

Deliverable 1.1

Management Guidelines

of Remote NMR (R-NMR):

Moving NMR infrastructures to remote access capabilities

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TECHNICAL REFERENCES

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1. Management Structure

The success of the R-NMR project depends on an effective management structure tailored to the need of securing the timing in respect of planned activities and to manage a consortium with a large number of partners with good communication channels. The governance structure of the R-NMR consortium is depicted in Figure 1.

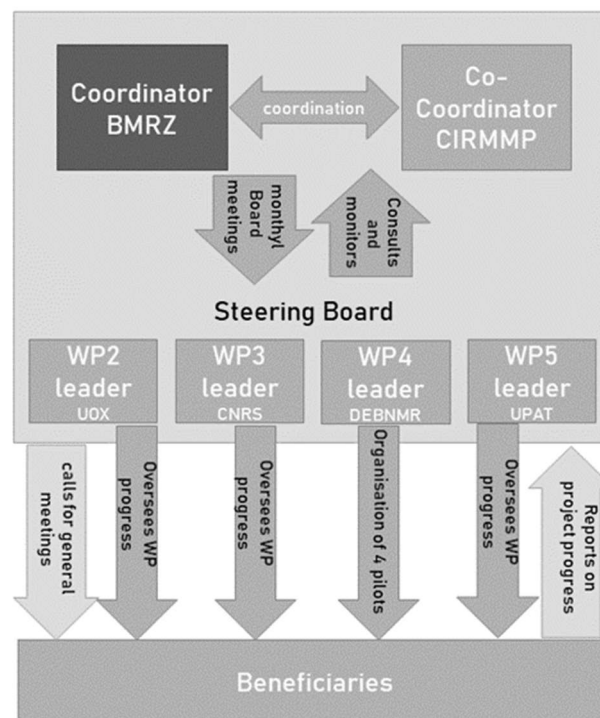


Figure 1: Governance structure of the R-NMR project

Project Coordination

Prof. Dr. Harald Schwalbe from BMRZ is the Coordinator of the project. The Coordinator is the chair of the General Assembly and of the Steering Board meetings. He is responsible for the global management of the project and for the execution of the tasks described in the grant agreement. He is responsible for communication with the partners as well as with the European commission and monitors compliance by all partners with their obligations.

The consortium management activities are carried out by the Coordination Team, composed by the Coordinator, the Co-Coordinator Prof. Dr. Antonio Rosato from CIRMMMP as well by the project managers Dr. Julia Wirmer-Bartoschek (BMRZ) and Dr. Francesca Morelli (CIRMMMP). The main tasks of the Coordination Team are the following:

- Coordination of the planned work as outlined in the Grant Agreement
- Organization of General Assembly and Steering Board meetings, minutes and implementation of decisions of these meetings
- Delivering guidelines and procedures to streamline report preparation
- Monitoring of project progress (milestones, deliverables, technical risks)
- Collection and review of documents for deliverables and reports
- Communication with the EU, submission of deliverables and reports (only BMRZ)
- Financial administration and distribution of payments to the beneficiaries (only BMRZ)
- Keeping project records
- Communication within the consortium
- Communication with the iRemote consortium
- Risk management

Management Bodies

Steering Board

The Steering Board will manage and oversee the execution of the project. It meets monthly and is composed of the Coordination Team and the Work Package (WP) leaders:

- Coordination team: H. Schwalbe (BMRZ), Antonio Rosato (CIRMMP), Francesca Morelli (CIRMMP), Julia Wirmer-Bartoschek (BMRZ)
- Work package leaders: Christina Redfield (UOXF, WP2), Anne Lesage (CNRS, WP3), Katalin Kover (DEBNMR), Georgios Spyroulias (UPAT) or their representative.

The WP leaders are responsible for the execution of the work plan, which is described in their respective WP. Monthly WP meetings are organized by the WP leaders as soon as the WP starts. WP leaders are expected to organise monthly WP meetings and report about the progresses at the Steering Board meetings.

General Assembly

The highest governing body of the R-NMR consortium is the General Assembly (GA). Here, all partners are represented to formulate and take decisions (1 partner – 1 vote) about the consortium, approve board members, monitor activities and modifications therein. The GA assures the progress of the project. The GA will meet at least quarterly and whenever required.

2. Procedures for Reporting

Deliverables

. The procedure for reporting of the deliverables is as following:

1. Template provided by the Coordination Team
2. Reporting initiated by the WP leader
3. The WP leader collects input from involved partners
4. Deliverable submitted to the Coordinator by the WP leader
5. Decision by Coordination Team
6. Deliverable uploaded to the EC by Coordinator

Milestones

The procedure for reporting of the deliverables is as following:

1. Template provided by Coordination Team
2. Short report initiated by Lead
3. Lead collects input from involved partners
4. Short report submitted to Coordinator by Lead
5. Decision by Coordination Team
6. Milestone achievement communicated to EC by Coordinator

Periodic Reports

The procedure for the reporting is as following:

1. Template for reporting, in agreement with the template available in the EC Portal Periodic Reporting tool, is provided by the Coordination Team
2. The reporting for each WP is coordinated by Lead



3. The Lead acquires input from involved partners
4. WP report is submitted to Coordinator by the Lead
5. Preparation of other parts is initiated by the Coordination Team
6. Periodic Technical report is combined and submitted to EC by the Coordinator

Reporting dates

The delivery time of Deliverables and Milestones: Tables and/or lists are made available by the Coordinator (see also Table c. and Table d. of this guidelines)

Reporting Periods:

- Period 1: M 12 - 30/06/2023
- Final report: M 36 -30/06/2025

Contributions of WP leaders to the Coordinator **within 15 days** after the end of the reporting period:

- Period 1: 15/07/2023
- Final report: 15/07/2025

Submission of reports to the EC by the Coordinator:

- Period 1: 29/08/2023
- Final report: 29/08/2025

EC Reviews

EC Reviews are planned 2-3 months after the end of each reporting period (Article 25 of the Grant Agreement). Beside the Coordinator, it is expected that the Co-Coordinator and the WP leaders participate at the review. They present the work carried out, main achievements and use of resources. Where functional to the meeting results, the Coordinator will suggest to the EC PO the participation to the review meeting of further R-NMR partners.

Financial reporting and payments

During reporting, **each beneficiary has to submit to the EC their financial reports** (Form Cs), even if no costs have been incurred during the referred period.

Payment by the European Union is linked to the following reporting periods:

- Pre-financing: shortly after the kickoff meeting;
- Payment 2: after reporting period 1
- Payment 3: after final report

3. Keeping records and project Tools

To facilitate the account of the project activities during the project reporting period (Article 18 Grant Agreement), a Google Drive folder was set up which is accessible to all project partners at:

https://drive.google.com/drive/u/0/folders/1JfQKZoXrakxKmj34ZxGf1jB0Iu_XJR6

The folder is arranged so that meeting minutes, contacts, logo and templates are/will be available to all beneficiaries. Each WP has its own workspace to be filled with activity records/documents.

The following documents are collected in the folder: procedures and tools for administrative, contractual and day-to-day coordination that will be established, including these R-NMR management guidelines. The shared Google Drive folder allows partners to monitor R-NMR project's progress.

Note: The European Commission can carry out audits, financial and/or technical, during the entire lifetime of the project until 2 years after the payment of the balance.

Beneficiaries must keep records and other supporting documentation in order to prove the proper implementation and the costs declared as eligible.

A project website is being launched (www.r-nmr.eu) to inform the wide NMR community about the R-NMR activities, initiatives and results. The website is also a contact point for the engagement of NMR facilities wishing to be part of an inclusive network of NMR-infrastructures throughout Europe, by testing, sharing and adopting routines for remote NMR-usage.

Monitoring the progress of the project

Monitoring of the progress of the project will be facilitated by key performance indicators (KPIs). Baseline and target for the KPIs will be defined in WP2



Standardization

- Number of standardized experiments released
- Availability of reference samples
- Number/Percentage of implementations of standard experiments at all facilities in the partnership (and beyond)

CO₂

- Number/Percentage of facilities that can reliably monitor their CO₂ emissions

Remote access

- Number of users registered for remote access (internal and external)
- Number of remote access sessions

Dissemination

- Number of webinars and videos available
- Number of training sessions

4. Risk management

The Coordination Team and the Steering Board are responsible of monitoring and solving any operational problem as well as implementing the necessary risk and contingency measures. In the table below the potential risks identified at the beginning of the project and the respective mitigation measures are listed:

Risk number	Description	Work Package No(s)	Proposed Mitigation Measures
1	Long term absence of coordinator (low likelihood, medium severity)	WP1	The co-coordinator will act on the behalf of the coordinator
2	Long term absence of WP leader (low likelihood, medium severity)	WP2, WP4, WP5, WP3	The steering board will determine a replacement for the WP leader
3	Failure of effective management of a large consortium (Low likelihood, high severity)	WP1, WP2, WP4 WP5, WP3	The coordinator, co-coordinator and major partners (WPLs) have extensive experience in managing large EU projects. Simple management structure with regular, standardized reporting.

			Provision of Management Guidelines
4	Reliance on other Work Packages for content (medium likelihood, high severity)	WP1, WP2, WP4, WP5, WP3	There is a high degree of WP interdependence in R-NMR. This will be managed via 1) milestones 2) continuous monitoring via monthly WP calls 3) topic-focused working groups
5	The amount of returned surveys is too small (low likelihood, low severity)	WP2	The NMR community is small enough to encourage facility managers and users through personal contacts to the partners to return surveys
6	Failure to capture users' needs (medium likelihood, high severity)	WP2	Close engagement with infrastructures users to collect frequent feedback from their users.
7	Divergence of procedures for remote access: facilities cannot adopt the solutions defined (medium likelihood, medium severity)	WP4, WP3	Managed by monthly WP meetings First adoption of solutions can be assigned to different partners in order to obtain feedback for improvement
8	Chosen technology fails for purpose (low likelihood, low severity)	WP4	Best available similar technology will be implemented
9	Website suffers a security attack (low likelihood, medium severity)	WP5	Professional security and backup measures are implemented
10	Risk of COVID-19 infection or quarantine of partners (high likelihood, low severity)	WP2, WP1, WP4, WP5, WP3	All activities are planned as online activities partners can participate after recovery
11	Risk of lockdown due to COVID- (high likelihood, low severity)	WP1, WP2, WP4, WP5, WP3	All activities are planned as online activities

The risk management will be overseen by the Steering Board. The contingency plan will be discussed and approved at the General Assembly meetings. The risk assessment will be regularly updated by the WP leaders and reported on the occasion of the monthly Steering Board meetings. The risk table will be updated accordingly.

5. Gender balance

R-NMR members pledge themselves to respect the European Charter for Researchers “Employers and/or funders should aim to achieve a representative gender balance at all levels of staff, including at the level of thesis/internship supervisors and managers. This balance should be achieved through a policy of equal opportunities at the time of recruitment and at later career stages, without, however, overriding criteria of quality and competence. In order to ensure equal treatment, selection and evaluation committees should reflect an adequate gender balance”

6. Acknowledgement and visibility of EU Funding

During the R-NMR project lifetime and afterwards, beneficiaries ensure the visibility of EU funding for any communication activity related to the action (including in electronic form, via social media, etc.) and for any major result (including prototypes) funded by the grant. This will be done by displaying the EU flag and funding statement in all their communication and dissemination activities and major result funded by the grant.

The EU flag and funding statement reported below must be displayed in a way that is easily visible for the public and with sufficient prominence:



This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101058595

EU funding must moreover be acknowledged in all types of public outputs (including patent applications, EU standardisation of results), media contacts and other public statements.

Visibility of the R-NMR logo

Every internal document, technical / financial report and internal or external presentation must contain the logo of R-NMR:



The project logo is available in various colour versions in the R-NMR project shared folder:
<https://drive.google.com/drive/folders/1EHrgX8XURKDL-sPI7JYHUP03S4S4iPHP?usp=sharing>

7. Tables

Table a. Members of the Consortium

Participant No.	Participant organisation name	Country
1 (Coordinator)	Johann Wolfgang Goethe-Universitaet Frankfurt am Main (BMRZ)	DE
2	Consorzio Interuniversitario Risonanze Magnetiche Di Metallo Proteine (CIRMMP)	IT
3	Centre National De La Recherche Scientifique (CNRS)	FR
4	Debreceni Egyetem (DEBNMR)	HU
5	Panepistimio Patron (UPAT)	ELU
6	Universitat Linz (JKU)	AT
7	Masarykova Univerzita (MU)	CZ
8	Aarhus Universitet (AU)	DK
9	Asociacion Centro De Investigacion Cooperativa En Biociencias (CICBIO)	ES
10	Universitat De Barcelona (UB)	ES
11	Universite De Strasbourg (UNISTRA)	FR
12	Universite De Nantes (UNTE)	FR
13	Ruder Boskovic Institute (RBI)	HR
14	Latvijas Organiskas Sintezes Instituts (LIOS)	LV
15	Universiteit Utrecht (UU)	NL
16	Stichting Radboud Univerisiteit (SRU)	NL
17	Universitetet I Bergen (UiB)	NO

18	Uniwersytet Warszawski (UNIWARSAW)	PL
19	Universidade Nova De Lisboa (NOVA)	PT
20	Goeteborgs Universitet (UGOT)	SE
21	Kemijski Institut (NIC)	SI
22	Bruker Biospin GmbH (BRUKER)	DE
23	Universitaet Graz (UNI GRAZ)	AT
24 *	The Chancellor, Masters And Scholars Of The University of Oxford (UOXF)	UK
25 *	The University Of Warwick (UW)	UK
26 *	The University Of Birmingham (HWB-NMR)	UK

*Associated partner

Table b. Work Packages

Work Package No	Work Package name	Lead Beneficiary	Responsible Persons	Deliverable No(s)
WP1	Project Management	1 - BMRZ	Harald Schwalbe (BMRZ), Co-lead Antonio Rosato (CIRMMP)	D1.1, D1.2, D1.4, D1.5, D1.3
WP2	Remote NMR Landscape	24 - UOXF	Christina Redfield (UOXF)	D2.2, D2.1
WP3	Defining a common procedure for remote access and measurement	3 - CNRS	Anne Lesage (CNRS)	D3.2, D3.3, D3.1
WP4	Remote control of instrumentation	4 - DEBNMR	Katalin Kövér (DEBNMR))	D4.3, D4.1, D4.2
WP5	Dissemination, exploitation and training	5 - UPAT	Georgios Spyroulias (UPAT)	D5.6, D5.3, D5.5, D5.2, D5.1, D5.4

Table c. List of Deliverables

Deliverable No	Deliverable Name	Work Package No	Lead Beneficiary	Type	Due Date (month)
D1.1	Management Guidelines	WP1	1 - BMRZ	Document, report	2

D1.2	Data Management Plan	WP1	1 - BMRZ	OTHER	5
D5.1	Plan for dissemination and exploitation including communication activities	WP5	1 - BMRZ	Document, report	6
D2.1	Identification of GDPR, security needs and shipment bottlenecks	WP2	24 - UOXF	Document, report	12
D5.4	First report on the organization of dedicated workshops along with the annual consortium meeting	WP5	5 - UPAT	Document, report	12
D1.3	First updated Data Management Plan	WP1	1 - BMRZ	OTHER	17
D2.2	Remote-NMR landscape including existing technical solutions for remote acces and a table of criticalities	WP2	24 - UOXF	Document, report	18
D3.1	Standard Operating Procedures (SOP) for remote NMR measurements including sample shipment	WP3	3 - CNRS	Document, report	18
D3.2	Procedures for the assignment of users' levels and definition of the corresponding roles of infrastructure staff	WP3	7 - MU	Document, report	18
D3.3	Document defining the technical requirements for connectivity platforms and existing technical solutions that enable remote control of the NMR instruments	WP3	20 - UGOT	Document, report	18
D5.2	First updated plan for dissemination and exploitation including communication activities	WP5	5 - UPAT	Document, report	18
D5.6	Report on impact of training activities	WP5	2 - CIRMMP	Document, report	21
D5.5	Second report on the organization of dedicated workshops along with the annual consortium meeting	WP5	5 - UPAT	Document, report	24
D1.4	Second updated Data Management Plan	WP1	1 - BMRZ	OTHER	29

D4.1	Implementation of standardized experiments for remote access to NMR-infrastructures for both liquid- and solid-state platforms	WP4	16 - SRU	Document, report	30
D4.2	Development of data handling and archiving protocols	WP4	9 - CICBIO	Document, report	30
D5.3	Second updated plan for dissemination and exploitation including communication activities	WP5	5 - UPAT	Document, report	30
D4.3	Validation of the implementations at selected NMR-infrastructures	WP4	21 - NIC	Document, report	36
D1.5	Summary of the main achievements of RNMR, analysis of its impacts and perspective for sustainability and exploitation beyond the end of the project	WP1	2 - CIRMMP	Document, report	36

Table d. List of Milestones

Milestone No	Milestone Name	Work Package No	Lead Beneficiary	Means of Verification	Due Date (month)
4	Launch and operation of the website	WP5	5-UPAT	Website online	3
1	Report on survey on operation of NMR facilities during pandemics	WP2	1-BMRZ	Report available on website	5
2	Report on survey on users' experience and expectations	WP2	2-CIRMMP	Report available on website	7
5	First set of training materials available via the website	WP5	5-UPAT	Training material published online	12
3	First implementation of user access levels, involving users of three different levels	WP4	4-DEBNMR	Remote access by test users with proper settings	21