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Landscape analysis of Human Resources policies across European Research Infrastructures

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Abstract
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carried out. The following infrastructures have accepted to participate in our study: CLARIN (European Research Infrastructure for Language Resources and Technology); DARIAH (Digital Research Infrastructure for the Arts and Humanities); EMBL (European Molecular Biology Laboratory); EPOS (European Plate Observing System); LifeWatch (Biodiversity organisation and Ecosystem functions); and GBIF (Global Biodiversity Information Facility). The survey and documental analysis were structured around seven specific operational categories related to HR policy, namely: organizational culture and leadership, career development, training, development and innovation, recruitment and selection, engagement and mobility, performance management, and work conditions and inclusion. The five critical success factors considered more relevant are as follow: (1) engaging people to achieve organizational objective, (2) establish the right HR capabilities and competencies; (3) flat management structure and autonomy; (4) improve HR operational excellence; (5) measure impact of HR products and services. We believe the identification of CSFs will help us putting into practice the strategy and operational objectives of the DiSSCo, enhancing its leadership and network management capacity.

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Landscape analysis of Human Resources policies across European Research Infrastructures

DiSSCo Prepare WP 2 – Ms 2.5

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Keywords

HR policy, critical success factors (CSF); organizational culture and leadership; career development; training, development and innovation; recruitment and selection; engagement and mobility; performance management; work conditions and inclusion

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01   INTRODUCTION

Human Resources are instrumental in ensuring the successful implementation of DiSSCo RI. Acknowledging the challenge inherent in operating as a distributed infrastructure across 21 European countries, Task 2.3 devotes specific efforts to the elaboration of a Human Resources policy, contributing to improve DiSSCo's Organisational and Scientific Readiness.

The goal of this report is to present the results of a landscape analysis of Human Resources (hereafter HR) policies of European Research Infrastructures (RIs), which also operate as distributed RIs like DiSSCo. Such analysis is deemed to support the elaboration of a strategic map that establishes the alignment between the HR policy and the strategic objectives of the DiSSCo as well as the results that it intends to achieve. HR policy requires the identification of factors that induce strategic performance in HR management that contribute to the successful implementation of the DiSSCo mission. HR policy will, in turn, define the key competencies (knowledge, skills, capabilities) that will guide international recruitment and selection, the performance appraisal and remuneration system; the definition of a training and development plan based on the identification of future needs and a knowledge management system that will allow the transfer and sharing of knowledge. A landscape analysis will permit us to identify general HR practices that can be used as benchmarking to the development of DiSSCo people management policy.

With that goal in mind we contacted ten European Research Infrastructure Consortiums (ERICs), three non-research infrastructures and two non-European RIs. Six of these organizations accepted to participate in our study. These are: CLARIN (European Research Infrastructure for Language Resources and Technology); DARIAH (Digital Research Infrastructure for the Arts and Humanities); EMBL (European Molecular Biology Laboratory); EPOS (European Plate Observing System); LifeWatch (Biodiversity organisation and Ecosystem functions); GBIF (Global Biodiversity Information Facility).

All these RIs are constituted by European members with the exception of GBIF which has participants from all over the world. The number of members varies between 7 (LifeWatch) and 27 (EMBL) with an average of 17 members. The exception is GBIF with 101 participant

countries. Most of the RIs operate from a single Head Office, although two of them have more than one facility (LifeWatch and EMBL). The number of professionals working in the participant RIs varies between 10 and 30. EMBL is an outlier with 2000 professionals distributed by six laboratories in six countries (see Annex A).

In order to identify the strategies and practices that are considered relevant in the RIs' HR policy, a survey and available documental analysis on the RIs' HR management was carried out. The information resulting from analysis of the questionnaire survey, carried out with previously selected RIs, was later complemented with the documental analysis. The questionnaire survey was applied to key individuals (usually the Executive Director or equivalent) of the participant RIs during the month of May. The survey was structured around a set of seven specific operational categories related to HR policy, namely: organizational culture and leadership, career development, training and innovation, recruitment and selection, engagement and mobility, performance management, and work conditions and inclusion (Annex B).

In this report we describe how the participant RIs address each of these categories in their HR management policy.

In the final chapter we present the critical success factors (CSF) considered relevant in the definition of a HR policy for RIs. Ultimately, we sought to know the best practices related to HR management and to draw outputs for the identification of the relevant CSF to consider in the implementation of a RI people management policy. We believe the identification of CSFs will help us putting into practice the strategy and operational objectives of the DiSSCo, enhancing its leadership and network management capacity. The five critical success factors considered more relevant are as follow: (1) engaging people to achieve organizational objective, (2) establish the right HR capabilities and competencies; (3) flat management structure and autonomy; (4) improve HR operational excellence; (5) measure impact of HR products and services.

02   ORGANISATIONAL CULTURE and LEADERSHIP

Organisational culture can be defined as 'the way we do things around here' (Balogun & Johnson, 2004), and it influences employee engagement, retention and helps to develop a common purpose within an organisation. It can be intrinsic and implicit (e.g. in leadership behaviours), and / or explicitly set out in a documented mission, vision and values. An organisation's HR function can both influence and be influenced by organisational culture. Leadership can help to reinforce organisational values and culture (Young, 2020).

Culture of Research Infrastructures

Empowered and engaged people are seen by most RIs as central to characterising their organisational culture. DARIAH and CLARIN both recognise the importance of teamwork, and EPOS noted the importance of managing and monitoring the interface between Units and involved people. GBIF aims to encourage innovative thoughts and ideas, and LifeWatch sees the engagement of people as a key principle for its culture with empowered, competent people essential to helping the RI to deliver value.

Organisational processes and capability were also identified as key areas characterising the RI culture and mind-set, with EPOS highlighting that monitoring workflow and procedures for quality and efficiency was important. CLARIN aims to adopt a service-oriented mind-set, with a good sense of responsibility for team objectives.

For LifeWatch, their organisational culture is developed in harmony with their mission and vision, and is a building block to their success, with all employees responsible for nurturing this culture. Similarly, GBIF aims to ensure its people understand the goals of the infrastructure and meaningfulness of its work, with respect, trust, transparency and integrity seen as key values.

Communication and openness were seen as key in order to help foster the desired organisational culture. DARIAH referred directly to openness, whereas EMBL talked about having a fair and transparent internal justice system, EPOS to having an open mind toward cross-disciplinary expertise and awareness of the team work required to tackle challenges, and CLARIN to having a clear vision

and a common understanding of communication priorities. Leadership was identified as important by LifeWatch and EMBL, with a readiness to learn seen as a key value for EPOS and LifeWatch.

Leadership

Each RI was asked to select the three aspects they felt were essential for good leadership. Most research infrastructures agreed that empowerment was important (five RIs) and half of those who responded valued interpersonal effectiveness (three RIs). Two selected vision as important, and two selected personal development. Other options, including innovation, a drive for results and strategic capability, were selected by a single RI only, which suggests there is variability between RIs in which leadership qualities are valued, or simply that many leadership qualities are desirable.

Figure 2.1. Proposed list of aspects essential for effective leadership by each RI/ Facility

The survey also asked respondents to rate the reasons why their organisational culture and leadership were important to the RI (Fig. 2.1.). The following responses were selected by more than one RI:

- Operating from a user-oriented and service-based perspective, which is delivered consistently with quality, excellence, professionalism (four RIs)

- Engaging people to achieve organisational objectives (four RIs)

- Strengthening the culture of collaboration, resiliency, and adaptation to change (three RIs)

- Ensuring the strategic development and sustainability of the RI (three RIs).

In sum, organisational culture is seen as important in order to help ensure RIs achieve their strategic objectives and to strengthen relationships both within the RI and with external stakeholders. In addition, empowerment, development of people, interpersonal effectiveness and a clear and motivating motivation were the factors considered most relevant for an effective leadership.

03   CAREER DEVELOPMENT, TRAINING and INNOVATION

This survey section explored the extent to which the RI is committed to providing appropriate training and development opportunities to all employees to support high performance in their current role and to prepare them for potential future opportunities. For the scope of training and development, we considered it may be focused on the specific technical requirements of an employee's role, more general 'business based' skills, or developmental needs. Seven RIs have responded to this section of the questionnaire, with one of them (RecolNat) only answering the first question. Thus, for most of the results only six answers were considered.

Training and development

From the seven surveyed RIs, four have a training and development program (RecolNat, DARIAH, EMBL and CLARIN) and three have stated they do not currently have one (EPOS, LifeWatch, GBIF). On the specific case of DARIAH, training and education is one of their strategic pillars and although it targets mostly their research communities, from a central point of view employees are invited to participate in training (workshops, webinars, etc) on a very regular basis.

Which are the most important current priorities in the area of training and competence development of HR?

Figure 3.1 Proposed list of current priorities of HR training and development and their selection by each RI

Personal initiatives are encouraged and almost always accepted and they have a programme of internal conferences to discover new topics. The most important current priorities in training and competence development of HR have been self-identified by the RIs to be Events and conferences, Coaching and mentoring and IT/digital skills training (Fig 3.1).

When surveyed which area(s) their employees have been trained in the last three years, three RIs reported training in more job-related skills development (project management, IT development, open science, law, EU projects, service delivery, EOSC), one RI on soft-skills focusing on long-term personal development, mindset change and employee safety (mental health, mindful solutions, diversity and inclusion, anti-harassment) and the two others exhibited a mix of topics from both fields (networking skills, stakeholder engagement, project management and administration, presentation skills, facilitation skills, IT and informatics skills, video editing, development techniques, GDPR, leadership, communication, first aid and safety and team/cross-team building training).

The average length of training attended per year by employees with most occurrences was of 1-3 days, which was selected by three RIs. Only one RI selected 3-5 days and another 5-7 days. Regarding the monitoring and quality control assessment of the training activities, only one RI disclaimed to have a follow-up process by the employee's supervisor, with the remaining five RIs not having a formal process or systematic approach in place.

When surveyed about which training and development area(s) there should be a greater focus of and why, only three RIs answered, and the overall field of management and governance was the most highlighted one, with specific topics such as executive leadership, governance law, internal project management tools, coaching and mentoring. Parallelly, one of the RIs also underlined the difficulty in answering this question due to the diversity of profiles among their team.

Innovation

Regarding tools to tap into innovative potential of the workforce, the RIs seem to prefer mostly the use of autonomous multidisciplinary teams for innovation projects, international innovation committees/ working groups and innovation-oriented peer learning (Fig. 3.2), with none of the RIs stating they have never used these tools. The use of innovation labs/hubs and training to support HR in leading transformational projects and initiatives was also moderately used by all RIs.
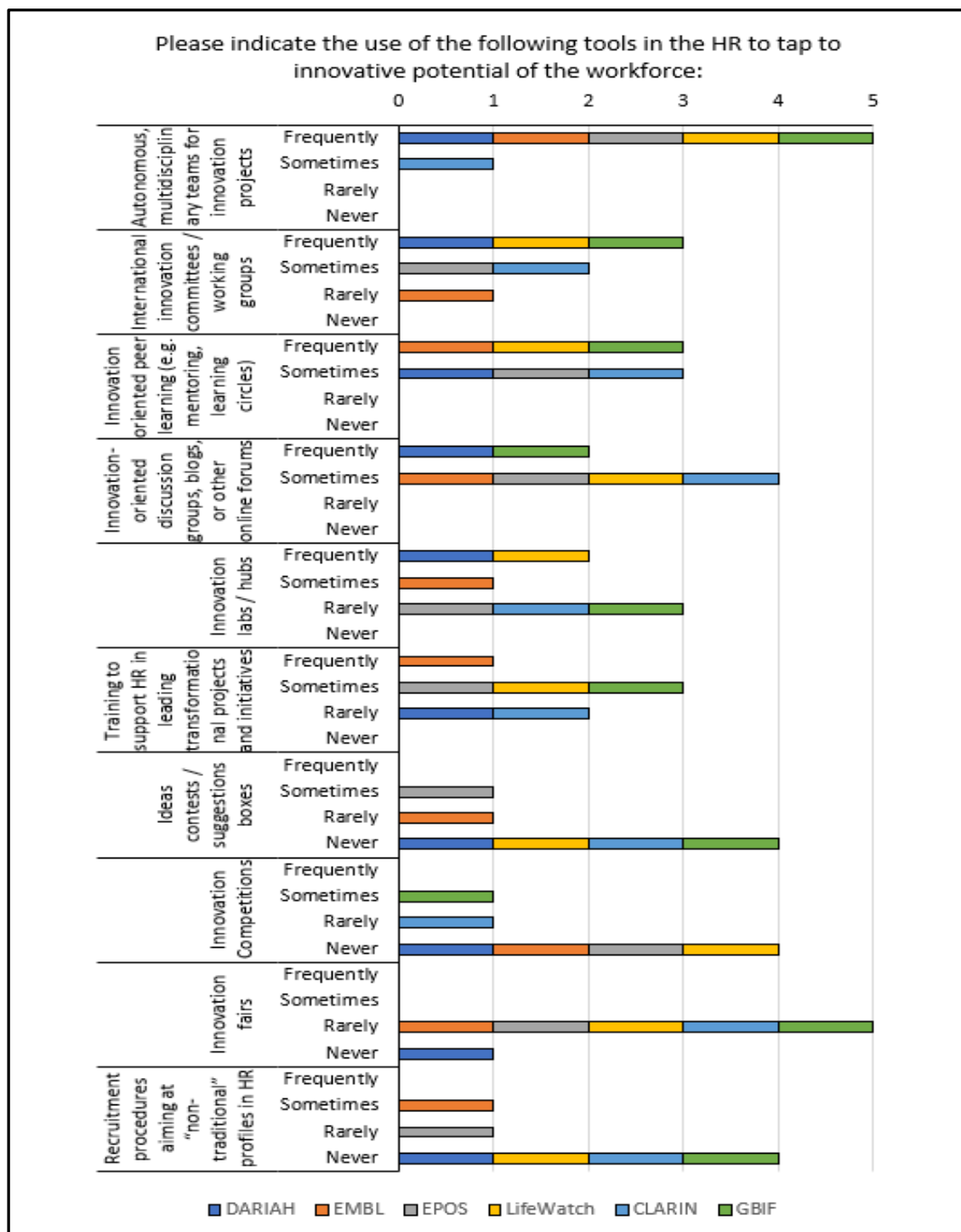
Figure 3.2 Proposed list of tools for stimulating HR innovation and their frequency on each RI.

Finally, when reflecting on which factors are important for being promoted to a different grade or to a different hierarchical level, performance appraisals was consistently the top criteria across managerial, technical, and secretarial staff. The criteria of training completed the top selection for technical staff and years of experience and qualifications were the main criteria considered for

secretarial staff (Fig. 3.3). It was also observed that, apart from a few minor changes, the criteria applied remained mostly constant within the same organization, regardless of the type of staff being considered.
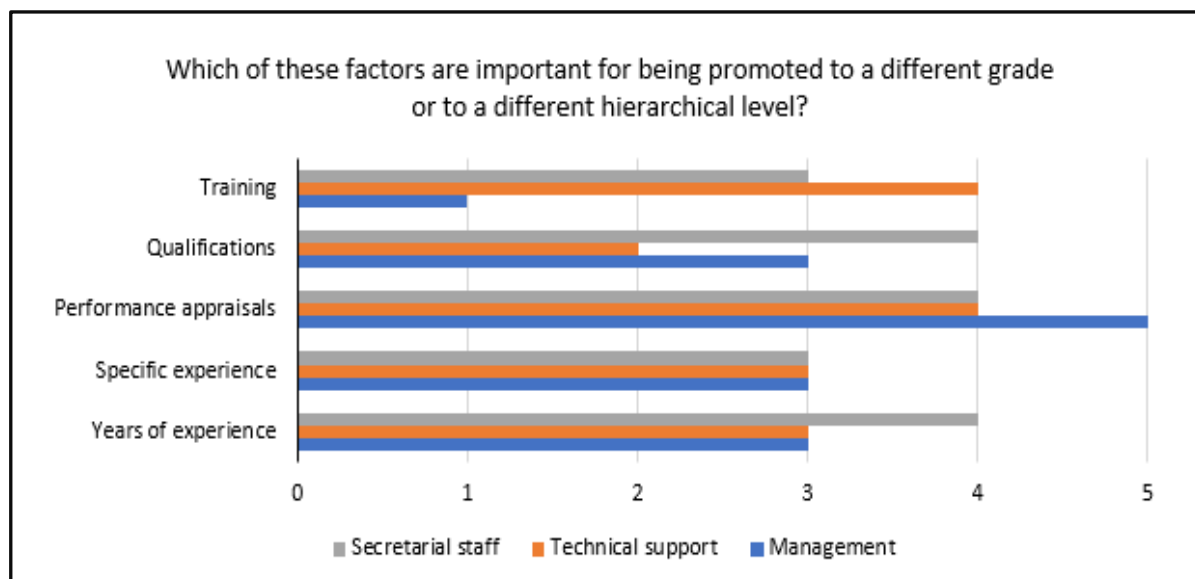

Figure 3.3 Proposed list of important factors for HR promotion and their selection by each RI

In conclusion, a little over half of the RIs have reported having a learning and development strategy in place for their employees, with specific focus on Events and conferences, Coaching and mentoring and IT/digital skills training and the overall field of management and governance was the most highlighted as the training and development area where there should be a greater focus. The most common occurrence on yearly time dedicated to training per employee was 1-3 days and the monitoring and quality assurance of the undertaken training activities was predominantly non-existent or done informally.

For tapping into innovative potential of the workforce, the RIs seemed to prefer mostly the use of autonomous multidisciplinary teams for innovation projects, international innovation committees/ working groups and innovation-oriented peer learning. Lastly, the important factors for being promoted to a different grade or to a different hierarchical level were performance appraisals (across all types of staff), training (technical staff) and years of experience and qualifications (secretarial staff).

04   RECRUITMENT and SELECTION

In this chapter we explore which competencies are prioritized by the RIs/facilities (hereafter RIs) in the recruitment and development of senior managers, managers, technical support staff and administrative staff.

Regarding senior managers (Fig. 4.1), all RIs agreed in identifying strategic thinking as a primary competence. People management and communication skills were indicated by 5 RIs out of 6, followed by employee development and values and ethics which were selected by 4 RIs. Financial management, risk management and technical specialty were selected by 3 RIs, while action management and change management only by 2 of them. Finally, CLARIN added proficiency in English as a fundamental skill for a senior manager.
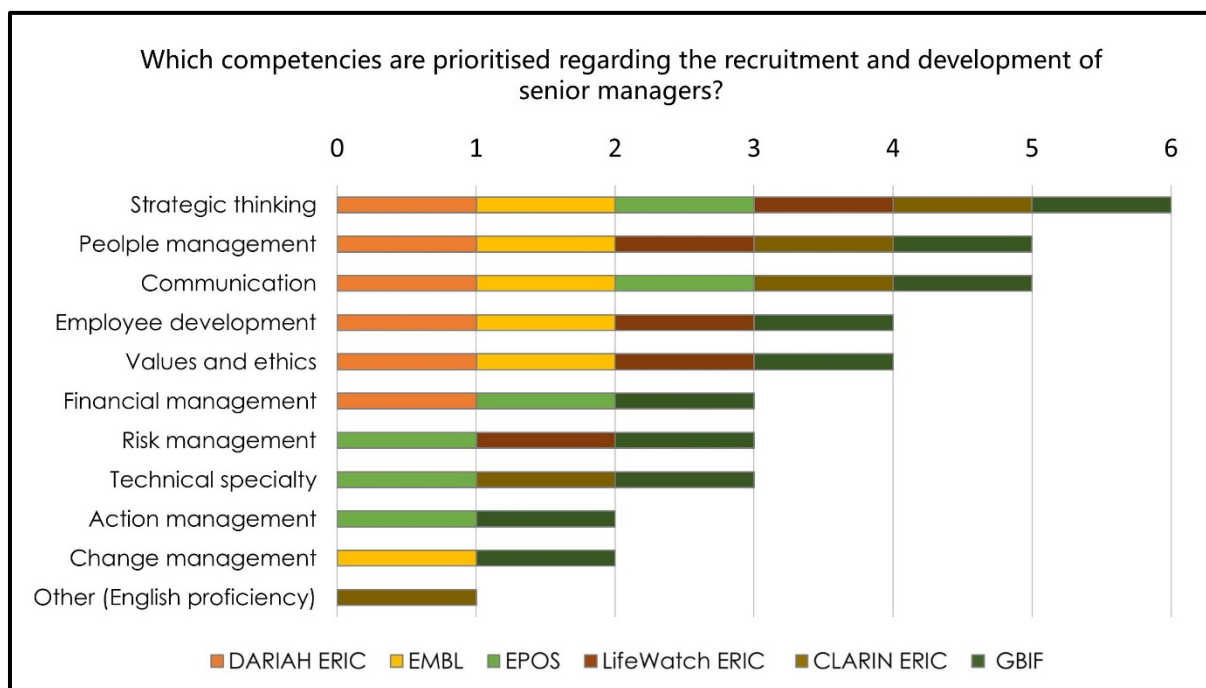

Figure 4.1. Proposed list of competencies relevant for the recruitment and development of senior managers and their selection by each RI/ Facility.

Regarding the recruitment of managers, only 3 RIs answered the survey: EPOS indicated project and risk management as the main required competence, LifeWatch indicated leadership and technical capability, and GBIF strategic thinking and financial, action and people management (Tab. 4.1).

Regarding the recruitment of technical support and administrative staff only EPOS, LifeWatch and GBIF answered the survey and they all indicated technical specialty as the most important competence for both categories (Tab. 4.1). More specifically, EPOS indicated IT and data management as the technical skill required from technical support staff and financial and legal expertise from the administrative staff. In addition to this, action management and communication skills were also indicated for technical support staff, and operational efficiency, action, financial and people management for administrative staff (Tab. 4.1).

Table 4.1. Competencies prioritized by the interviewed RIs regarding the recruitment and development of managers, technical support and administrative staff.

Role	Priority competencies	RI/Facility
MANAGERS	Project and risk management	EPOS
	Leadership and technical capability	LifeWatch
	Strategic thinking and financial, action and people management	GBIF
TECHNICAL SUPPORT STAFF	Technical specialty	EPOS, LifeWatch, GBIF
	Action management and communication skills	GBIF
ADMINISTRATIVE STAFF	Technical specialty	EPOS, LifeWatch, GBIF
	Operational efficiency	GBIF
	Action, financial and people management	LifeWatch

Finally, LifeWatch and CLARIN indicated that the cultural fit between the candidate and the RI itself (defined by CLARIN as a 'match in style and approach' and by LifeWatch as the 'suitability of the candidate at a cultural level') is another crucial element to be considered in the recruitment process. However, the difficulty in making the relevant criteria explicit was also underlined.

EPOS said that such a cultural fit is not taken into consideration by them, while the other RIs did not express their position on this respect.

Summarizing, the survey highlighted that the most relevant competencies to be considered in the recruitment of senior managers are transversal skills, such as strategic thinking and the good interpersonal skills needed to manage and communicate with other people (namely the RIs employees). The competencies needed for lower management positions are comparable, but it is important that they are accompanied also by more technical and specific skills. On the contrary, technical competencies are prioritized in the case of technical support and admin staff.

The sharing of the cultural vision of the RI seems to be aa benefit to be considered in order to select the best candidate to work in the RI, but it is something difficult to evaluate in the recruitment phase.

05   ENGAGEMENT and MOBILITY

Research Infrastructures consortiums are multiteam organizations with a complex task and can be considered reconfigurable organisations (Galbraith, 2002). In this kind of organisation, linkages are central to the coordination and communication between the teams. These linkages can be achieved through an array of lateral processes that vary between more simple coordination processes such as informal groups, to more complex ones such as e-coordination, formal coordination groups or integrator.

In this chapter, we address the policies for staff mobility adopted by each of the participant RIs as well as the strategies put forwards to enhance the involvement of the national nodes between themselves and with the Head Office.

We first asked the participants to describe the policy adopted to ensure the successful integration of national nodes into the RI, if there is one.

For the majority of the RIs, there is not a defined policy to support the integration between national nodes themselves and with the headquarters. Nonetheless, two of the RIs said to have a clear policy on the relations between the nodes and the head quarter. For EPOS, national nodes are essentially service IprovideIwhich are integrated within Thematic Core Services (TCS) designed, implemented and operated by the community. TCS are community driven frameworks to foster the integration of national RI and data providers. In the case of CLARIN, newly joined countries are offered a workshop for newcomers and a special section has been created on the website with various types of information that can help a national consortium to get up and running.

For more detail, participants were also asked about the existence of special strategies to attain a greater involvement of the national nodes in the execution of the strategy defined by the Head Office. Three RIs responded positively. EPOS stressed the role of the Thematic Core Services, stating that TCS are a key component of the EPOS functional Architecture and ensure the governance of data and service provision. For CLARIN, funding is available for collaborative projects conducted by nodes from multiple countries. In addition, informal conversations are scheduled (in a virtual setting)

between the Board and national teams. Finally, in DARIAH such strIs include meeting every six weeks, thorough strategic planning, and engagement practices.

For these reconfigurable organizations, HR policies must be aligned to create the behaviours and mind-sets that support its mission. We asked the participants about strategies that could be adopted to involve the Human Resources of the national nodes in carrying out the tasks and guarantee an adequate quality control. Again, only three RIs had a thought about this issue. For EPOS, the easiest way to achieve this kind of alignment is to foster the establishment and the funding of national consortia (funded by national authorities) which ensures the provision of HR for the operation of service providers. CLARIN consider it a tough issue. When they use the model of secondment contracts for specific individuals or for specific tasks they insist on a minimal duration, and sometimes open this option only for a specific representative of a national node. Finally, for DARIAH this is not an easy question, because it depends on many factors. For instance, whether people are employed by the central administration or not, the culture of the country, and the institution in which people work.

Specifically, we asked the participants if they knew what strategies have been adopted in their organization to motivate national nodes to participate and contribute to the RI. EPOS described the establishment and operation of Thematic Core Services as a new bottom up approach to foster data and service integration representing a practice to share data and scientific products. CLARIN mentioned the existence of a range of funding instruments and annual awards and the offering of publication channels aimed to increase the visibility of national nodes. LifeWatch refers to a strategic working plan that describes activities involving the national nodes through the Internal Joint Initiative (IJI). Two objectives of the IJI, concur to this end: (1) boost the integration of tools and services into the LifeWatch ERIC web-portal; (2) involve the LifeWatch ERIC National scientific communities, key international research groups and other European research Infrastructures with related interests and running activities. For DARIAH such motivation can be attained through engagement, communication, regular meeting, see belonging to the same culture/structure.

A second goal of this section of the survey was the existence of a policy for staff mobility in the participant RI'. WE started by asking how was the mobility between national nodes and Head Office encouraged in their organizations. Three of the RIs declared they have no formal policies to promote mobility of staff. LifeWatch has no formal program in place. EPOS is not promoting mobility among national nodes or service providers. DARIAH referred that mobility was done on a "*ad hoc*" basis. Differently, CLARIN has some stimulus to people mobility between nodes and head office. Although the central organisation is relatively small in terms of budget and staff, they have several positions in

committees and boards that are open for national node representatives. Apart from the membership of the Board of Directors, these positions are not paid.

In sum, there seems to be no specific policies on staff mobility in these RI, either among national nodes nor between national nodes and the Head Office. There are only sporadic initiatives in a few RIs. Regarding the strategies set to enhance the involvement of the national nodes between themselves and with the Head Office, we highlight the creation of Thematic Core Services designed, implemented and operated by the community. TCS foster the integration of national RI and data providers, the availability of funding for collaborative projects conducted by nodes from multiple countries, or regular meetings between the Board and national teams.

06   PERFORMANCE MANAGEMENT

Performance management is the continuous process of improving performance by setting individual and team goals, which are aligned to the strategic aims of the organisation. It is focused on planning performance to achieve the objectives, reviewing and assessing progress, and developing the knowledge, skills, and abilities of people. In HR policy, different tools can be used to evaluate the performance of the employees and different approaches can be applied to improve them and to facilitate the communication between manager and staff, increasing the quality of the working environment. The evaluation process will lead to a better decision for the organization in terms of career advancement, work assignment, transfer, remuneration and it is helpful for monitoring the activities for the organization itself, as well as for the employees that will improve their skills and abilities.

Four questions have been set to survey this topic and six RIs gave their feedback. Two of them did not answer directly to this part of the questionnaire, but they replied with comments. In particular, EPOS answered that at their current situation they still have not defined evaluation criteria being not yet in the operative phase, and the other one, LifeWatch, reported that their KPIs are under development and no performance review is currently in place. For this reason, we reported results regarding only four RIs.

Regarding performance criteria used for evaluation, all the RIs agree on the importance of the outputs and the achievement of the objectives. Some RIs selected more than one quality indicating that the set we proposed represents a good pool of descriptors. In particular EMBL selected six of the eight items, GBIF four and CLARIN two of them, while DARIAH only one.

EMBL and GBIF share their answers, indicating a similar point of view for HR policy for this subject, highlighting other two criteria relevant for the performance evaluation: quality of the outputs, closely related to the previous one, and the interpersonal / management skills. In the chart below we can see the most used performance indicators by RIs (Fig. 6.1).
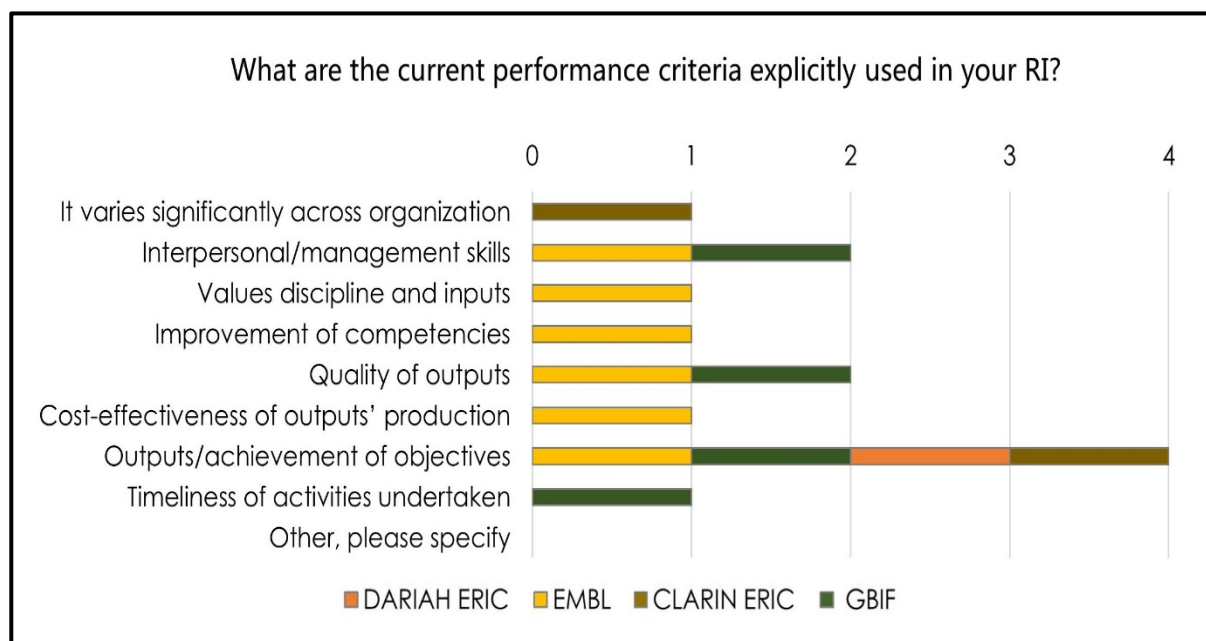
Figure 6.1. Proposed list of performance criteria and their selection by each RI/Facility.

Three RIs answered at the second question "What are the performance indicators used to measure the employee performance?": EMBL and CLARIN did not give specific details, indicating that they do not use formalized or quantified indicators and suggested appraisals as the tool to measure the performance of their employees. The third one, DARIAH, did not directly answer but being a close partner of the E-RHIS RI, follows similar guidelines on HR policy. It can be valuable to report here the HR indicators from E-RIHS for performance appraisals: Time keeping, Motivation interest and flexibility, Initiative and openness to learning, Communication skill/interpersonal skill, Teamwork, Conscientiousness, Attention to detail. All of them are evaluated on 4 rates: below expectation, met expectation, expectation met at high standard and not relevant for the role, giving a field for comment for the line manager and for the employee.

Regarding performance assessment tools, the RIs seem to prefer mostly an annual meeting with their immediate superior and written feedback from their superior as a tool for evaluating the performance. Only GBIF showed a higher frequency, preferring a written feedback from their superior and a meeting with a superior two levels above or a HR officer, like following a hierarchy line (Fig. 6.2).
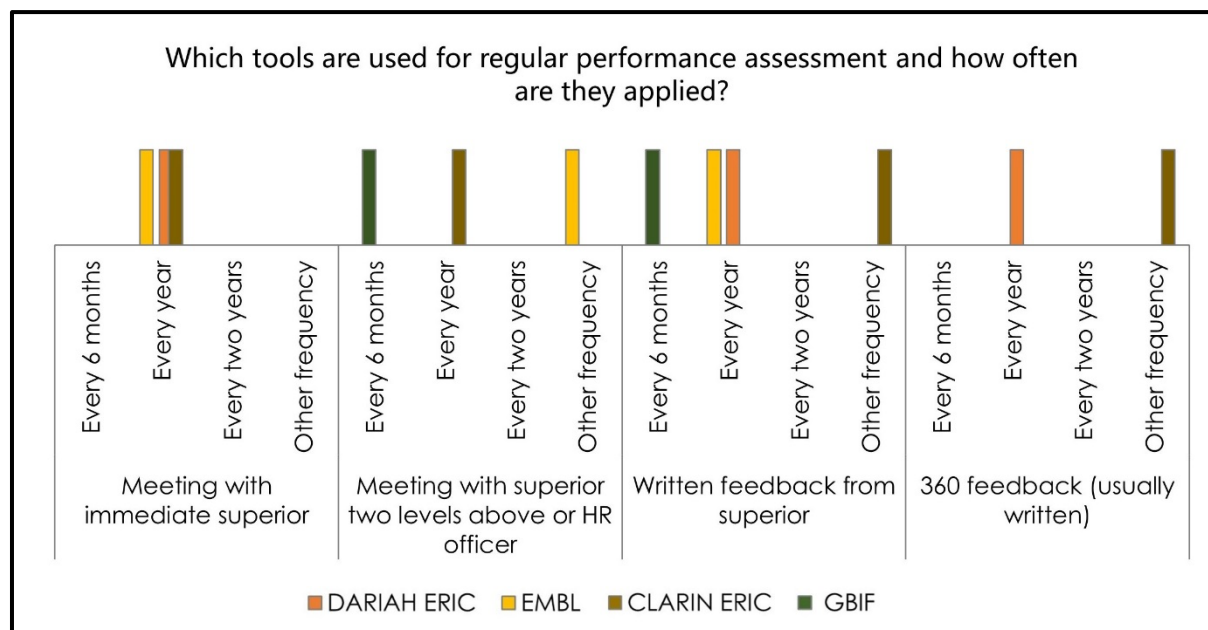
Figure 6.2 Frequency selected by RIs/Facilities for each descriptor proposed for the performance assessment.

Three of the four RIs that answered the question "Is there a performance-based compensation system?" do not have a compensation system and only GBIF reported that the staff receive incremental salary increases in accordance with the International Service for Remunerations and Pensions (iSRP) system, subject to annual assessment of satisfactory performance and conduct.

Concluding, the HR policy of the surveyed RIs/Facilities seems to be aligned on giving relevant roles to competencies such as to be strongly goal oriented and owning management skills for achieving objectives and building good relationships with the team, therefore ability to cooperation and coordination in teamwork. Key performance indicators are not well defined for all RIs but the performance evaluation is more focused on appraisals, such as written feedback and meeting with the immediate superior, underlining the importance of direct communication.

07   WORK CONDITIONS AND INCLUSION

Work conditions and inclusion should be key values in every workplace. RIs should strive to have a diverse employee component and promote inclusive work practices. Diversity can be a benefit and conforms to the principles of social justice and labour legislation. RIs are recognizing the importance of facilitating a workplace that values its workers' diversity.

Regarding the survey, not all the interviewed RIs/Facilities answered this section. In fact, the replies from LifeWatch and Recolnat are not present.

The first question asked the participants to arrange in order of importance eighteen policies for the management of people in the respective RIs (see Tab. 7.1). These 18 HRM policies refer to working conditions and are organised in three major categories: work system, employee attitudes and wellbeing, and individual-organization relations. In a similar way, the rankings of these eighteen policies are classified in three tiers. The first tier (1st-6th) corresponds to very important, the second tier (7th-12th) corresponds to somehow important, and the third tier (13th-18th) corresponds to less or not important at all.

In the category of work system policies, flexibility of working conditions was the policy deemed the most important for the majority of the RIs. Three of the RIs ranked flexible work conditions in first or second place. For two of the RIs flexibility of work was considered less important or not important at all (EPOS, GBIF). Flexibility of working conditions include number of hours of work per week, number of working days per week/month, part-time work, parental leave, sabbatical leave among other conditions. Another HR policy considered very important by most of the RIs was skills match between job and employee. Two of the RIs ranked this policy in the 1st place (EPOS, GBIF), while the others ranked it between 7th and 14th (CLARIN) positions. Finally, the existence of training programs and the possibility to work in a team were two policies that were considered important for employee management. Training was ranked in the top tier by two of the RIs (DARIAH, EMBL) and between 9th and 14th positions for the rest of the RIs. In a similar way, the possibility to work in a team was in the top tier by two of the RIs (CLARIN, EPOS) and between 7th and 17th positions for the rest of the RIs. On the contrary, the following policies were relatively less important in the people management: performance appraisal systems (ranked between 8th and 16th place by all of the RIs), mobility

policies (ranked between 8th and 18th place by all of the RIs), and the adoption of innovative practices and the perception of effective management were ranked between 9th and 18th by all the RIs, but one (for GBIF, at the 6th rank).

In the category of employee attitudes, job satisfaction was the condition deemed the most important for the majority of the RIs. Three of the RIs ranked it in the first tier (1st-3rd) and other two RIs in the second tier (7th, 12th), thus considering job satisfaction an important attitude at work. A second one was the perception of wellbeing by employees, ranked in the second tier (8th-9th) by the majority of RIs and for one RI it was held to be the 4th most important work condition (DARIAH). The perception of work/life balance was important for three RIs, thus ranking it in the first tier (2nd-6th), and for one RI it was somehow important (7th). However, for GBIF this point was considered of little importance. Employee motivation, engagement with work and commitment to the organization were considered important employee attitudes as two of the participants considered it very important, thus ranking them in the first tier (EPOS, GBIF), while another RI ranked it in 9th. On the contrary, as less important employee attitudes in the workplace, two RIs graded employee motivation and work engagement (EMBL, CLARIN). In a similar way, organizational commitment was deemed very important for two of the participants (EMBL, GBIF) but were considered of little importance for the other RIs (13th-16th). In addition, the perception of doing challenging work was referred to as of some importance for three of the participants, but of no importance for two of the RIs (DARIAH, EPOS).

Table 7.1. List of working conditions sorted by order of importance by each RI.

	EMBL	GBIF	DARIAH	CLARIN	EPOS
1	Flexibility of working conditions	Skills match (between job and employee)	Flexibility of working conditions	Job satisfaction	Skills match (between job and employee)
2	Work/life balance	Job satisfaction	Work/life balance	Flexibility of working conditions	Employee motivation and engagement
3	Training	Employee motivation and engagement	Job satisfaction	Integrity at the workplace	Integrity at the workplace
4	Organisational commitment	Organisational commitment	Employee wellbeing	The possibility to work in a team	The possibility to work in a team
5	Diversity and inclusion	Integrity at the workplace	Ethics, equal opportunity, equity issues	Perceived employer image	Ethics, equal opportunity, equity issues

6	Ethics, equal opportunity, equity issues	Effectiveness of management	Training	Ethics, equal opportunity, equity issues	Work/life balance
7	Skills match (between job and employee)	The possibility to work in a team	Diversity and inclusion	Work/life balance	Job satisfaction
8	Performance appraisal systems	Employee wellbeing	Mobility	Employee wellbeing	Employee wellbeing
9	Employee wellbeing	Innovation	Employee motivation and engagement	Training	Flexibility of working conditions
10	Effectiveness of management	Challenging work	Skills match (between job and employee)	Challenging work	Effectiveness of management
11	Challenging work	Diversity and inclusion	Performance appraisal systems	Mobility	Performance appraisal systems
12	Job satisfaction	Perceived employer image	Perceived employer image	Diversity and inclusion	Perceived employer image
13	Innovation	Work/life balance	Organisational commitment	Performance appraisal systems	Training
14	Employee motivation and engagement	Training	Innovation	Skills match (between job and employee)	Mobility
15	Perceived employer image	Flexibility of working conditions	The possibility to work in a team	Organisational commitment	Diversity and inclusion
16	Integrity at the workplace	Performance appraisal systems	Challenging work	Employee motivation and engagement	Organisational commitment
17	The possibility to work in a team	Ethics, equal opportunity, equity issues	Integrity at the workplace	Effectiveness of management	Innovation
18	Mobility	Mobility	Effectiveness of management	Innovation	Challenging work

The observed diversity of positions about employee attitudes may have to do with the fact that engagement, commitment or satisfaction are related attitudes that although psychologically distinct concepts are intertwined attitudes that may lead to value one over the others, which is not necessarily a negative assessment of employee attitudes.

Finally, in the category of individual-organization relations, policies related to ethics, equal opportunity and equity issues were regarded as very important conditions. The majority of the

participants ranked these issues in the first tier of importance (5th-6th). In a similar way, integrity at the workplace was considered very important for most of the participants, ranking it the first tier of importance (3rd-5th) by 3 RIs. In addition, concern for diversity and inclusion (e.g. minorities) was considered of some importance for most of the participants (second tier) and was even ranked the 5th most important condition for EMBL. Perceived employer image was regarded as relatively unimportant issue for most of the RIs. Four RIs ranked employer image in the third tier of importance (12th-15th). The exception was CLARIN, for whom the image employees have of the RI is a very relevant condition to do a good work (5th).

The RIs are providing several options to their employees (Fig. 7.1), principally flexible working hours and the possibility of part-time and tele-work. DARIAH, EMBL and CLARIN hold in high regard family obligations, with the option of arranging the work schedule and family leave. CLARIN is the only RI that offers job-sharing and gradual retirement. None are offering sabbatical leave.
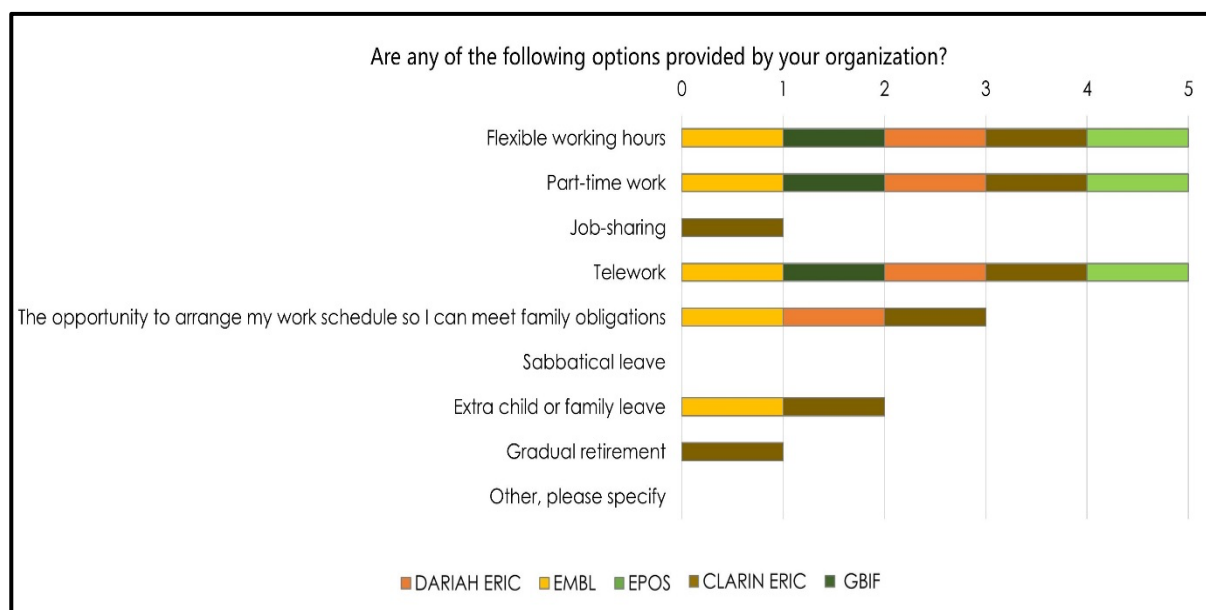

Figure 7.1. List of options provided by the RIs to their workers.

With regard to inclusion policies, we have identified four practices that aim to protect and increase the representation in RIs of women, people with disabilities, non-nationals and other minorities. These practices include (a) preferential right for being promoted; (b) preference in the promotion and selection processes; (c) information sessions specially directed to specific groups; (d) mentoring and coaching programs.

Two RIs, GBIF and EPOS, did not answer the question about this matter. DARIAH and EMBL are promoting policies towards women, providing preferential right in the promotion/selection process, dedicated information sessions and coaching, and towards people with disabilities (even if coaching has not been selected for this group). In addition to this, EMBL promotes preference in the selection process and information sessions also towards non-nationals and minorities, while DARIAH encourages the preference in the promotion towards minorities (Table. 6.2).

CLARIN is following HR policies and models of the Utrecht University and VSNU (Vereniging van Universiteiten, a trade university group) collective labour agreement.

Table 7.2. Answers to the question "Which of the following policies promotes equal opportunity for promotions and career advancement of underrepresented groups in your RI?".

	Women	Non-nationals	Minorities	Disabled
Preferential right for being promoted	EMBL	-	-	DARIAH
Preference in the promotion/selection process	DARIAH EMBL	EMBL	DARIAH EMBL	DARIAH EMBL
Information sessions specially directed to	EMBL	EMBL	EMBL	-
Coaching	EMBL	-	-	-

The last question regarded which measures are increasing gender diversity in the RI (Fig. 7.2): only EPOS did not answer, while GBIF selected all the options. Of these practices, we highlight two more directly related to the philosophy of HR management, which are the existence of (1) aspirational goals/quota for women and (2) mentoring programs from senior managers, selected by all the RIs. Less frequently mentioned are (3) customised career programs for underrepresented group and (4) visible monitoring of gender programs by senior managers.

Other favourable practices to promote inclusion are more embedded in the work system, such as: (1) flexible work models (e.g. flexibility in the number of working hours per week) selected by all the RIs; (2) virtual mobility (working from home); (3) programs to encourage networking. A practice mentioned less frequently is the (4) neutralisation of the impact of a parental leave/flexible work model when assessing performance.

Among practices related to the individual-organization relationship all RIs selected (1) programs offering childcare support, and almost all give relevance to (2) parental leaves and (3) clear policies and processes to penalize sexual harassment in the workplace. Finally, one less cited practice was the development of role model campaigns.
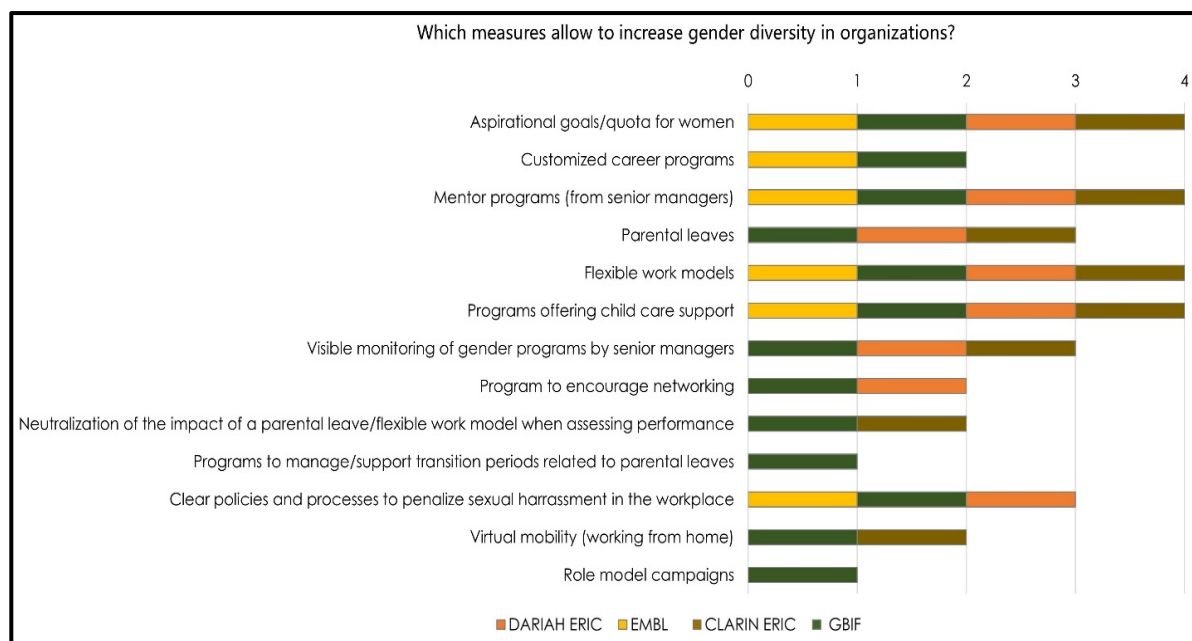

Figure 7.2. List of measures proposed to increase gender diversity in RIs.

Finally, some RI referred that they follow the principles of "The European Charter for Researchers" and "The Code of Conduct for the Recruitment of Researchers" (2005). Therefore, they have clear policies on non-discrimination and gender balance principles. In particular, they adopted general procedures for protection against discrimination on the grounds of gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition, life convictions or marital status (e.g., CLARIN-Equal Treatment Commission). In what concerns gender balance, some RIs adopted a policy of promoting a balanced proportion of women researchers as well as a higher proportion of women in senior management positions. In order to accomplish that they set targets for female researchers and for senior managers and have the Executive Board monitoring the progress made annually toward those targets (e.g., CLARIN).

In conclusion, the participants are committed to having a diverse component of inclusive workers and work practices, to get the most of the organizational benefit of diversity, promoting social justice

and complying with legislation. Moreover, they recognize the importance of developing an environment that values and promotes diversity and inclusion.

08   HR STRATEGY and CRITICAL SUCCESS FACTORS

One of the main factors in meeting DiSSCo's challenges is having a robust people management system. HR policies and practices are a fundamental management tool to help the organization execute its strategy and contribute to the success of its performance and the achievement of its results.

The HR policy is a support mechanism for the entire structure. It must be developed in close articulation with the organizational strategy and act proactively for its execution. Its mission is to define, develop and implement HR practices that ensure high levels of motivation and performance of workers and teams in implementing the outlined strategy. In the particular case of RIs, the HR policy should also promote the permanent connection of the various functional units with the National Nodes, in order to guarantee that the RIs' operational policies and objectives are observed throughout the network.

Despite the relevance of the people management system, it is a difficult to identify the exact contribution that HR functions should develop; such as putting into practice simple and transparent solutions, but equally efficient and effective, which allow meeting not only the requirements demanded by strategic planning, but also the needs of the workers.

When defining an HR policy, it is important to identify the Critical Success Factors (CSF) related to the performance of people and that are relevant to the success of the organization's activities. By definition, the CSF "(...) are, for any business, the limited number of areas in which results will ensure a successful competitive performance for the organization" (Bullen and Rockart, 1981:7). In this sense, the CSF "are areas of activity that should receive constant and careful attention from management." (Rockart 1979:85).

In the particular case of HR policy, the CSF helps to define the essential critical aspects, related to the management of people and teams, and on which efforts should be concentrated. This is for example the case of allocating the necessary human resources to implement the strategy, the adequacy of skills to operational requirements or the management of internal processes and work organization, for example. Therefore, it guides

managers towards the key dimensions related to managing people and on which they should pay the utmost attention.

The identification and categorization of CSF emerges, from a methodological point of view, as a structured technique that aims to support the decision maker in obtaining useful information on a set of matters that are critical for the organization's performance and should be considered in the definition of the strategy.

To specifically analyze the CSF, the answers related to three items that were part of the survey were taken as reference, namely: a) identification of the core aspects for an efficient management of the RI; b) survey of the most valued aspects, in its RI, regarding the HR strategy and c) the identification of critical success factors specifically related to the HR area. The objective was to collect information that allows identifying the CSF considered relevant in the definition of an HR policy for RIs. Ultimately, we sought to understand best practices related to HR management and to draw outputs for the identification of the relevant CSF to consider in the implementation of a RIs HR policy and which allows putting into practice the strategy and operational objectives of the DiSSCo, enhancing its leadership and network management capacity.

Aspects Regarding the Management of RIs

In the analysis of the responses to the questionnaire related to the central aspects for an efficient management of RIs ("What are the core aspects for an efficient management of the RI?"), the importance of RIs having a clear definition of their Strategic Objectives was highlighted (Fig.8.1.). This dimension was considered the most relevant and selected as the first option by most of the RIs surveyed (DARIAH; LifeWatch, CLARIN and GBIF).

The second most mentioned factor is the importance of the skills of workers and teams, namely in the fulfilment of future goals. The importance of specific skills was the first option for EMBL and EPOS and the second for GBIF and DARIAH.

Operational Excellence emerges as the third most important factor to consider in RI management, having been referred to by GBIF, EPOS and LifeWatch.

Other factors were also considered relevant, but obtained less value. It is the case of the Technological Capacity (IT), referred only by two RIs (EPOS and CLARIN), and the items Customer-user Focus/success/results (EBML), Possibilities for Coordination (EMBL),
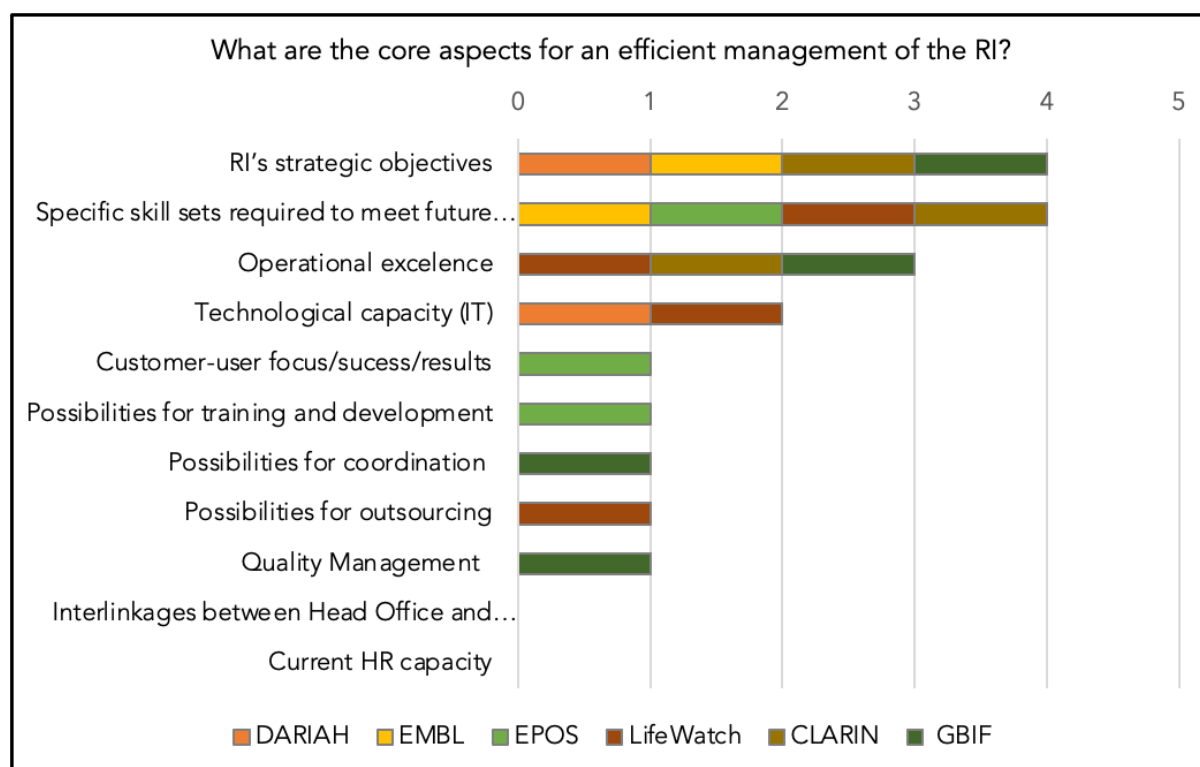
Figure 8.1. Proposed list of core aspects for an efficient management of the RI

Possibilities for Training and Development (LifeWatch), Possibilities for Outsourcing (EPOS) and Quality Management (LifeWatch), were referenced only once by the various RIs.

Other dimensions related to the Interlinkages between Head Office and National Nodes, Efficiency Savings or Job Profiling were not mentioned, showing a lower relevance attributed by the analyzed RIs.

Aspects Regarding the HR strategy

Equally enlightening is the analysis of responses on what is valued the most regarding the HR strategy ("In your opinion, considering your RI, what do you value the most regarding the HR strategy?"). As this is an open response, it was possible to identify several areas selected as fundamental in the definition of an HR policy and which assume a high impact on the effectiveness of RIs, namely:

1- Engaging people to achieve organizational objective

The achievement of high levels of involvement and commitment of employees and teams with the strategic objectives of RI were considered one of the most important factors in managing RIs. The appreciation of this dimension is clearly expressed in the LifeWatch ERIC testimony:

- "LifeWatch ERIC is currently in the process of developing its HRM strategy (...)The Executive Board has identified the following key principles that will form the backbone of the strategy.

- LifeWatch ERIC believes it is important to involve and collaborate with all people at all levels and to respect them as individuals. Through recognition, empowerment and enhancement of competence we inspire the engagement of people in achieving their own and organisational objectives."

- Engagement of People:

- Definition:

- Competent, empowered and engaged people at all levels throughout our organization are essential to enhance its capability to create and deliver value.

- Our behaviour:

- To manage/contribute in an organization in an effective and efficient way, it is important to involve and collaborate with all people at all levels and to respect them as individuals. Through recognition, empowerment and enhancement of competence we inspire the engagement of people in achieving their own and organisational objectives.

- Our Actions:

- We create and deploy the communication plan that promotes organisational objectives and importance of individual contribution.

- We encourage cross-functional collaboration on individual and organisational level.

- We promote open constructive discussion and sharing of knowledge and experience.

- We empower individuals to take initiatives.

- We conduct surveys to assess individual and organisational satisfaction, and we act on the results.

- We recognize and acknowledge individual contribution, learning and improvement as part of individual performance evaluation.

- The Code of Conduct and Employment policies are already in place (LifeWatch ERIC).

2 - Establish Right HR Capabilities

Another area that emerges in the survey responses as extremely relevant in a HR policy is the empowerment of workers. The importance of the existence of skills and incentives to acquire new knowledge related not only to the performance of existing activities but also those that may emerge in the future is highlighted.

The importance attributed to this item is recurrently expressed throughout the survey. It emerges not only in the direct answer to the above-mentioned question, but is present in multiple other answers. Underlying is the clear perception that it is only possible to ensure operational excellence and meet the strategic objectives of the RIs if the HR has high levels of technical capacity. The relevance attributed to this theme is clearly expressed in the testimony of EPOS, namely:

- "EPOS The priority for the ECO is to ensure the operation of the ERIC in guiding the RI and its delivery framework. HR plan must ensure personnel and skills to manage the day-to-day operation. Operation concerns both the components placed inside the ERIC perimeter (i.e., those assets controlled/owned by the ERIC and included in the financial statements - such as legal seat and central hub) and the interactions with those components located outside the internal ERIC perimeter (such as national nodes or service providers). HR plan is a key element of the sustainability plan of the RI" (EPOS).

The importance of empowering workers is also based on the idea that it is important to develop new approaches to lifelong learning that enables them to respond effectively to the constantly changing skills requirements.

3 – Flat management structure, flexibility, autonomy and dialogue

In the answers obtained, the need for flat organizational structures and operational decentralization also emerges as relevant. This decentralization presupposes that there is a definition of a basic set of information, on the strategic and operational objectives, in order to guarantee that people and teams can guide/orient their decisions autonomously to

achieve the defined results. The appreciation of the option for simple structures is expressed in the GBIF excerpt, which refers to the importance of having:

- "Flat management structure and simple governance rules and regulations" (GBIF).

- Additionally, the existence of high levels of autonomy and participation gains exponential importance. In DARIAH's response, the importance of:

- "Listening, flexibility, constant dialogue, autonomy" (DARIAH).

- In the responses, therefore, the fact that the teams have autonomy and participate in the planning and definition of the activities of the RIs emerges as relevant. The delegation of competences and responsibilities, through the constitution of decentralized structures, guarantees that the teams can develop, with autonomy and flexibility, their activity in accordance with the pre-defined strategy. According to the RIs surveyed, this positioning ensures greater levels of flexibility and adjustment to future operational needs. It also contributes to capitalizing and enhancing internal skills, as well as to increasing the sense of belonging and achievement, critical factors considered essential to achieving high levels of performance and proficiency. This perspective is also highlighted by CLARIN, as it emerges in the following section:

- "This ensure the possibility for hiring people on permanent contracts, decent pension regulations, options for parental leave;

- To be able to adequately respond to the dynamics in the field we aim at a mix of people with permanent contracts and people on temporary contracts;

- All people have responsibility for more than one task and for each task/role more than one person is available" (CLARIN).

4 – Efficient, competence and comprehensive services

The fact that HR maintains its focus on the customer's needs and has efficient competence and comprehensive services are also referred to as an extremely relevant element, as expressed in the EMBL testimony:

- "Efficient, competence and comprehensive services" (EMBL).

The achievement of this objective presupposes that HR are clearly aligned with the strategy and operational objectives of the RIs and that they direct their actions towards the fulfilment

of the strategic objectives and established goals. Without this assumption, all the strategic planning may not be achieved. Additionally, it is also underlying the importance of having properly structured processes and a correct adequacy of HR to the portfolio of services provided by RIs.

Critical Success Factors in HR

Finally, the survey responses that directly focused on the CSF considered fundamental in the definition of an HR policy were analyzed ("Choose from the list below what are the critical success factors in this area?"). Four of the RIs that answered this question, DARIAH, EMBL, CLARIN and GBIF, emerged as the most relevant factor is the dimension "Qualification of Employees (Management Bodies; Specialized Services)", having been selected by three of the RIs: DARIAH, EMBL and GBIF.

Second, other CSF emerge, also considered relevant. They are the Strong Organizational Culture, selected first by the RIs: EMBL and GBIF. Also mentioned by two of the RIs, but ranked second in terms of valuation, is the importance of the International Network (CLARIN and GBIF), followed by the Quality of Products and Services (DARIAH and CLARIN).

Other CSFs also selected, although less prominent, were Reputation and Credibility, mentioned by CLARIN, Capacity for Innovation (EMBL) and Public Service (DARIAH). It is also significant that dimensions such as Financial Soundness, Technological Investment and Quality Certification have not been considered as CSF within the scope of the HR policy of RIs.
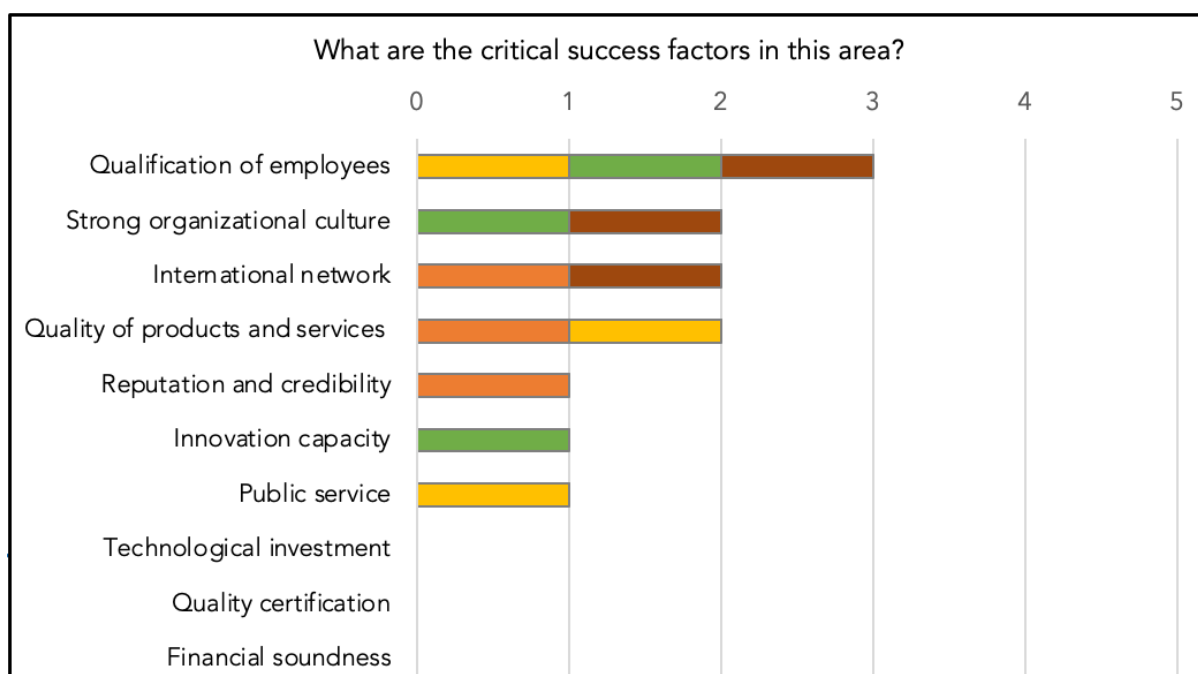
Figure 2. Proposed list of the critical success factors in GRH

With the additional objective of generating contributions and proposing recommendations, related to the CSF that should be considered when defining the HR policy for DiSSCo, the results of the analysis previously carried out were taken into account. This analysis resulted in the identification of 5 CSF related to people management, which can have a positive impact on DiSSCo's management and contribute to ensuring the successful execution of its strategy.

CSF 1. Engaging People to Achieve Organizational Objective

A fundamental CSF is ensuring that employees are committed and genuinely involved in the implementation of DiSCCo's strategy and core objectives. This assumes that HR has a very clear understanding of DiSSCo's mission, vision and core values. The mission, vision and values reflect the identity and purpose of an organization. Therefore, it is necessary that the workers of DiSSCo clearly understand the vision and general assumptions of RI operation so that they can guide their decisions and achieve the desired results. Without this assumption, all strategic planning may not be achieved.

For the involvement to be institutionalized in the institution's day-to-day, and permanently, it is also necessary that the vision, mission and values are inscribed in the organizational culture of DiSSCo. Organizational culture translates the values and beliefs shared by the members of an organization and functions as an organizational control mechanism that gives meaning, direction and mobilization to the members of the organization.

The fact that DiSSCo constitutes a large and complex distributed infrastructure with multiple structures and with a significant number of people, directly and indirectly involved and articulated in a network, also emphasizes the importance of having a communication strategy for the entire network. It is therefore necessary to establish clear and transparent communication mechanisms so that everyone is aware of the vision determined by the institution and the guidelines for the implementation of its strategy, thus enhancing higher levels of involvement and performance.

CSF 2. Establish Right HR Capabilities and Competencies

Ensuring that RI has the capabilities and competences necessary to fulfil the functions is also considered of vital importance. It is expressed that the implementation of RI will hardly be

successful without the workers being trained so that in their day-to-day they can fulfil their functions with high proficiency.

Considering that the roles and responsibilities are many, diverse and changeable, it is not expectable that organizations like DiSSCO will be able to fully fulfil all their responsibilities without the existence of multidisciplinary teams united around strategic objectives. The existence of HR, with the necessary skills and capabilities to face the multiple demands, requires the formation of multidisciplinary teams with high degrees of integration, self-coordinated and capable of collaborating with each other.

CSF 3. Flat Management Structure and Autonomy

Contributing to building a collaborative organization emerges as another important CSF. The option to adopt a flat organizational structure, based on collaborative principles, in which workers and teams have the possibility of having greater control in the daily management, acquiring fundamental skills and knowledge to be able to introduce organizational changes whenever necessary, is of element relevance. In addition, the involvement of workers in the local structures of the units and services makes them pivotal for the protection and provision of data, with the function of helping, in a logic of proximity, all those who in these structures have doubts related to the processes and services provided. The organization's resources, when used collaboratively, increase its value and ability to produce better results.

Furthermore, because the dimension and complexity of DiSSCo's activities does not allow for a uniform and simultaneous application of operational plans in all areas of intervention, not even in all of its structures, it becomes important that the teams have the capacity for autonomous resolution of problems and self-organization. Autonomy strongly increases the feeling of empowerment as well as the teams' ability to adapt to the constant renewal of processes and respond to the demands that emerge in DiSSCo's mission. Therefore, when defining the governance model, it is important to consider, from the beginning, the involvement of the teams in the formulation of projects. This allows them to make their own decisions and autonomously adapt their course for the successful completion of projects in which they are involved.

CSF 4. Improve HR Operational Excellence

This CSF aims to ensure that people remain focused on the customer's needs and the objectives set out in DiSSCo's strategy. It is important that HR actions are supported by effective processes and procedures that ensure compliance with high quality standards in the exercise of DiSSCo's functions. In this context, it is relevant to carry out systematic assessments/audits in order to identify and correct non-conformities. The HR self-regulation process is extremely important. Underlying this CSF is also the need for RI to guarantee the resources and means necessary for the RI to fulfil its function fully and technically independently.

As mentioned above, the fact that DiSSCo is a complex pan-European research infrastructure, comprising of a head office and many national nodes, makes the central office's cohesive role (head office) even more relevant in structuring multiple parts of this intrinsically complex organization. Designing a comprehensive HR policy requires, in the first instance, to focus on the central office structure because of its central coordinating role among the various stakeholders, but also because the various national nodes are subject to the personnel policy of their domestic organization. Ensuring operational excellence therefore requires the creation of dedicated institutional communication channels in order to allow the dissemination of clear, concise and useful information about DiSSCo

CSF 5. Measure Impact of HR Products and Services

Related to the previous CSF, a new CSF emerges related to the monitoring of HR performance, important to maximize the achievement of the commitments defined by the mission, as well as the fulfilment of the Strategic Plan and the operational plans. The HR indicators, or KPIs, are strategic metrics that allow for detailed evidence of the efforts made by the teams. Consequently, it allows to identify points of improvement or ineffectiveness, and then proceed with the correction if existing flaws are verified.

The motoring of performance is a critical success factor to be considered in the definition of the HR policy. It is important to define metrics to assess how the performance of HR contributes to the concrete results that DiSSCo intends to achieve. It should be noted that the metrics should reflect the main critical success factors of DiSSCo's core activities and provide a balanced view of the most important aspects of DiSSCo's evolution.

In addition to periodic and timely feedback on the evolution of the activity carried out, the main benefit of the assessment system is that it gives rise to greater knowledge, involvement

and focus of all HR on strategic objectives. Everyone knows in advance how they can contribute and that their performance will be measured by their contribution.

In summary, we present five critical success factors that should be considered relevant when defining an HR policy for DiSSCo. The identified critical success factors are as follows: (1) engaging people to achieve organizational objective; (2) establish the right HR capabilities and competencies; (3) flat management structure and autonomy; (4) improve HR operational excellence; (5) measure impact of HR products and services.

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ANNEX A

Characterisation of RIs

	CLARIN ERIC	**DARIAH ERIC**	**EMBL**
Scientific area	Social sciences and humanities	Arts & Humanities	Life science & Molecular biology
Main core activities	Create and maintain a distributed infrastructure to support the sharing, use and sustainability of language data and tools for research in the humanities and social sciences. Offer access to federated data and tools through a single sign-on platform. Coordinate the collaboration between the national consortia and the nodes in the network of centres.	DARIAH's mission is to empower research communities with digital methods to create, connect and share knowledge about culture and society. We work towards developing an infrastructure that supports researchers working in the diverse community of practice known as the arts and humanities to build, analyse and interpret digital or hybrid resources.	Conduct world-class excellent biological research, provide training for students and scientists, and provide state-of-the-art technologies for a wide range of scientific and experimental services.
Number of members	21 7European members, 3 observers, 1 third-party (USA)	19 European Members, 1 Observer and several Cooperating Partners in seven non-member countries.	27 European members, 1 associate (Australia)

	EPOS ERIC	GBIF	LifeWatch ERIC
Scientific area	Solid Earth science	Life on Earth	Environment, biodiversity and ecosystem
Main core activities	EPOS, is a multidisciplinary, distributed research infrastructure that facilitates the integrated use of data, data products, and facilities from the solid Earth science community in Europe. EPOS vision To ensure sustainable and universal use and re-use of multidisciplinary solid Earth science data.	GBIF is an international network and data infrastructure funded by the world's governments and aimed at providing anyone, anywhere, open access to data about all types of life on Earth.	LifeWatch ERIC seeks to understand the complex interactions between species and the environment.Grid and Big Data computing systems, advanced modelling tools to implement management measures aimed at preserving life on Earth.
Number of members	25 7European members	41 members worldwide	7European members

ANNEX B

HR Policies Questionnaire

The Distributed System of Scientific Collections (DiSSCo) is a European Research Infrastructure (RI) currently under construction that integrates 115 organisations across 21 European countries. It aims to mobilize, unify information on bio and geodiversity linked to specimens contained in collections of natural sciences and distribute it to scientific communities and the community in general.
Within the scope of the construction activities of the master plan for DiSSCo, it is important to define a human resources policy.

The purpose of this survey is to collect information on the Human Resources Management policies of your Distributed Research Infrastructure / Facility.

Your feedback will be used to help us build DiSSCo HRM system.

You can answer at you own pace. Can stop and resume later and can move back and forward.

Thank you for taking some time to answer our questions.

Please identify your RI:

_____
_____
_____

1. Human Resource Strategy and Planning

Considering your DRI, what do you value the most regarding the HRM strategy?

_____
_____
_____
_____

What are the core aspects for an efficient management of the RI?

Select at maximum 3 options

Current HR capacity

RI's strategic objectives

Specific skill sets required to meet future objectives

Customer-user focus/success/results

Technological capacity (IT)

Possibilities for training and development

Interlinkages between Head Office and National Nodes

Possibilities for outsourcing

Possibilities for coordination (e.g., with other organisations, universities, etc.)

Efficiency savings

Job profiling

Operational excellence

Quality Management

Other, please specify: _____

What are the most relevant skills that HR in general should have?

Select at maximum 3 options

☐   Achieving results

☐   Adaptability/flexibility

☐   International network competencies

☐   Communication

☐   Customer/user-orientation

☐   Commitment

☐   Coordination

☐   Digital competencies

☐   Efficiency

☐   Information processing

☐   Initiative

☐   Innovation

☐   Interpersonal relationships

☐   Working experience

☐   Leadership

☐ Negotiation

☐ Long-term international working experience

☐ Problem Solving

☐ Professionalism

☐ Scientific knowledge

☐ Self-development/learning

☐ Strategic thinking

☐ Teamwork

☐ Values and ethics

☐ Cross-functional collaboration

☐ Other, please specify: _____

Please choose what philosophy lies behind the setup of your HR function:

☐ Mainly centralized HR model

☐ Mixture of centralized and decentralized HR model

☐ Mainly decentralized HR model

2. Organizational Culture and Leadership

Please identify the central aspects that should characterize the culture of RI and workforce mind-set

*Please refer at maximum 3 items

_____
_____
_____
_____
_____

Which aspects do you value most in order to exists a true and good organizational culture?

*Please refer at maximum 3 items

_____
_____
_____
_____
_____

Which aspects do you think are essential for good leadership?

Please select at maximum 3 options

☐   Drive for results

☐   Effective decision making

☐   Successful user strategy

☐   Innovation management

☐   Strategic capability

☐   Functional excellence

☐   People development

☐   Vision

☐   Interpersonal effectiveness

☐   Ethical behaviour

☐   International network

☐   Scientific excellence

☐   Knowledge sharing capacity

☐   Attracting skilled workers

☐   Building and maintaining external relations

☐   Innovation

☐   Interlinkages between Head Office and National Nodes

☐   Empowerment

☐   Boundary spanning

☐   Motivation behaviours

☐   Consideration

☐   Other, please specify: _____

What are the importance of this key areas to your RI?

Please select at maximum 3 options

☐ Operating from a user-oriented and service-based perspective, which is delivered consistently with quality, excellence, professionalism

☐ Focusing people and organizations on identifying and meeting customer/user expectations

☐ Engaging people to achieve organizational objectives

☐ Providing organizational resource and support to the users/community

☐ Making strategic plans and coordinating, overseeing and integrating the operations into the global network

☐ Strengthening the culture of collaboration, resiliency, and adaptation to change

☐ Encouraging and nurturing innovative thinking and behaviours

☐ Turning innovations and promising ideas into service successes

☐ Building organizational systems and structures that support people (vs. frustrating them) as they do their work

☐ Sharing essential knowledge across Head Office and National Nodes

☐ Ensuring overall quality assurance and control of the RI

☐ Building skills for innovation and flexibility in the workforce

☐ Developing productive, performance-based work environments

☐ Planning, improving and securing all aspects related to the sustainability of the whole RI

☐ Coordinating and integrating the RI operations

☐ Ensuring the strategic development and sustainability of the RI

☐ Other, please specify: _____

3. Training, development, and innovation

Is there a training/development program and/or action plan?

Yes

No

If yes, please describe briefly or provide a web link with more information:

_____

Among the following options, please select the most important current priorities in the area of training and competence development of HR

 Please select at maximum 3 options

Online course development (e-learning, m-learning, blended learning)

Special development programs

Executive leadership training and coaching

Training for middle management

IT/digital skills training

Events and conferences

Facilitation of community of practice

Coaching and mentoring

Outsourcing training to private delivery

Partnerships with universities and public or private educational institutions

Networking programmes

Other, please specify: _____

Please indicate the area (s) in which employees have been trained in the last three years:

_____
_____
_____
_____
_____

- -

Please indicate, according to your opinion, the training and development area(s) where there should be a greater focus of and why.

*Refer at maximum 3 reasons

_____
_____
_____
_____
_____

- -

What is the average length of training attended per year per employee?

☐   1-3 days

☐   3-5 days

☐   5-7 days

☐   7-10 days

☐   Other, please specify: _____

What are the mechanisms in place to monitor and assess the quality of the training activities?

_____
_____
_____

Please indicate the use of the following tools in the HR to tap to innovative potential of the workforce:

	Frequently	Sometimes	Rarely	Never	Prefer not to say
Autonomous, multidisciplinary teams for innovation projects	☐	☐	☐	☐	☐
International innovation committees and/or working groups	☐	☐	☐	☐	☐
Innovation labs / hubs	☐	☐	☐	☐	☐
Idea contests/suggestions boxes	☐	☐	☐	☐	☐
Innovation-oriented discussion groups, blogs, or other online forums	☐	☐	☐	☐	☐
Innovation oriented peer learning (e.g., mentoring, learning circles, etc.)	☐	☐	☐	☐	☐
Training to support HR in leading transformational projects and initiatives	☐	☐	☐	☐	☐
Innovation Competitions	☐	☐	☐	☐	☐
Innovation fairs	☐	☐	☐	☐	☐
Recruitment procedures aiming at "non-traditional" profiles in the HR (design thinking, behavioural economics, etc.)	☐	☐	☐	☐	☐

Other tools, please describe:

_____
_____

 Which of these factors are important for being promoted to a different grade or to a different hierarchical level?

_____   **DiSSCo**   _____
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Can select more than one option

	Years of experience	Specific experience	Performance appraisals	Qualifications	Training	Mobility (job rotation)	Other (specify in the comment box below)
Management	☐	☐	☐	☐	☐	☐	☐
Technical support	☐	☐	☐	☐	☐	☐	☐
Secretarial staff	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐

- -

Comments:

_____
_____
_____
_____
_____

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4. Recruitment

Which competencies are prioritized regarding the recruitment and development of senior managers?

 Select all that apply

☐   Action management

☐   Strategic thinking

☐   Change management

☐   Financial Management

☐   People management

☐   Risk management

☐   Communication

☐   Employee development

☐   Technical specialty

☐   Values and ethics

☐   Other, please specify: _____

Which competencies are prioritized regarding the recruitment and development of main RI functions?

	Management	Technical support	Administrative staff	Other jobs
Please specify				

Is there a concern with cultural person-organization fit during recruitment?

_____
_____
_____
_____
_____

5. Engagement and mobility

There is a policy adopted to ensure the successful integration of National Nodes into the RI?

☐   No

☐   Yes, briefly describe _____

There are special strategies to attain a greater involvement of the National Nodes in the execution of the strategy defined by the Head Office

☐   No

☐   Yes, briefly describe _____

Do you know strategies that could be adopted to involve the Human Resources of the National Nodes in carrying out the tasks and guarantee an adequate quality control?

☐   No

☐   Yes, which _____

In your organization, do you know what strategies have been adopted to motivate national nodes to participate and contribute to the RI?

☐   Yes. Please describe briefly:

_____

☐   No, they don't have

☐   I'm not aware of them

How is the mobility between National Nodes and Head Office encouraged in your organization?

☐   HR retain the right to return to their post (or equivalent) in the previous organization

☐   External mobility is explicitly taken into account in promotion decisions and long-term career planning

☐   External mobility is promoted through special secondment and training programs, explicitly taken into account in promotion decisions and long-term career planning

☐   External mobility is accepted but not promoted in any particular way

☐   Other, please specify: _____

These programmes are targeted to:

☐ All personal

☐ Management functions

☐ Specific functions. Which function and why?
_____

- -

Do these programmes enable:

Select all that apply

☐ Mobility within the HR (exchanges between Staff)

☐ HR placements in the private/not-for-profit sector

☐ Private/not-for-profit sector employee placements in the organization

☐ Other, please specify: _____

6. Performance Indicators

What are the current performance criteria explicitly used in your RI?

Select all that apply

☐   Timeliness of activities undertaken

☐   Outputs/achievement of objectives

☐   Cost-effectiveness of outputs' production

☐   Quality of outputs

☐   Improvement of competencies

☐   Values discipline and inputs

☐   Interpersonal/management skills

☐   It varies significantly across organization

☐   Other, please specify: _____

What are the performance indicators used to measure the employee performance?

○ Indicator 1 _____

○ Indicator 2 _____

○ Indicator 3 _____

_____   DiSSCo PREPARE   _____

Which tools are used for regular performance assessment and how often are they applied?

	Every 6 months	Every year	Every two years	Other frequency
Meeting with immediate superior	○	○	○	○
Meeting with superior two levels above or HR officer	○	○	○	○
Written feedback from superior	○	○	○	○
360 feedback (usually written)	○	○	○	○
Other, please specify:	○	○	○	○

Is there a performance-based compensation system?

_____
_____
_____
_____
_____

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7. Work conditions and inclusion

What are, in general, the most relevant working conditions?

Please sort by order of importance to you (drag and drop)

_____ Flexibility of working conditions (number of hours, etc.)
_____ Performance appraisal systems
_____ Ethics, equal opportunity, equity issues
_____ Employee wellbeing
_____ Training
_____ Mobility
_____ Work/life balance
_____ Diversity and inclusion (of, for example, minorities)
_____ Skills match (between job and employee)
_____ Perceived employer image
_____ Job satisfaction
_____ Organisational commitment
_____ Employee motivation and engagement
_____ Effectiveness of management
_____ Innovation
_____ Integrity at the workplace
_____ The possibility to work in a team
_____ Challenging work
_____ Other, please specify:

Are any of the following options provided by your organization?

☐   Flexible working hours

☐   Part-time work

☐   Job-sharing

☐   Telework

☐   The opportunity to arrange my work schedule so I can meet family obligations

☐   Sabbatical leave

☐   Extra child or family leave (beyond that which is guaranteed in the private sector)

☐   Gradual retirement (allows employees to gradually reduce the number of working hours or duties over an extended period of time, up to several years, prior to retirement)

☐   Other, please specify: _____

Which of the following policies promotes equal opportunities for promotions and career advancement of underrepresented groups in your RI?

	Women	Non-nationals (naturalised citizens born in another country)	Minorities (if defined for HR policy apart from women and non-nationals)	Disabled
Preferential right for being promoted	☐	☐	☐	☐
Preference in the promotion / selection process	☐	☐	☐	☐
Information sessions specially directed to	☐	☐	☐	☐
Coaching	☐	☐	☐	☐
Other, please specify	☐	☐	☐	☐

Taking into consideration the measures below, in your opinion which measures allow to increase gender diversity in organizations?

☐   Aspirational goals/quota for women

☐   Customized career programs

☐   Mentor programs (from senior managers)

☐   Parental leaves

☐   Flexible work models

☐   Programs offering childcare support

☐   Visible monitoring of gender programs by senior managers

☐   Program to encourage networking

☐   Neutralization of the impact of a parental leave/flexible work model when assessing performance

☐   Programs to manage/support transition periods related to parental leaves

☐   Clear policies and processes to penalize sexual harassment in the workplace

☐   Virtual mobility (working from home)

☐   Role model campaigns

8. Critical success factors

Please choose from the list bellow what you consider to be the critical success factors in this area

Select at maximum 3 options

☐   Reputation and credibility

☐   Financial soundness

☐   Strong organizational culture

☐   International network

☐   Qualification of employees (Management Bodies; Specialized services)

☐   Quality of products and services

☐   Technological investment

☐   Quality certification

☐   Innovation capacity

☐   Public service