 | Bus departs from the hotel to Cattedrale di San Giusto | | | | |
| 19.20 | Tour of Cathedral and castle | | | | |
| 20.15 | Drinks and dinner at Bottega del Vino | | | | |
| 22.00 | Bus departs to hotel | | | | |

Tuesday, 19 June (Elettra)

| 08.15 | Bus departs NH Hotel for Elettra Sincrotrone Trieste | | | |
|-------|---|--|--|--|
| 09.00 | Learning session: Project management and the RI Life Cycle moderator: Wouter Los | | | |
| 09:00 | What to consider in project management?, Wouter Los Both for setting up an infrastructure, as well for large projects managed by an infrastructure. | | | |
| 09:25 | Introduction for three cases to be discussed in working groups - Group A: A project involving 10 persons - Group B: A project involving 100 persons - Group C: A project involving > 500 persons | | | |
| 09:40 | Group work | | | |
| 11.00 | Break for networking and discussion | | | |
| 11:30 | Managing in-kind contributions, Serge Prat | | | |
| 12:00 | Questions and answers | | | |
| 12:15 | Reporting by the three groups to the "Governing Board" of the RI case Discussion | | | |

| 13.00 | Lunch | | | | | |
|-------|---|--|--|--|--|--|
| 14.00 | Tour of <i>Elettra + FERMI</i> | | | | | |
| 14.50 | Group Photograph | | | | | |
| 15.00 | Learning session: Finance (I) moderators: Florian Gliksohn, Jacco Konijn | | | | | |
| | Introduction: objectives and structure of the session | | | | | |
| 15.10 | Case studies – Spending patterns of RIs – Introduction of the case studies – Identification of costs and of their evolution over time | | | | | |
| 16.30 | Reports and discussion | | | | | |
| 17.00 | Break for networking and discussion | | | | | |
| 17.30 | Bus departs to Kyma | | | | | |
| 18.00 | Presentation of Kyma, Mauro Zambelli (10 min) Industrial Liaison, Marco Marazzi, (10 min) Networking, snacks and drinks | | | | | |
| 19.00 | Bus departs to <i>Grotta Gigante</i> | | | | | |
| 19.30 | Introduction to and tour of the cave; presentation of OGS (National Institute of Oceonography and Experimental Geophysics) | | | | | |
| 21.00 | Dinner at Cave Museum | | | | | |
| 22.30 | Departure for hotel | | | | | |

Wednesday, 20 June (NH Hotel)

08.30 Learning session: Finance (II) moderators: Florian Gliksohn, Jacco Konijn

What funding sources for RIs

- Overview of the funding sources of the lifetime of RIs
- Focus on structural funds and EIB loans, Paola Bembich, (10 min)

| 09.15 | Negotiating contributions | | | | | |
|-------|--|--|--|--|--|--|
| | – How contributions connect to governance? | | | | | |
| | – How to convince the funders? | | | | | |
| | Narratives | | | | | |
| | Socio-economic impact | | | | | |
| 10.00 | Final Feedback: filling of questionnaire (+ refreshments) | | | | | |
| 11.00 | RAMIRI communication platform (Proteon), Marije Van Den Boogaard | | | | | |
| 11.30 | Conclusions from the 2012 RAMIRI Learning Programme | | | | | |
| | Next steps, Carlo Rizzuto | | | | | |
| 13.00 | Lunch | | | | | |
| 14.00 | Departure | | | | | |
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