

RM ROADMAP

Consensus Document for Country Community Türkiye

Co-Creation Session 2: Who are research managers?/ What are their skills and competencies?

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RM ROADMAP

“Creating Framework Conditions for Research Management to Strengthen the European Research Area”

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1. Introduction

This is an important moment for the research management (RM) community in Europe. The European Commission (EC) and countries across Europe want to better understand the current research management landscape to further strengthen the European Research Area (ERA).

Research management includes a broad range of professionals supporting researchers to achieve excellence in research. For the purpose of this co-creation exercise, Research Managers (RMs) are to be considered as broad as possible including: research policy advisers, research managers, financial support staff, data stewards, research infrastructure operators, knowledge transfer officers, business developers, knowledge brokers, innovation managers, etc. For simplicity, we use the term research management but this exercise covers also other terms such as research support, research management and administration, professionals at the interface of science and other terms which are used as the norm in the national landscapes across Europe.

The RM Roadmap Knowledge and Community Platform (KCP) brings research managers together to shape the future of the profession and support the strengthening of an inclusive research management community in Europe. The KCP is a place where research managers share their views and introduce issues for discussion in a solution-focused endeavour. RM Roadmap Ambassadors lead the discussions for each country on the Knowledge and Community Platform, supported by national and regional RM networks.

This co-creation exercise is the biggest collaboration between RM networks ever to take place in Europe. With a focus on learning insights from RMs, the co-creation exercise seeks to establish a robust framework that can support professional growth and collaboration across the EU and associated countries.

By 2023, 40 country communities have been established within the RM Roadmap Ambassador Network.

These have been complemented by 10 thematic communities, including 35 additional Ambassadors on top of the 114 national Ambassadors at the beginning of 2024. The RM Roadmap project will use the outcomes from this co-creation exercise to make a roadmap for the future of research management in Europe and to build and exchange solid knowledge on career framework opportunities, upskilling and networking for research managers. RM Roadmap will ultimately build a value proposition for policymakers and institutional leaders who want to strengthen and modernise their research support departments.

This **consensus document for Country Community Türkiye** contains the outcomes of the **Second Co-Creation Session – Who are research managers/ skills and competences**. A short summary of the main outcomes from the co-creation exercise is included in Section 2. More information about the topic of research managers/ skills and competences is detailed in Section 3.

For more information about the RM Roadmap initiative, the reader can consult the following website: www.rmroadmap.eu

2. Summary of Co-Creation Session 2

In the very first in-person meeting of the RM project, held during the first co-creation session, a preliminary list of the “skills and competencies required for Research Management” was discussed and compiled by 130 professionals working in research management at various positions. The ambassadors decided to further develop this knowledge through the Co-Creation Session 2 for Türkiye.

An online meeting was held on January 30, 2024, with 58 participants, including thematic and regional representatives, and ecosystem stakeholders, to evaluate the skills and competencies necessary for Research Management. A briefing based on the earlier work was shared to initiate discussions. During the meeting, the National Ambassadors/Deputy Ambassadors informed the participants about the RM ROADMAP Project and summarised the activities conducted from inception to date, the first consensus reports of other countries, and the contributions of Türkiye.

In the discussions, it was agreed that RMAs are hybrid professionals with academic and professional experience who are at the interface of science and they require a variety of mixed credentials when performing their professional-oriented roles to make their hybridity visible in their performance of the role. This approach is also in parallel to literature **(1)**. This required a wide range of skills and competencies, particularly during the transition in roles and career pathways within research management and administration. Therefore the participants agreed to group Research Managers according to the fields of activity in which they operate, regardless of age and experience, as:

- **Bounded Managers:** The term "bounded research manager" refers to those whose responsibilities and activities are confined within certain boundaries or limits. Their responsibilities are typically defined by their job descriptions, organizational structures, or departmental functions. They perform tasks with specific definitions such as operational support, administrative, and organizational tasks. They operate within well-defined parameters and focus on managing tasks within their designated areas of responsibility.

- **Cross-Boundary Professionals:** This term refers to those who perform tasks with not so clear-cut definitions such as those providing support to institutional managers/leaders in forming strategies. These professionals actively engage in bridging gaps and facilitating collaboration between different departments, disciplines, or organizational units within the higher education institution. They work across boundaries to integrate diverse perspectives, resources, and expertise in pursuit of common objectives.
- **Unbounded Professionals:** Those with open-ended task definitions; those who can act with innovation and creativity in environments of uncertainty and risk are categorised as “unbounded professionals”. In contrast to the other categories, unbounded professionals have more flexibility and autonomy in their roles. They often transcend traditional boundaries and operate across multiple departments, disciplines, or organizational levels. Unbounded professionals may take on diverse responsibilities and collaborate with colleagues from different areas to achieve organizational goals.

A consensus was reached to categorise the necessary knowledge, skills, and competencies within these three different groups. This categorisation reflected the evolving nature of roles in RM emphasizing the importance of adaptability, collaboration, and interdisciplinary approaches addressing the multifaceted challenges and opportunities. The decision was made to identify the knowledge and skills necessary for Research Managers through three distinct focus group studies.

First of all, a survey was shared with those who attended the meeting, asking their choice of preferences for contributing to Focus Group studies based on their responsibilities and previous experiences. It was possible to contribute to more than one focus group. Focus Groups were formed based on the answers and the CVs of the applicants.

Additionally, a "TR RM Core Group" of 10 key players was established consisting of the most senior leaders and the RM Ambassadors to participate in all focus group studies to facilitate the discussions. The groups met online to discuss and define the required “Knowledge/Awareness, Skills and Competencies/Expertise” for their respective groups:

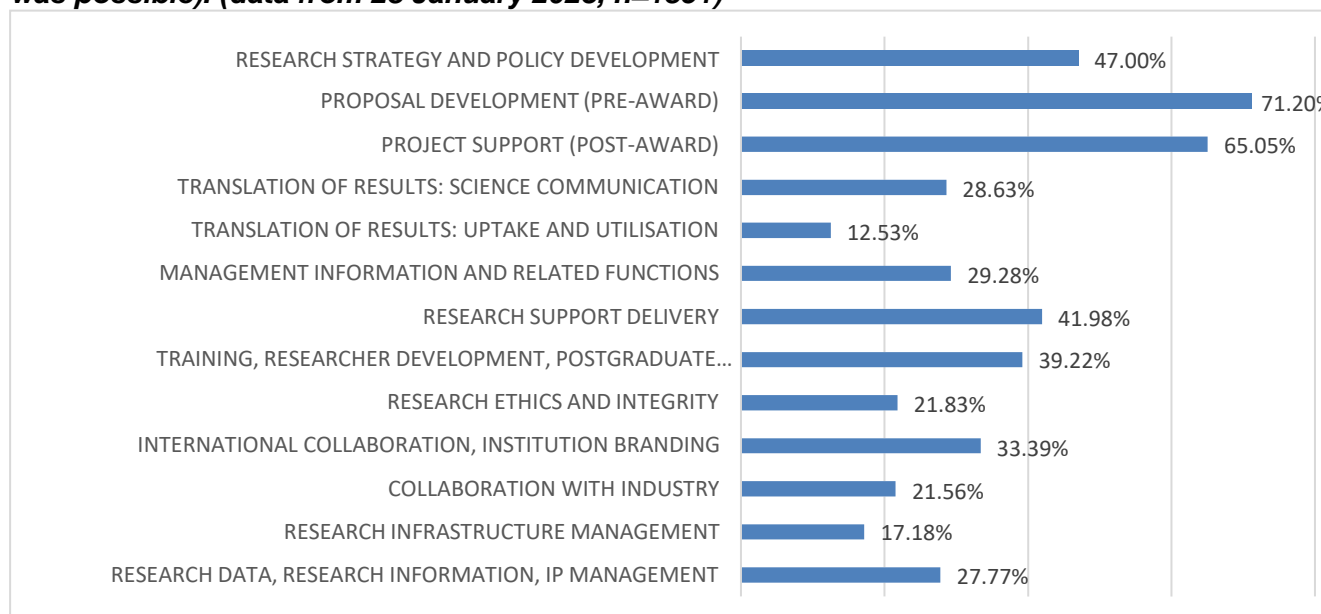
- FOCUS GROUP1 **Bounded Managers** of 26 participants - March 1, 2024
- FOCUS GROUP 2 **Cross-Boundary Professionals** of 33 participants -March 6, 2024,
- FOCUS GROUP 3 **Unbounded Professionals** of 22 participants - March 20, 2024,

As a result of discussions in Focus Groups **(2,3,4)** an excel sheet was produced under three different domains “Knowledge/Awareness”, “Skills” and “Competencies/Expertise” emphasizing the overlaps amongst the groups and the document was shared for further comments / amendments with the Focus Groups as well as the “TR RM Core Group”.

3. Discussion Outcomes of Co-Creation Session 2

This consensus document for Country Community Türkiye contains the outcomes of the Second Co-Creation Session – “Who are research managers?/ What are their skills and competencies?”

Q1: Respondents of the RM ROADMAP survey indicated the following areas in which they work (multiple selection was possible). (data from 28 January 2023, n=1851)



Q1.1: Do you miss any particular and/or emerging areas which should be also included in the definition of research management at the European level? If yes, please share!

The Focus Groups described above all agreed that innovation and valorisation of research outputs should be an integral part of Research Management as graphically illustrated in the Figure 1 below.



Figure 1: The domain of Research Management in the holistic approach

Q1.2: Are there any national specificities, e.g. certain areas being underdeveloped / non-existent, that influence the areas covered by research management? If yes, please elaborate on these factors and how they might affect the definition of research management at the national level.

The Research Management ecosystem in Türkiye is quite mature and there are no national specificities. The focus groups have decided that RM professionals can be divided into three groups: regardless of their specific responsibilities:

- 1) Those who provide services such as supporting, managing, organising, and administering (Bounded Managers).

These, position themselves firmly within the boundaries of a function or organisational location which they had either constructed for themselves or which they perceived as having been imposed upon them. This means that these professionals may choose to be governed by the 'rules and resources' within that space; they also often are characterised by a desire to maintain boundaries and perform their roles in ways that were relatively prescribed.

- 2) Those who are involved in strategy-making, providing advice to institution leaders (Cross-Boundary Professionals).

These, actively use boundaries to build strategic advantage and institutional capacity, capitalising on their knowledge of territories on either side of these boundaries. They use their understanding of the 'rules and resources' of more than one type of space and are likely to display negotiating and political skills to perform interpretive functions and become actors in institutional decision-making. Although they work with different people with different backgrounds through their internal and external networks and influence internal and external stakeholders to build institutional capacity, they tend to see their futures within the sector.

- 3) Those who practice a more open-ended and exploratory approach and are willing to 'let go' of the structures tolerating a degree of risk and ambiguity, and embracing innovation and creativity (Unbounded Professionals).

These, have a more flexible and dynamic approach to the broadly-based projects with which they are involved. They undertake work that contributes to institutional development, tend to draw on external experience and networks, and are as likely to see their futures with higher education as well within the sector.

Q2: Respondents of the RM ROADMAP survey were asked to select the 3 most suitable professional titles with which they identify and could be used as umbrella/collective term at European level for RMs. The 5 most popular choices are as follows (data from 28 January 2023, n=1846):

- Research Manager and Administrator: 32.88%
- Research Manager: 31.96%
- Research Management and Support Professional: 28.60%
- Research Support Professional: 22.70%
- Research Advisor: 19.50%

Q2.1: Given the broad range of fields covered by research managers, what would be the most proper umbrella/collective term to be used at European level? Please pick one! The term should be embraced by professionals working in RM and understood by stakeholders of the R&I ecosystem including institution leaders, decision-makers and policymakers.

The scope and the umbrella of Research Management were defined, and detailed as including research strategy, project development, R&D funding, project implementation, knowledge- technology transfer and commercialization process (Fig. 1). Research management includes a broad range of professionals supporting researchers to achieve excellence in research, from creation to commercial exploitation of outputs. Although, for simplicity, the term research management is being used, the concept covers also other terms such as research support, research management and administration and professionals at the interface of science. In this holistic approach, a synergistic collaboration of Research Managers (RMs) including research policy advisers, research managers, financial support staff, data stewards, research infrastructure operators, knowledge transfer officers, project development and management professionals, business developers, knowledge brokers, innovation managers, etc. are expected to create a multiplier effect throughout the ecosystems.

Therefore, with, in the Focus Groups, the term “**Research and Innovation Manager**” was seen as more fit to cover this chain of related activities leading to the contribution of research to societal welfare.

In Türkiye, the term "Research and Innovation Manager" is increasingly prevalent, especially within organizations, institutions, and companies prioritizing research and development (R&D) and innovation-driven strategies. This reflects Türkiye's growing emphasis on fostering innovation to drive economic growth, enhance competitiveness, and tackle societal challenges.

Consequently, various sectors acknowledge the importance of dedicated roles for overseeing research and innovation activities. Additionally, as a candidate country for EU membership, Türkiye aligns its policies with EU priorities, including those related to research and innovation. The term "research and innovation manager" mirrors this alignment with EU frameworks, such as Horizon Europe, which advocate for research excellence, innovation, and collaboration on a European scale. Moreover, its widespread usage in international contexts enhances its recognition and familiarity within the research environment.

Q2.2: Please elaborate any specificities that may influence your choice given your national/regional context.

In the discussions, we have come to the conclusion that RMAs are hybrid professionals with academic and professional experience who are at the interface of science. They generally have experience in a variety of sectors and roles in careers and facilitating their sense of 'fitting in' any professional community. They work with and for science and have diverse positions without being specialised in one major area and they have mixed credentials, career choices, and backgrounds. RMs leverage a variety of mixed credentials when performing their professional-oriented roles so to make their hybridity visible in their performance of the role; the hybridity is therefore in the self as it is in the role itself. Therefore, the definition should embrace a wide and comprehensive list of identities and functions, requiring a wide range of skill sets. It was emphasized that it is important to consider sub-professional groups such as institutional relationships, partnerships, legal consultancy, technology investments, licensing, resource management, business development, innovation support, project management, project budgeting, research ethics, open access, international relations, risk management, entrepreneurship, etc.

The research management competencies and skills at the institutional level were conveyed. The potential future research skills and competencies were discussed with an emphasis on sustainability, environment, equality, diversity, and participation awareness.

Indeed, discussions have underscored the significant variability in research management skills and competencies due to national or regional contexts, influenced by diverse regulatory environments, cultural norms, funding mechanisms, collaboration opportunities, technological infrastructure, and socioeconomic factors. Within a country, such as Türkiye, there exists notable diversity in research landscapes, spanning disciplines, sectors, and institutional settings. Research management practices can vary widely across different institutions, including universities, research institutes, government agencies, and industry organizations. These institutional differences, encompassing organizational culture, governance

structures, and research priorities, shape the requisite skills and competencies of research managers. Furthermore, these differences show how critical RMAs and their competencies are to facilitate collaborations between different organizations. Particularly in economically unstable environments like Türkiye, challenges and threats within the research environment compel research management administrators (RMAs) to innovate and find novel solutions. This dynamic fosters the development of essential problem-solving skills, prompting individuals to think critically, assess situations, and devise effective strategies to surmount obstacles. Consequently, this process nurtures adaptability and resilience among RMAs, equipping them with the capacity to navigate uncertainty, cope with stress, and persevere in adverse circumstances. Adapting to these contextual differences was identified as essential for research managers to effectively navigate the complexities of the research landscape and drive meaningful outcomes in their respective regions.

As a result of the discussions in co-creation sessions, the main headings, diverse skills and competencies that are gathered by the participants were summarised as:

AWARENESS

- Understanding of the innovation ecosystem with its legislation, institutions, agents, and relationship mechanisms. awareness of international business practices and norms.
- Global perspective, cross-cultural competences including cultural sensitivity
- Awareness of technological developments staying permanently updated on advances in the scientific and technological world, coupled with a range of
- Holistic vision capable of understanding the political, social and environmental issues
- Assess the environmental impact of technologies and promote sustainable and equitable practices
Ethics and social responsibility - of legal and ethical frameworks, ethical and social implications.

SOFT SKILLS

- Inter-disciplinary skills
- Adaptability to work effectively in diverse teams and being flexible and open to change
- Administrative skills including, efficiency, proactivity, organizational and time-management skills, embracing uncertainty, and planning and strategic thinking, leadership, decision-making
- Coordination and management of cross-functional teams, transdisciplinary projects, cross sector partners; multi-stakeholder relationships, including integration and alignment with institutional functions,

- Networking and collaboration - identifying networks and fostering collaborations, and building strong relationships with diverse stakeholders with different perspectives; involving interdisciplinary, trans-national, cross-cultural components or different actors in the innovation ecosystem (academia, policymakers, industry, incubators, accelerators, VC etc.) to leverage collective expertise and influence the regulatory environment
- A proactive approach to and an open mind for continuous learning and self-development; including storytelling, sharing experiences and best practices, continuous learning,
- Active listening, excellent written and verbal communication skills, to convey complex technical information to non-experts;
- Skills to address situational needs, going into the direction of an account manager approach- combination of strong soft skills and client orientation, coupled with project management skills needed to bring in specialist expertise
- Curiosity, thinking creatively, problem-solving, and analytical skills
- Facilitation, mediation and negotiation skills, relationship management to navigate complex agreements, resolve conflicts,
- Emotional intelligence including conscientiousness, trustworthiness, interpersonal skills and attitudes, building trust, team building, motivation building and resilience, reliability,
- An entrepreneurial mindset facing the actual challenges, including teamwork, training/coaching skills.

HARD SKILLS (Professional Skills)

- A broad understanding of various disciplines, including science, technology, business, law, and ethics, coupled other legal and regulatory aspects enabling professionals to bridge gaps between different sectors and facilitate effective transfers.
- Technological literacy – competency in use of new tools (of digital tools, artificial intelligence, and data analytics) collaboration tools (Patent & information search, information and knowledge management systems)
- Following regional economic development strategies based upon science and technology - Searching, preparation, and participation in local and international calls for entrepreneurship and R+D+I financing,
- Identifying requirements of different technology readiness levels, developing appropriate funding proposals from discovery to market, fostering translational research approaches to promote commercialization



- Program and project management; including building and leading multi sectoral consortia, pursuing multi-party grants from government funding, and leading coalitions, managing multiple collaborations/partnerships across the “value chain”, efficiently plan, execute, and monitor transfer projects coordinating resource allocation and timeline management and ensuring ethical operations
- Knowledge and expertise in intellectual property laws, data privacy regulations, and protection of IP and sensitive data; including patents, trademarks, copyrights, and trade secrets,
- IP portfolio management, licensing, and commercialization, good understanding of funding and early-stage investment, spin-off creation, sophisticated approaches to deep-tech venturing
- Ability to evaluate technology and market trends for commercialization, commercial viability and the feasibility of a technology and distinguish opportunities in different markets, understanding the “route to market”, sales,
- Assessing the societal impact- how technology affects communities, economies, and individuals to ensure responsible and ethical knowledge transfer
- Expertise in identifying and assessing risks associated with transfer activities and developing mitigation strategies, crisis management and contingency plans and to navigate unexpected challenges like legal disputes or public relations issues and to foster resilience planning skills.
- Adopting a user-centric focus prioritizing the needs and experiences of end-users to ensure successful adoption and implementation.
- Proficiency in innovation ecosystem mapping.

Q3: The table outlines the most important skills and competences revealed by the RM ROADMAP survey for each of the identified areas of research management. Identification of these skills and competences for the different areas can help employers in recruitment, provide career paths and professional development opportunities for RMs, and articulate better the training needs. Are there additional skills or competences that should be included among the top 5 identified in the RM Roadmap survey for each area? If yes, please share your suggestions!

	Transversal skills relevant for RMs	RM related soft skills	RM related hard skills	Specialisation or role related skills
RESEARCH STRATEGY AND POLICY DEVELOPMENT	<ul style="list-style-type: none"> • Written communication • Oral communication • Problem solving • Self-motivation, proactiveness, initiation • Critical thinking 	<ul style="list-style-type: none"> • Prioritisation • Time management • Efficiency and effectiveness • Reliability, trustfulness • Planning, strategic thinking 	<ul style="list-style-type: none"> • Understand research and the R&I ecosystem • Knowledge of rules and regulations of funders • Understanding institutional governance • Ethics, integrity • Language skills (EN) 	<ul style="list-style-type: none"> • Appreciating values and understanding interests • Understanding politics and policy cycles • Building and maintaining networks • Stakeholder engagement and management • Administrative skills
PROPOSAL DEVELOPMENT (PRE-AWARD)	<ul style="list-style-type: none"> • Written communication • Problem solving • Flexibility • Openness • Oral communication 	<ul style="list-style-type: none"> • Prioritisation • Adaptability • Time management • Reliability • Trustfulness 	<ul style="list-style-type: none"> • Knowledge of rules and regulations of funders • Language skills (EN) • IT skills • Ethics, integrity • Understand research and the R&I ecosystem 	<ul style="list-style-type: none"> • Administrative skills • Appreciating values and understanding interests • Building and maintaining networks • Financial skills • Understanding politics and policy cycles
PROJECT SUPPORT (POST-AWARD)	<ul style="list-style-type: none"> • Written communication • Oral communication • Interpersonal skills • Intrapersonal skills • Flexibility 	<ul style="list-style-type: none"> • Prioritisation • Time management • Information management • Efficiency and effectiveness • Reliability, trustfulness 	<ul style="list-style-type: none"> • IT skills • Ethics, integrity • Knowledge of rules and regulations of funders • Understand research and the R&I ecosystem • Managing resources 	<ul style="list-style-type: none"> • Administrative skills • Financial skills • Appreciating values and understanding interests • Building and maintaining networks • Legal and regulatory skills

TRANSLATION OF RESULTS: SCIENCE COMMUNICATION	<ul style="list-style-type: none"> • Flexibility • Oral communication • Interpersonal skills • Self-motivation, proactiveness, initiation • Problem solving 	<ul style="list-style-type: none"> • Adaptability • Prioritisation • Time management • Reliability, trustfulness • Efficiency and effectiveness 	<ul style="list-style-type: none"> • Language skills (EN) • IT skills • Understand research and the R&I ecosystem • Knowledge of rules and regulations of funders • Ethics, integrity 	<ul style="list-style-type: none"> • Building and maintaining networks • Appreciating values and understanding interests • Understanding politics and policy cycles • Stakeholder engagement and management • Administrative skills
TRANSLATION OF RESULTS: UPTAKE AND UTILISATION	<ul style="list-style-type: none"> • Oral communication • Problem solving • Interpersonal skills • Critical thinking • Assertiveness 	<ul style="list-style-type: none"> • Prioritisation • Planning, strategic thinking • Time management • Information management • Adaptability 	<ul style="list-style-type: none"> • Understand research and the R&I ecosystem • Knowledge of rules and regulations of funders • Language skills (EN) • Management skills • Understanding institutional governance 	<ul style="list-style-type: none"> • Building and maintaining networks • Administrative skills • Stakeholder engagement and management • Financial skills • Legal and regulatory skills
MANAGEMENT INFORMATION AND RELATED FUNCTIONS	<ul style="list-style-type: none"> • Problem solving • Openness • Flexibility • Cultural and diversity skills • Interpersonal skills 	<ul style="list-style-type: none"> • Adaptability • Stress management • Resilience • Time management • Prioritisation 	<ul style="list-style-type: none"> • IT skills • Understanding institutional governance • Knowledge of rules and regulations of funders • Understand research and the R&I ecosystem • Ethics and integrity 	<ul style="list-style-type: none"> • Administrative skills • Appreciating values and understanding interests • Financial skills • Appreciating values and understanding interests • Cross-cutting issues in HEU
RESEARCH SUPPORT DELIVERY	<ul style="list-style-type: none"> • Assertiveness • Written communication skills • Interpersonal skills • Intrapersonal skills • Oral communication skills 	<ul style="list-style-type: none"> • Time management • Prioritisation • Adaptability • Reliability, trustfulness • Efficiency and effectiveness 	<ul style="list-style-type: none"> • Knowledge of rules and regulations of funders • Language skills (EN) • IT skills • Understanding institutional governance • Managing resources 	<ul style="list-style-type: none"> • Administrative skills • Appreciating values and understanding interests • Financial skills • Understanding politics and policy cycles • Building and maintaining networks

TRAINING, RESEARCHER DEVELOPMENT, POSTGRADUATE RESEARCHERS (PGR)	<ul style="list-style-type: none"> • Assertiveness • Oral communication • Written communication • Openness • Flexibility 	<ul style="list-style-type: none"> • Adaptability • Time management • Reliability, trustfulness • Working in teams • Efficiency and effectiveness 	<ul style="list-style-type: none"> • Language skills (EN) • Knowledge of rules and regulations of funders • Ethics, integrity • Understand research and the R&I ecosystem • IT skills 	<ul style="list-style-type: none"> • Administrative skills • Building and maintaining networks • Appreciating values and understanding interests • Understanding politics and policy cycles • Cross-cutting issues in HEU
RESEARCH ETHICS AND INTEGRITY	<ul style="list-style-type: none"> • Written communication • Multitasking • Interpersonal skills • Cultural and diversity skills • Openness 	<ul style="list-style-type: none"> • Reliability, trustfulness • Adaptability • Time management • Efficiency and effectiveness • Planning, strategic thinking 	<ul style="list-style-type: none"> • Ethics, integrity • Language skills (EN) • Knowledge of rules and regulations of funders • Management skills • Understand research and the R&I ecosystem 	<ul style="list-style-type: none"> • Administrative skills • Appreciating values and understanding interests • Building and maintaining networks • Stakeholder engagement and management • Legal and regulatory skills
INTERNATIONAL COLLABORATION, INSTITUTION BRANDING	<ul style="list-style-type: none"> • Intrapersonal skills • Flexibility • Assertiveness • Openness • Critical thinking 	<ul style="list-style-type: none"> • Reliability, trustfulness • Stress management • Time management • Resilience • Adaptability 	<ul style="list-style-type: none"> • IT skills • Knowledge of rules and regulations of funders • Understand research and the R&I ecosystem • Understanding institutional governance • Ethics, integrity 	<ul style="list-style-type: none"> • Appreciating values and understanding interests • Lobbying • Building and maintaining networks • Administrative skills • Understanding politics and policy cycles
COLLABORATION WITH INDUSTRY	<ul style="list-style-type: none"> • Cultural and diversity skills • Problem solving • Oral communication • Assertiveness • Openness 	<ul style="list-style-type: none"> • Time management • Prioritisation • Planning, strategic thinking • Stress management • Working in teams 	<ul style="list-style-type: none"> • Understanding institutional governance • Knowledge of rules and regulations of funders • Management skills • Language skills (EN) • Managing resources 	<ul style="list-style-type: none"> • Building and maintaining networks • Administrative skills • Appreciating values and understanding interests • Nurturing innovation • Stakeholder engagement and management
RESEARCH INFRASTRUCTURE MANAGEMENT	<ul style="list-style-type: none"> • Flexibility • Openness • Written communication skills 	<ul style="list-style-type: none"> • Teamwork • Stress management • Diplomatic skills 	<ul style="list-style-type: none"> • Understand research and the R&I ecosystem 	<ul style="list-style-type: none"> • Stakeholder engagement and management • Building and maintaining networks

	<ul style="list-style-type: none"> • Multitasking • Cultural and diversity skills 	<ul style="list-style-type: none"> • Conflict management • Time management 	<ul style="list-style-type: none"> • Understanding institutional governance • IT skills • Language skills (EN) • Ethics, integrity 	<ul style="list-style-type: none"> • Administrative skills • Understanding politics and policy cycles • Legal and regulatory skills
RESEARCH DATA, RESEARCH INFORMATION, INTELLECTUAL PROPERTY MANAGEMENT	<ul style="list-style-type: none"> • Assertiveness • Openness • Flexibility • Interpersonal skills • Oral communication 	<ul style="list-style-type: none"> • Adaptability • Negotiation • Time management • Conflict management • Reliability, trustfulness 	<ul style="list-style-type: none"> • Understand research and the R&I ecosystem • Knowledge of rules and regulations of funders • Understanding institutional governance • Management skills • Ethics, integrity 	<ul style="list-style-type: none"> • Administrative skills • Legal and regulatory skills • Building and maintaining networks • Understanding politics and policy cycles • Appreciating values and understanding interests

Based on the discussions and the main headings agreed upon, Figures 2-4 were developed for the categorises defined, for three main pillars; namely:

- Knowledge / Awareness
- Skills
- Competencies / Expertise

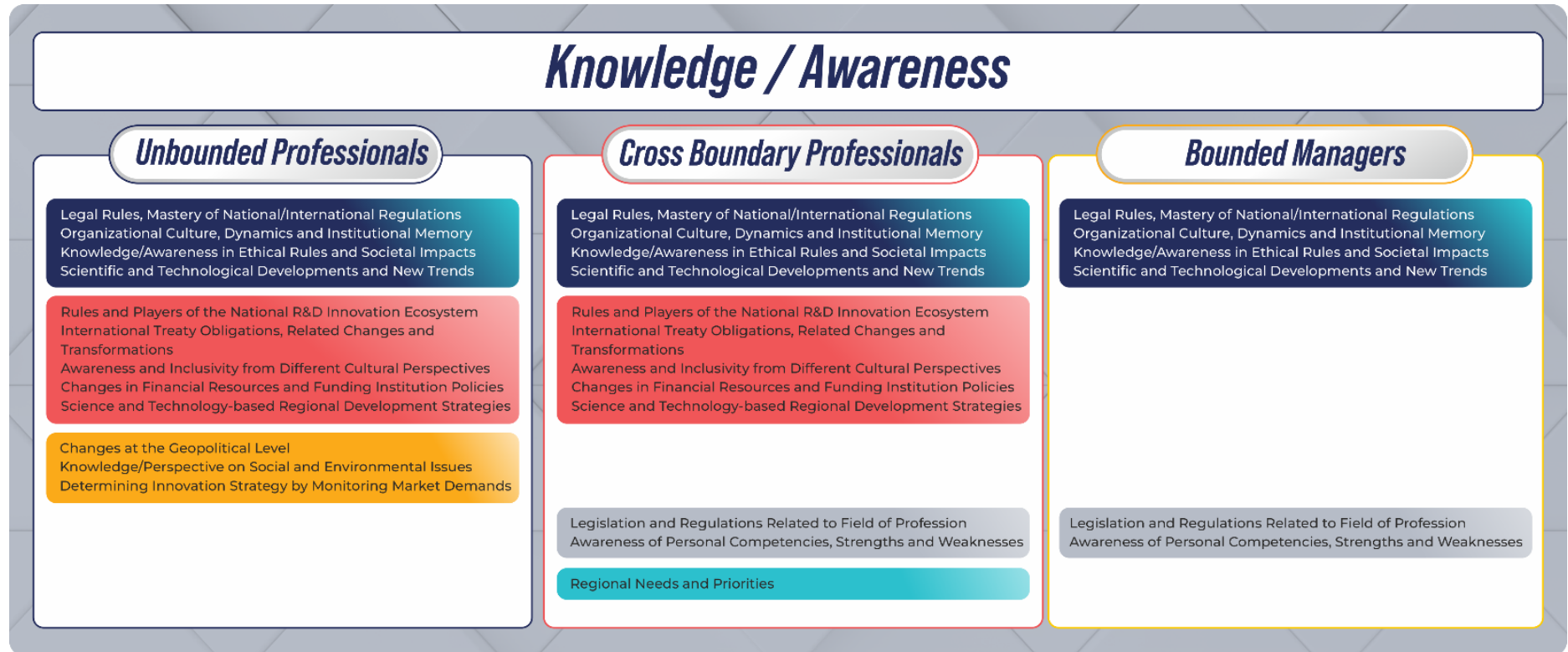


Figure 2. Knowledge / Awareness headings for Research Managers in three categories

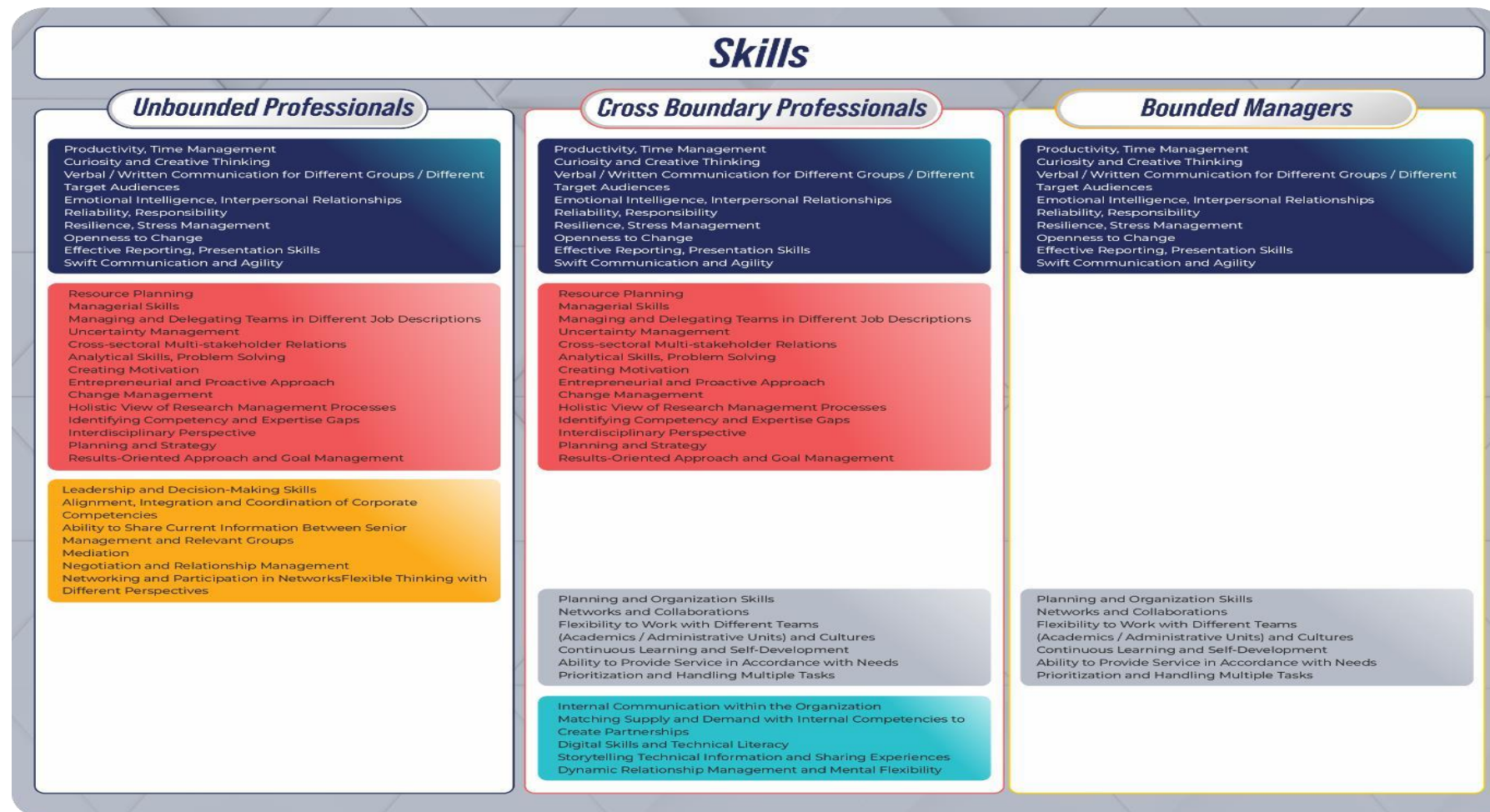


Figure 3. Skills required for Research Managers in three categories



Figure 4. Competencies / Expertise headings for Research Managers in three categories

4. References

- (1) Poli S., Oliveira C., Zsar V. (2024). From Conceptualisation to Action – The Quest for Understanding Attitudes of Research Managers and Administrators in the Wider World. Emerald Publishing Limited, (Chapter 3.1). DOI: [10.1108/978-1-80382-701-820231019](https://doi.org/10.1108/978-1-80382-701-820231019)
- (2) Minutes of Focus Group 1 Discussions, March 1, 2024
- (3) Minutes of Focus Group 2 Discussions, March 6, 2024
- (4) Minutes of Focus Group 3 Discussions, March 20, 2024

5. Acknowledgements

We acknowledge the participation of TR RM Core Group for their overall contribution to the preparation of this document. Written approval was obtained from TR RM Core Group Members for their names to be included in the document.

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