Chapter 5.25

Evolution of RMA in Slovenia

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Abstract

This chapter outlines the research management and administration (RMA) as a profession and work field in Slovenia. Thus, we present an overview of the Slovenian research system, describing how this system has evolved over time. In addition, we explain the emerging need for RMA skills, including its self-organisation component and the challenges that lie ahead. A section is dedicated to Slovenian RMA demographics using RAAAP-2 and RAAAP-3 surveys. The conclusions of the chapter focus on a forecast for the future of RMA in Slovenia and several possible paths to follow for its community.

Keywords: Slovenia; Research management and administration; professionalisation; KOsRIS II; RAAAP; research ecosystem

The Slovenian Research Ecosystem

The beginning of the institutionalisation of Slovenian research can be associated with the establishment of the first research institution in Slovenia in 1898, the Agricultural

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Institute of Slovenia, ¹ and later with the establishment of the University of Ljubljana in 1919, the first Slovenian higher education institution. The second most important milestone is the establishment of the Slovenian Academy of Sciences and Arts² in 1938. Before that, shortly after World War II, the research community and its ecosystem had been enriched by various research institutes, including the National Institute of Chemistry (1946), ³ the Geological Survey of Slovenia (1946), ⁴ the Slovenian Forestry Institute (1947), ⁵ and the Josef Stefan Institute (1949). ⁶ By this time, the foundations for successful research in Slovenia had been laid. Nevertheless, the role of research managers and administrators (RMAs) was not yet recognised at that time, and it took quite a while for this topic to receive the attention it needed.

Since then, the profile of RMAs in Slovenia has evolved over time. It began as a response to the emerging need for a more professionalised workforce, which increased with the introduction of project-based grant research.

Slovenia was part of the Yugoslav Republic until 1991. On 25 June 1991, Slovenia became an independent state and sought closer integration with the European Union (EU; Republic of Slovenia, 2020).

When Slovenian organisations were able to participate in EU research funding programmes, a need arose for new skills in RMA. Slovenia became a full member of the EU on 1 May 2004, but had already participated in research projects during the accession phase as a candidate country since the Fifth Framework Programme in 1999 (European Commission, 2014). Slovenian institutions/research organisations submitted 1,350 applications in the 5th Framework Programme and 921 applications in the 6th Framework Programme (Rašula, 2004). Since 2004, when Slovenia became a full member of the EU, Slovenian researchers have participated in various EU programmes. The most recent known data on performance in the Horizon 2020 programme show that Slovenia submitted 4,142 applications in 2014–2017 involving Slovenian institutions either as partners or coordinators, of which 450 were successful (Republic of Slovenia, Ministry of Infrastructure, 2018).

Investments in R&D in Slovenia peaked in 2012 and 2013 at more than 2.5% of gross domestic product (GDP). Since then, relative investments have declined and will only account for about 2% of GDP in 2020 (Statistical Office of the Republic of Slovenia, 2022).

The development of the profession of RMA in Slovenia is full of challenges. The process began with the emergence of RMAs at the institutional level – this is why we refer to 'institutionalisation' at the beginning of the chapter. Professional development of these colleagues took place through expert seminars organised by consulting companies and through self-initiated collaboration between research institutions. Support at the national level was less visible, although the profession was known and recognised, for example, through the inclusion of basic RMA job titles in the catalogue of civil service jobs that is part of the Public Sector Salary System Act passed on 28 December 2009 (Zakon o sistemu plač v javnem sektorju, 2009).

RMAs meet regularly in a network of RMAs called KOsRIS II (Koordinacija samostojnih raziskovalnih inštitutov), which was established on the basis of good

¹ www.kis.si

²www.sazu.si

³www.ki.si

⁴www.geo-zs.si

⁵www.gozdis.si

⁶www.ijs.si

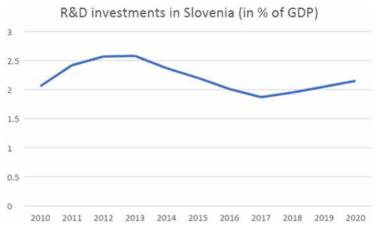


Fig. 5.25.1. R&D Investments in Slovenia (in % of GDP). *Source*: Statistical Office of the Republic of Slovenia (2022).

informal cooperation between research institutions. Since its inception, it has developed into an open network that embodies the spirit of inclusion. It brings together mainly RMAs from independent research institutes. The background of KOsRIS II is the establishment of KORIS, which was founded on 10 January 1996.

The research community in Slovenia founded KORIS out of a need to network and look for ways to improve conditions for research work by signing membership agreements in 1996. KORIS stands for Coordination of Research Institutes of Slovenia. The members were public research institutes as well as other institutes within universities that were not independent legal entities. According to the 1996 work programme of KORIS, the basic goal was to coordinate cooperation with the Ministry of Science and Technology in defining research policy in Slovenia. With the adoption of the new Rules of Procedure on the Functioning of the Coordination of Research Institutes of Slovenia on 29 May 2009, KORIS was renewed. In the new Rules of Procedure, membership was limited to independent, non-profit research institutions. The amended Rules of Procedure also brought about the change of the name to KOsRIS (abbreviation for Coordination of Independent Research Institutes of Slovenia), emphasising the independence of the member organisations.

In the period 2009–2022, KOsRIS became an active and important player in shaping the research field. KOsRIS is making significant efforts to increase the budget for science and the share of stable funding, which was fully competitive by the end of 2021. In addition, KOsRIS is taking initiatives to remove red tape, overcome administrative barriers, and improve research infrastructure. Its members also work with legislators to find ways to improve working conditions, draft sectoral legislation, point out irregularities, and participate in organising the March for Science. The greatest achievement of KOsRIS was its participation in the drafting of the new Act on Scientific Research and Innovation Activities (Zakon o znastvenoraziskovalni in razvojni dejavnosti (ZZrID), 2021), which was adopted by the National Assembly of the Republic of Slovenia on 18 November 2021. The Act recognises KOsRIS as an active player in the regulation of the research field and regulates its activities for the first time in Article 53 (ZZrID, 2021).

At this point, it should also be noted that for-profit entities which participate in research activities, receive less than 1% of the national research budget in 2020, according to the Slovenian Research Agency (ARRS, 2020).

Evolution of the Profession in Slovenia

Nowadays, the profession of RMA is becoming more and more recognised in Slovenia, although it is still mainly limited to financial reporting, administrative project management, and legal advice. The national landscape is quite diverse: in larger research organisations, on one hand, there are extended project offices where basic and additional services are provided. In smaller organisations, on other hand, these RMA tasks are often delegated to department members (i.e. general managers and administrators, not necessarily RMAs), so staff must be trained to perform some RMA tasks. For that purpose, tacit knowledge exists, albeit fragmented and not used to its fullest extent. However, the importance of soft skills has to be underlined as well, which are often not directly visible and are part of intangible human capital.

The RMA profession in Slovenia continues to evolve and faces many challenges. In addition to developing additional profiles on a broader basis (e.g. research consultant, technology transfer officer, data manager, etc.), it is of immense importance to strengthen and upgrade the existing profiles of the RMA. There is a need for continuous, lifelong learning of RMAs. This could be achieved in the initial phase through formal training (currently there are no accredited programmes for RMAs at university or national level) and should be complemented at the same time by fostering appropriate development within national and international networks of experts. We anticipate that various RMA networks would broaden the horizons of RMA staff. As a consequence, this could lead to better access to important information representing an important advantage in the demanding research market (e.g. better information on relevant calls for proposals, facilitated solutions to specific administrative problems, IT tools comparisons, etc.).

As for RMA personnel in Slovenia, they are mostly employed in universities, research institutes, private research organisations, and professional consulting firms. The RMA community is therefore growing rapidly due to the awareness that RMAs do not perform standard tasks, which, on the contrary, are the main characteristics of positions in general administration; on the contrary, RMAs are those who are called to provide support and solutions related to high profile and rather specialised tasks. There is another important difference between RMAs and traditional administrators in terms of qualifications; in general, RMAs have a better formal background and can access more training opportunities not only at the national level but also abroad. General administration is ubiquitous and therefore some basic standardisation already exists. On the other hand, RMAs are still evolving, and it is rather common to find it difficult to provide a complete list of required tasks that should be assigned to an RMA.

The Slovenian RMA Community

Directors of research institutes, as members of KOsRIS, very early acknowledged the need to involve the professional support of RMAs in the work of the network. The collaboration called KOsRIS II was initially informal part of KOsRIS and started in 2010. Since then, this collaboration, became an important part of KOsRIS and has proven to be indispensable as the directors, members of KOsRIS were in need of professional support in the field of research management and this high-quality type of support could have only been provided by competent and high calibre RMA staff. The formal process of integrating RMAs in KOsRIS II lasted until the year 2017, when the Rules of Procedure of the Coordination of Independent Research Institutes of Slovenia were amended. The chapter on KOsRIS II formally established a network of

RMAs under KOsRIS as umbrella network. During the years and with formalisation of the network, it has become clear that KOsRIS II needs to have an appointed Head of KOsRIS II. With the change of the Rules of Procedure of the Coordination of Independent Research Institutes of Slovenia in 2013, the function of Head of KOsRIS II was also formally introduced.

The main tasks of KOsRIS II are to contribute to the preparation of expert opinions and bases for KOsRIS actions, to do networking and to cooperate among institutes at the professional and operational levels, to carry out joint actions and search for solutions, and to organise professional trainings and meetings. In consideration of increasing demand from funders, the profession has emerged and slowly developed its main track. RMAs provide professional support to management in decision-making, in producing professional materials and guidelines, and in communicating with stakeholders (such as the ministry responsible for science and the national research funding agency). The good practice of networking and knowledge sharing at the management level has also fostered networking at the operational level, since it became soon clear to all that these directors united and supported by professional staff with relevant professional competencies could play a better role and be much more successful in communicating with key stakeholders.

Slovenian RMA Demographics

At the same time as the development of KOsRIS II, the RMA profession has further evolved. The growth of demands of funders at national and EU level has required specialisation and expertise. Institutes started to establish different research or project management offices where colleagues collaborated and specialised in carrying out activities in the pre-award and post-award phases of project application and implementation. In addition to deputy directors, heads of financial and accounting services, lawyers, financiers and human resources managers, project managers also became members of KOsRIS II forming a group dedicated to addressing common challenges in project management or financial management of European and national projects.

We estimate that there are approximately 1,000 RMAs working in Slovenia, mostly employed by universities and research institutes; this approximate number of RMAs is provided on the basis of data openly accessible and in some cases on the basis of estimations. In this group, we include a large workforce of those active in RMA in the country, so those who deal with finance, accounting, law, human resources, general research administration, and of course the ones who do project management.

Furthermore, we assess that one quarter of the workforce of RMAs working in Slovenia is employed in research institutes. These institutes vary in size but would be considered small organisations in the global context having them between 100 and 500 employees. Even many smaller organisations rely on RMAs to cover a varied, large set of roles, from finance, legal to project management, and proposal development, each carried out within the same role. While this general set of tasks allows for a successful flow of information, agility, and independence in project management, it also presents a challenge where more specialised knowledge and skills would be highly needed. Networking is, therefore, of utmost importance to fill in these knowledge gaps; and overall, this networking is assured through KOsRIS, which brings together mostly RMAs from public research institutes; KOsRIS also represents a strong RMA community in the country, even though the profession in RMA has still room for growth in Slovenia in a number of directions. One of these could be reached through enhanced connections among different national organisations employing RMAs.

Looking at some figures from the RAAAP-2 survey from 2019 (Kerridge, Ajai-Ajagbe, et al., 2022), we observe that 80% (n=10) of RMAs in Slovenia are female, which corresponds to the overall RAAAP results. This may be linked to the average salaries which do not attract male employees. Figures also show that RMAs are mostly employed through permanent contracts, and this proves the importance of having a stable RMA environment to advance the continuous need for these high-quality RMA services. Concerning the figures on education and academic credentials, we notice that RMAs in Slovenia mainly hold master's degrees and RMAs and leaders tend to have 10–14 years of experience in the profession.

Half of the respondents work at operational level and the other half is involved in managerial and leadership tasks. Since only 10 respondents from Slovenia managed to answer this survey, it is hard to make more definite conclusions on the grounds of such a small sample. We assume that there is a greater number of RMA colleagues that are involved on an operational level. On that basis, we can hypothesise that RMAs that work on an operational level are not sufficiently included in existing RMA networks.

On the basis of RAAAP-3 survey from 2022 (Kerridge, Dutta, et al., 2022), we observe that 82% of RMAs in Slovenia are female, which is close to overall RAAAP-3 results. There is a preponderance of permanent contracts. Most RMAs in Slovenia hold bachelor's degree and most of RMAs have 10-19 years of experience in the profession. Most of RMAs in Slovenia previously worked as administrators in other non-research sectors. Approximately 24% of RMAs have a research background. We estimate that among those RMAs quite some work outside management departments. We make this latter assumption based on the fact that only 60% respondents work in central management. The majority of RMAs work in non-profit organisations, which gives substrate for further conclusions. We assume that scope of RMA activities is closely related to scope of research activities. On that basis, we conclude that majority of R&D activities are executed in non-profit sector. We think that public entities focus more on research part of R&D and private entities focus more on development part of R&D. We draw this conclusion on basis of Aghion et al. (2008) who claim that academia (usually public) deals with early-stage research and private sector deals with late-stage research. We also think that late-stage research is much closer to development part of R&D activities. Consequently, we conclude that research sector is more systematically funded compared to development sector.

When we compare RAAAP-2 and RAAAP-3 surveys, we can conclude that proportion of female RMAs is pretty constant (around 80%) and that permanent contracts are prevailing. There is, however, difference at highest attained education degree – in the most recent survey, most of RMAs held bachelor's degree, whereas in the prior survey, RMAs held most often master's degree. There could be two reasons for the mentioned deviation; first, samples are relatively small and second, this could be due to a change in higher education system of Slovenia which went through Bologna transition period. Formally comparison between new and old system is placed, but there are still some inconsistencies which blur comparability.

In the contemporaneous RAAAP-3 survey, there are a greater number of respondents involved from Slovenia – 22 compared to 10 in RAAAP-2, which makes results in this most recent survey more useful. Although a bigger response had been hoped for, especially in view of the growing Slovenian RMA network. It is hoped that a larger number of participants could be foreseen within future similar surveys. Establishment of a Pan Slovenian society which would bring together RMAs from different working environments (such as universities and private research organisations) would be immensely beneficial and could consequently contribute to a much higher number of future responses.

Reflections on the Slovenian RMA Community

Although RMAs frequently interact with funders and policymakers, their communications are limited to specific requirements, such as pre-grant questions and financial review in the post-grant phase. Moreover, there is currently no mechanism for funders, decisionmakers, and RMAs to work with each other and lead to meaningful change, nor are RMAs recognised as relevant interlocutors. In our experience, an initiative usually has a bigger impact when it comes from researchers. There is little or no framework or funding for the development and professionalisation of RMAs.

Regarding the background of RMAs, we report that a detailed analysis of the previous professions of RMAs in Slovenia has not yet been conducted, but according to our assessment, RMAs come from different disciplines and career paths. There is some bias towards financial skills that facilitate the performance of future RMA tasks. Otherwise, according to an American study (Spencer & Scott, 2017), which could also be applicable to the current situation in our country, RMAs often come with a scientific background or they have previously held non-research jobs. Career pathways of RMAs were also analysed in a Nigerian study (Okonji et al., 2018). Compared to the career path of researchers, there is still much room for the career advancement system of RMAs.

The career path of RMAs in Slovenia is largely dependent on organisational factors. The level of experience and specialisation required, as well as lifelong learning, depends on the role that the RMA profession and RMAs play in their organisations. Whitchurch et al. (2021) note that organisations provide a more or less 'limited' roadmap for career advancement. However, individuals are able to flex formal requirements to accommodate activities that were not necessarily included in institutional career scripts. It therefore depends on institutions and whether they know how they are able to or want to support and encourage wider range of contributions from RMAs.

Some studies confirm that RMA is an area that has not been recognised internally (Virágh et al., 2020). In Slovenia, this field is considered only as a support service for the core business, which is primarily performed by researchers in their own way. This unbalanced relationship between RMAs and researchers is also reflected in salaries and other allowances. Thus, there is a gap between the two groups that can even affect the organisational climate of the institution. There is also usually a difference in terms of educational level – researchers usually have a PhD, while RMAs usually have a master's or bachelor's degree. It is then up to the individuals (researchers and RMAs) how they deal with this imbalance and how they mitigate potential tensions. However, the approach an institution chooses can play an important role in bringing together these two groups of staff with their different but complementary profiles.

Summary

In this chapter, we have provided an overview of RMA in Slovenia and its development over time. Its beginnings can be traced to the emerging need for more professional staff, which resulted from changes in research funding and more project-based grant research. Especially when Slovenian organisations were able to participate in EU programmes, new skills in RMA were needed. The RMA profession has been gaining recognition in Slovenia in recent years. However, their tasks are still mainly focussed on financial reporting, administrative project management, and legal advice. The situation varies quite a bit from organisation to organisation: in larger research organisations there are extensive project offices providing a variety of services, while in smaller

organisations RMA tasks are often performed by staff from different departments who are not necessarily trained RMAs. The challenge, then, is how to organise and leverage the fragmented knowledge that exists.

The career path of RMAs in Slovenia is largely dependent on organisational factors. The level of experience and specialisation required, as well as lifelong learning, depends on the role that the RMA profession and RMAs play in their organisations.

In Slovenia, RMA is considered only as a support service for the core business, which is primarily performed by researchers. This unbalanced relationship between RMAs and researchers is also reflected in climate of the institution. The approach an institution chooses can play an important role in bringing together these two groups of staff with their different but complementary profiles.

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