Project information

Project full title	Connecting Russian and European Measures for Large-scale Research Infrastructures – plus
Project acronym	CREMLINplus
Grant agreement no.	871072
Instrument	Research and Innovation Action (RIA)
Duration	01/02/2020 – 31/01/2024
Website	www.cremlinplus.eu

Deliverable information

Deliverable no.	D9.2
Deliverable title	Training needs of Russian RIs staff
Deliverable responsible	NUST MISIS
Estimated delivery date	31/10/2020
Related Work-Package/Task	WP9
Type (e.g. Report; other)	Report
Author(s)	ANDREY POLYAKOV, IGOR SCHETININ; MARINE MELKONYAN, MIKHAIL GORSHENKOV
Dissemination level	Confidential, only for members of the consortium (including the Commission Services)
Document Version	1
Date	30/10/2020
Download page	/

Document information

Version no.	Date	Author(s)	Comment
0	24/07/2020	Andrey Polyakov, Igor Schetinin, Marine Melkonyan, Mikhail Gorshenkov	Draft
1			Amendments

Identifying the challenges in managing research infrastructures in Russia and urgent training needs

Table of contents

1. Executive Summary

This report highlights the results of survey **"Identifying the challenges in managing research infrastructures in Russia and urgent training needs"** conducted within WP9 of the CREMLINplus project (Grant 871072) of the EU Research and Innovation Programme Horizon 2020.

The survey was focused on managers and operators (technicians) of the Russian research infrastructures (RU RIs) with the aim of collecting their views on the managerial issues of RIs in different thematic domains. The main respondents to the survey were the managers and operators of the 11 priority organizations implementing research infrastructures mentioned in the list, recommended by the Ministry of Science and Higher Education of the Russian Federation (LIST-11)[1] and the 5 Russian megascience projects[2].

Data was collected through an online survey with 11 questions on various aspects of management of research infrastructures, which was disseminated among 206 organizations, listed in Annex 3, including LIST-11 organizations and organizations that implement 5 megascience projects.

The report is based on 184 responses from managers at different levels and operators of the Russian research infrastructures, among them 14 responses came from representatives of focus groups.

The report provides a most **general description of the managerial problems of RU RIs and needs in training courses.** The results of the current survey show that there **is a real demand for improving skills and developing knowledge** of managers and operators of the Russian RIs. All respondents acknowledged a strong need for improving their managerial skills through different training courses. They also highlighted the benefits of exchange programmes for managers and operators between Russian and European RIs.

The **List of the training** courses/summer schools/workshops dedicated to improving skills and ways of managing research infrastructures in different thematic areas was updated based on suggestions of survey respondents.

The report provides recommendations on training activities for the RU RIs and emphasizes the role of CREMLINplus fellowship programme in addressing their managerial challenges.

2. Introduction. Objectives of the survey

The ambitious goal of CREMLINplus project is to achieve a significantly higher level of EU-Russia cooperation on research infrastructures in different thematic domains.

---

[1] https://www.cremlinplus.eu/collaboration/list_11_facilities/
[2] https://www.cremlinplus.eu/collaboration/russian_megascience_projects/

The project covers the following 3 directions:

-support the strengthening of the complementarity between Russian megascience initiatives and their European counterparts;

-contribute to overcoming the barriers that prevent European scientists from accessing Russian Research Infrastructures (RU RIs) of European interest; support Russian Facilities in setting-up the appropriate transparent and sustainable access conditions; promote the harmonization of procedures for access and develop the framework conditions to improve access of European Scientists to RU RIs;

- develop a staff exchange programme and thematic courses and workshops (e.g. summer schools), aimed at fostering exchanges of best practices on management practices, access procedures and scientific collaboration between infrastructure Staff and Scientists belonging to both the Russian Federation and European Union.

The success of the above mentioned initiatives depends largely on the quality and professional skills of the staff of research infrastructures, requires adequate skills for their managers, operators and technicians, as well as users. RIs managerial skills need to create advanced services for both the scientific community and trust by the stakeholders and supporting governments, to address different issues of international cooperation on research infrastructures characterized by challenging technical and organizational structures. For this reasons the identification of managerial challenges facing Russian research infrastructures (RU RIs) has been recognized as being of a paramount importance within the CREMLINplus project.

 Within Work package 9 of the project the following interconnected tasks have to be fulfilled:

- gathering and structuring the information on the available thematic and horizontal training courses, summer schools, workshops and international conferences in Europe and Russia, dedicated to managerial issues of research infrastructures, which meet the urgent needs of the Russian RIs;

- identifying the managerial challenges facing Russian research infrastructures;

- launching a specific "CREMLIN plus Fellowship Programme", aimed at supporting the participation of operators (scientists and engineers), managers and administrators of RU RIs in the events dedicated to improving their skills and ways of managing RU RIs in different thematic areas.

To identify problems and needs in managing Russian research infrastructures we developed **"Identifying the challenges in managing research infrastructures in Russia and urgent training needs"** survey within WP9.

This report presents the main findings of survey analysis. The results of the survey will allow to focus on the training activities aimed at improving the most challenging RU RIs managerial skills.

3. Methodology

In April – May 2020 WP9 team of the CREMLINplus project developed a survey "Identifying the challenges in managing research infrastructures in Russia and urgent training needs" and refined the groups of survey respondents.

The respondents of the survey were **the managers and operators** of the Russian research infrastructures in different thematic domains.

The main focus groups were 5 Russian megascience projects and the **11** priority organizations implementing research infrastructures, recommended by the Ministry of Science and Higher Education of the Russian Federation and mentioned in **LIST-11**.

It should be noted that although the Russian research infrastructures do not include the word **"manager" as a job title**, they often create specific positions for employees whose responsibilities focus on the administration of a variety of activities related to design, establishing and operation of research infrastructures at different levels (e.g. group-, section-, department heads and executives).

The **Technician (or operator**) of the Russian research infrastructure means a professional who keeps up the normal operation of various sectors of the infrastructure, delivers technological support to external and internal users. Technicians make use different tools and techniques to solve technical non-routine problems and managing client issues. The technicians play an essential role in active and smooth functioning and maintenance of the Russian research infrastructure.

The survey was conducted during the period from May 19, 2020 to October 21, 2020.

In the first step the survey was disseminated among the representatives of LIST-11 and organizations initiating and supporting 5 Russian megascience projects, and then the mailing list was expanded to **206 organizations** (Annex 2. The list of the survey recipients).

Totally the questionnaire was answered by **105 organizations** (**184 responses**) (Annex 3. The final mailing list of respondents).

We created **Google-forms** for the survey in two languages (English and Russian), available at the following links (Annex 1. Survey):

English:
https://docs.google.com/forms/d/e/1FAIpQLSf5amZEMN9K0YxMu64XahZyuG-Sv8ggvyNeg5udrxhAv_kbug/viewform
Russian:
https://docs.google.com/forms/d/e/1FAIpQLScGKdmSUJ9kZi2T79yP5abNNMt34vTJdfMDOZ5pAXBq0prU2g/viewform
The survey consists of 4 sections:
- General information about respondent with brief description of organization and a specific research infrastructure and its mission. This information allowed us to explore

the answers in terms of organization types, thematic domains and positions of the respondents in research infrastructures.

- Information on the challenges in managing research infrastructure of organization and related urgent training needs. This information allowed us to track respondents' opinions on the managerial problems of Russian RIs;
- Self-assessment of knowledge/skills in the items relevant to different aspects of managing research infrastructures. The data gathered from self-assessment allowed to understand the level of knowledge and skills of respondents on the most important managerial problems;
- Exchange the experience and knowledge. The gathered data allowed us to update the list of training activities, developed for CREMLINplus Fellowship programme within WP9 The Survey addressed the following topics:

1. **Governance and Organization** (this section gathered information on features of **governance and organization** of specific research infrastructure: design the governance structure of the research infrastructure, assign roles and responsibilities within the RI, set up of operating systems of the organization, assign performance targets and monitor results of different organizational units/nodes)

2. **Strategic Management and Business Innovation** (This section gathered information on understanding the ecosystem of the RI, define the business model and develop the business plan of the RI, translating mission and vision into a strategic plan, understanding how to monitor the strategy execution)

3. **Financial Management** (This section gathered information on understanding how to interpret financial data, balance sheets and cash flow, the costs of different service lines, how to monitor spending, expenses and budgets, how to develop a financial plan)

4. **Developing a sustainable funding model for your RI** (This section gathered information on modes of funding, identifying and negotiating with potential funders; new funding tools: private-public partnerships, special projects, commercial funding, fee for service, consultancy, the evaluation of investment projects)

5. **Leadership and Team Management** (This section gathered information on envision the future, engage people and support their empowerment, understanding how to influence, inspire and motivate others, building a common vision among stakeholders and organizations, managing efficiently interpersonal and organizational conflicts, understanding how to give constructive feedback to teams)

6. **Service Management** (This section gathered information on understanding how to develop new service solutions in the organization, knowing how to challenge standard practices and current procedures, Implementing best practice methods within the organization)

7. **International Law and Compliance (**This section gathered information on compliance with laws and regulations in different settings, public procurement, contract issues in different settings: IPR regulations and data and material sharing, privacy and ethical issues)

8. **Infrastructure and Resource Management (**This section gathered information on research and administrative data management: storage of data, archiving, privacy, data protection and sharing issues; compliance with national and international regulations, best practices and standards; creating a disaster mitigation and recovery plan)

9. **Raising Awareness (**This section gathered information on target communication to different groups, identify relevant stakeholders such as: public or scientific community, the organization [employees], policy makers and funding bodies; choosing the right communication channel to maximize impact, core elements of a successful branding strategy, communicating value creation and impact)

10. International dimension of research infrastructure (This section gathered information on strategy for promoting RI in global science and education space and attracting international users; ensuring long-term cooperation with foreign RIs on different issues, e.g. for joint development of instrumentation; providing the international trainings for **User communities**; managing data/experience / knowledge exchange with foreign partners; managing the participation of the infrastructure in European and other international programmes, projects and initiatives)

11. **Access to research infrastructure and User communities** (This section gathered information on establishing the Access policy [by defining the Access modes, fees and costs, the selection process, the eligibility and restriction criteria, the data management plan, confidentiality and data protection issues, IPR and ethical issues; the safety and health regulations and the measures supporting the users travel and accommodation; the experience of providing access to infrastructure and managing a specialized website]; developing a strategy to promote the infrastructure among possible user groups; establishing a strategy **to create a User Community** and to integrate it in the RIs development).

The questionnaire resulted in the collection of an impressive amount of information.

4. Survey results
4.1. General information

4.1.1. Thematic domains

We received over 35 responses for each thematic domain: Biomedical sciences/health and food, Environmental sciences, Physical sciences and engineering, Social sciences and humanities. The distribution of the gathered responses across the thematic domains is shown in Fig. 1.
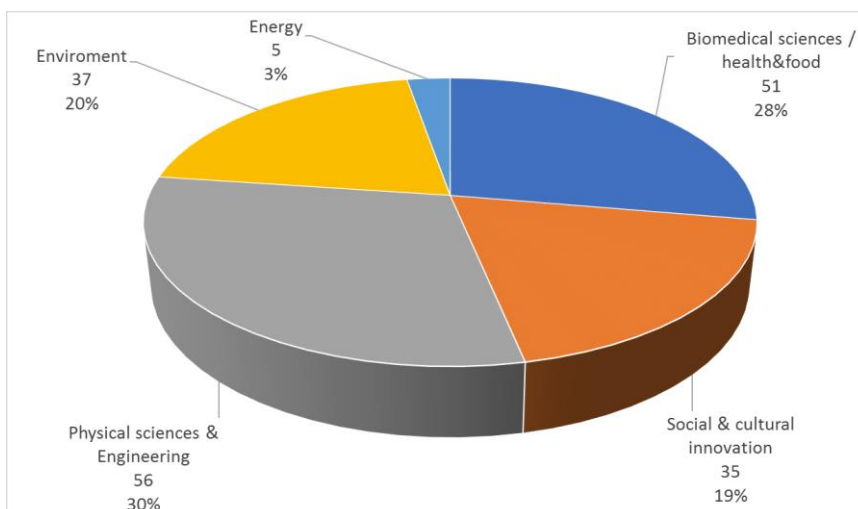
Fig. 1 – The distribution of collected responses across thematic domains

4.1.2. Positions of respondents in RU RIs

The survey respondents hold different positions in their organizations. We distributed their positions into the following groups:

1. Managers of the 1st level – Directors of organizations, deputy-directors, vice-rectors, scientific secretary.

2. Managers of the 2nd level - Heads and deputy heads of centers / departments, directors of institutes / faculties, heads of laboratories.

3. Operators - senior researchers and associate professors, who keeps up the normal operation of various sectors of the infrastructure and delivers technological support to external and internal users.

The distributions of respondents according to their positions in general (Fig.2) and in every thematic domain (Fig. 3) were analyzed.
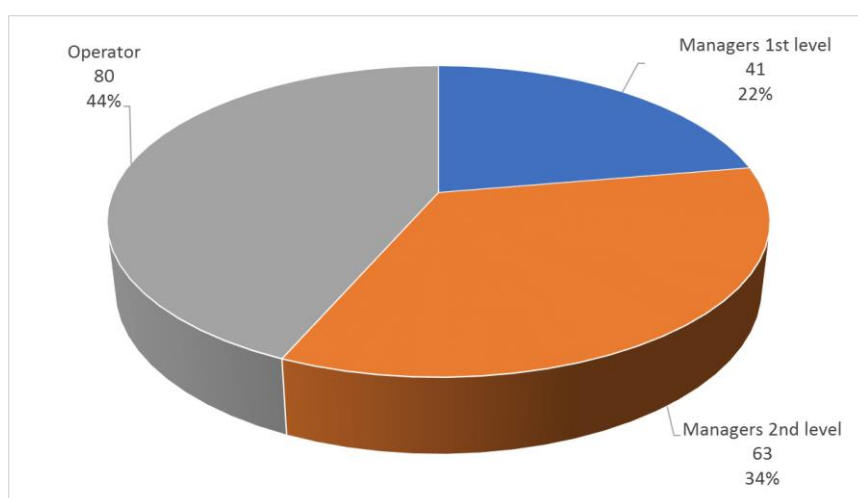

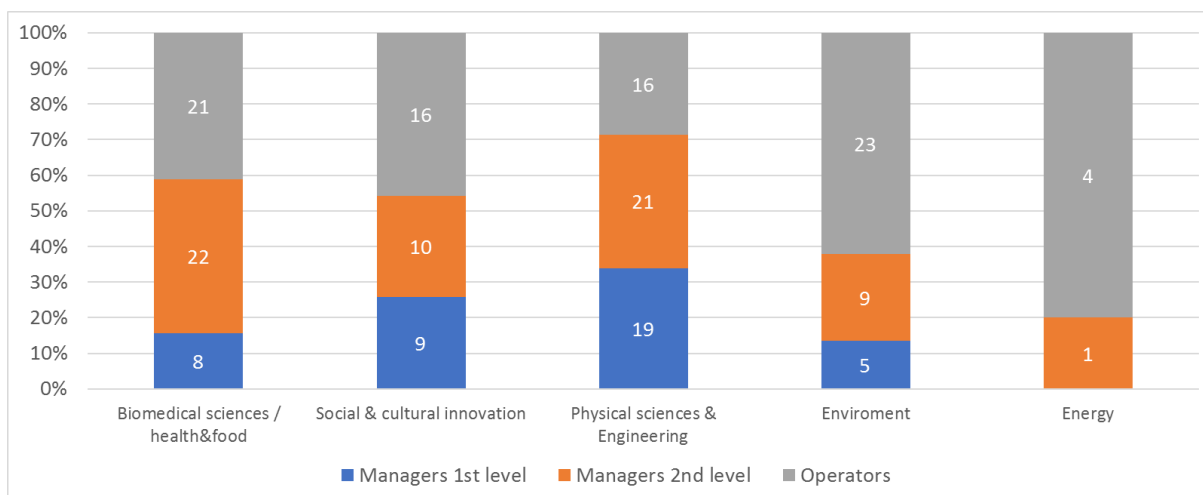Fig. 2 – Distribution of respondents by the positions

Fig. 3 – Distribution of respondents according to their position within thematic domains (the column contains data on the number of responses)

Regarding the distribution according to position of respondents within the thematic domains, there is a slight bias towards an increase in number of managers for Physical sciences and engineering domain(Managers 1st Level - 34%; Managers 2nd Level - 38%; Operators - 29%), and vice versa for Environment domain (Managers 1st Level - 14%; Managers 2nd Level - 24%; Operators - 62%) and Energy domain (Managers 1st Level - 0%; Managers 2nd Level - 20%; Operators - 80%), which in the case of Energy domain is related to a relatively small number of responses. In the other thematic domains, the distribution is close to each other: Biomedical sciences / health and food (Managers 1st Level - 16%; Managers 2nd Level - 41%; operators - 43%), Social (Managers 1st Level - 26% Managers 2nd Level - 29%; operators - 46%).

4.1.3. The distribution of respondents according to type of organization

In the next stage, we analyzed the respondents according to type of organization (Figure 4).

In the Russian Federation, along with Universities and research centers, there are historically established Institutes of the Russian Academy of Sciences (RAS).

The main goal of the RAS is to organize and conduct fundamental and applied scientific research on the problems of natural, technical, humanitarian and social sciences, aimed at obtaining new knowledge about the laws of the development of nature, society, humans and contributing to the technological, economic, social and cultural development of the Russian Federation. The RAS Institutes have a well-developed scientific infrastructure, including the megascience infrustucture (the Super S-Tau electron-positron collider factory at the Budker Institute of Nuclear Physics of the RAS, the International Center for Extreme Light Field Research at the Institute of Applied Physics of RAS, Institute of Cytology and Genetics SB RAS). The category of Institutes of the RAS included representatives of LIST-11:

Institute for Nuclear Research of the RAS, Crystallography and Photonics of the RAS, Special Astrophysical Observatory of the RAS)

Universities have a developed scientific infrastructure and centers for the collective use of scientific equipment. Representatives of LIST-11 were included in the category of Universities: National Research University Higher School of Economics, St. Petersburg State University.

Sectoral scientific Institutes (Research Centers) is a very large network of research, design and engineering organizations of a wide variety of profiles to provide applied research and development in the industry-specific direction. They include pilot plants, clinics, breeding stations, organizations for information services in the scientific and technical sphere, metrology and certification. This network partly includes state scientific centers (SSC), which are one of the effective tools for the development of the scientific and technological complex of Russia. The status of a state scientific center can be assigned to a scientific organization that has unique experimental and experimental equipment, has scientists and highly qualified specialists, and whose scientific and (or) scientific and technical activities have received international acceptance.

Representatives of LIST-11 are also assigned to the category "Other": NRC "Kurchatov Institute", Kulakov's Scientific Medical Research Center for Obstetrics, Gynecology and Perinatology of the Ministry of Health of the Russian Federation. The Joint Institute for Nuclear Research fell into the category of "international organization".

All types of scientific organizations are presented in the survey. A large number of processed questionnaires of Universities, Institutes of the Russian Academy of Sciences and sectoral research centers allow us to consider them as an analytical section when processing questionnaires.
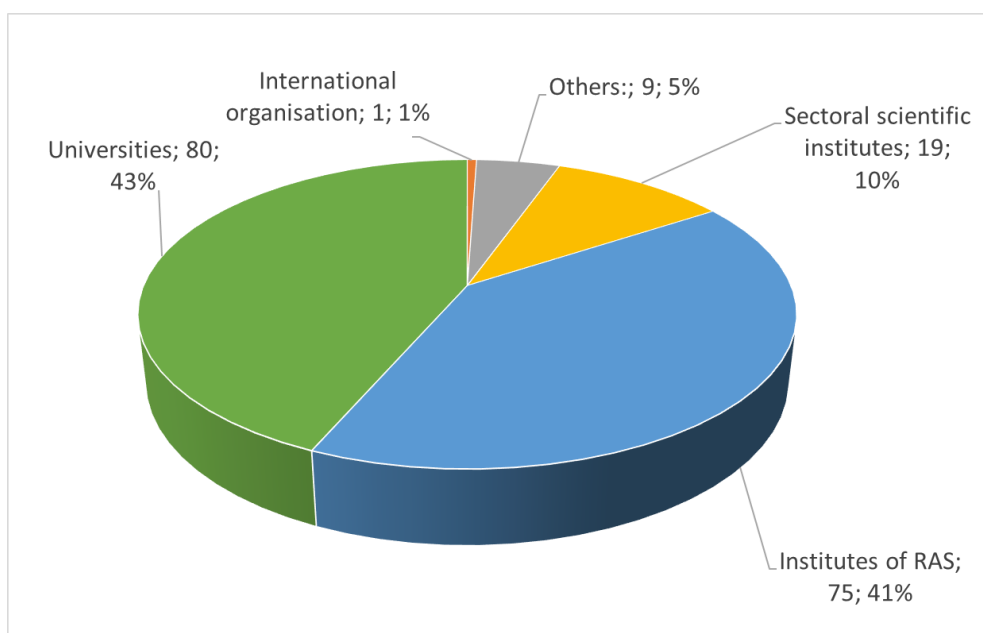
Fig. 4 - Distribution of respondents according to type of organization

Regarding the distribution of respondents according to type of organization within thematic domains (Figure 5), there is a shift from the average towards Universities for Social Science and Energy domains, and for the Environmental Sciences - towards the predominance of representatives of RAS.
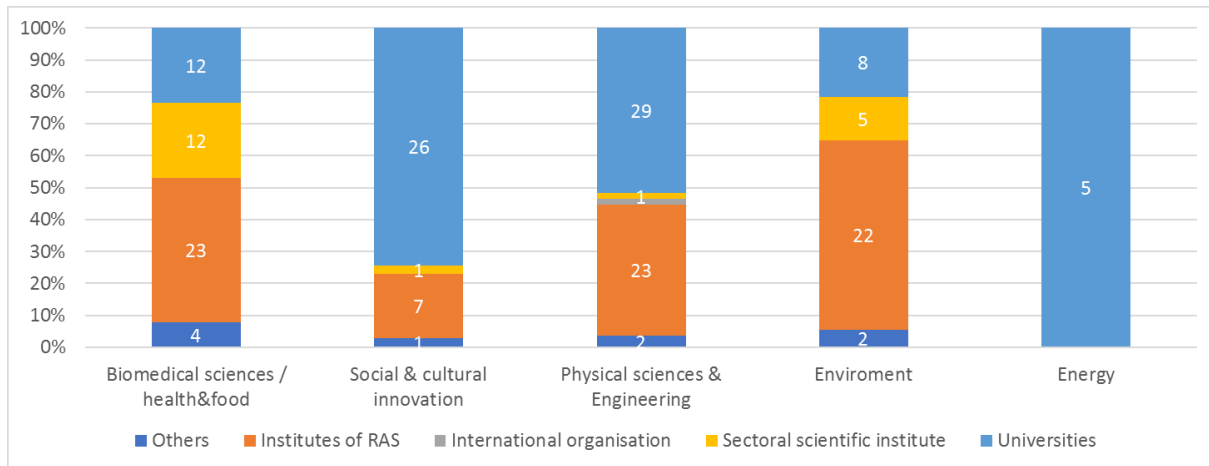
Figure 5 - Distribution according to type of organization among respondents within thematic domains

The distribution of job types by the main types of organizations (Figure 6) is close to the average, but there is a slight increase in the share of Managers of the 1st level for RAS institutes.
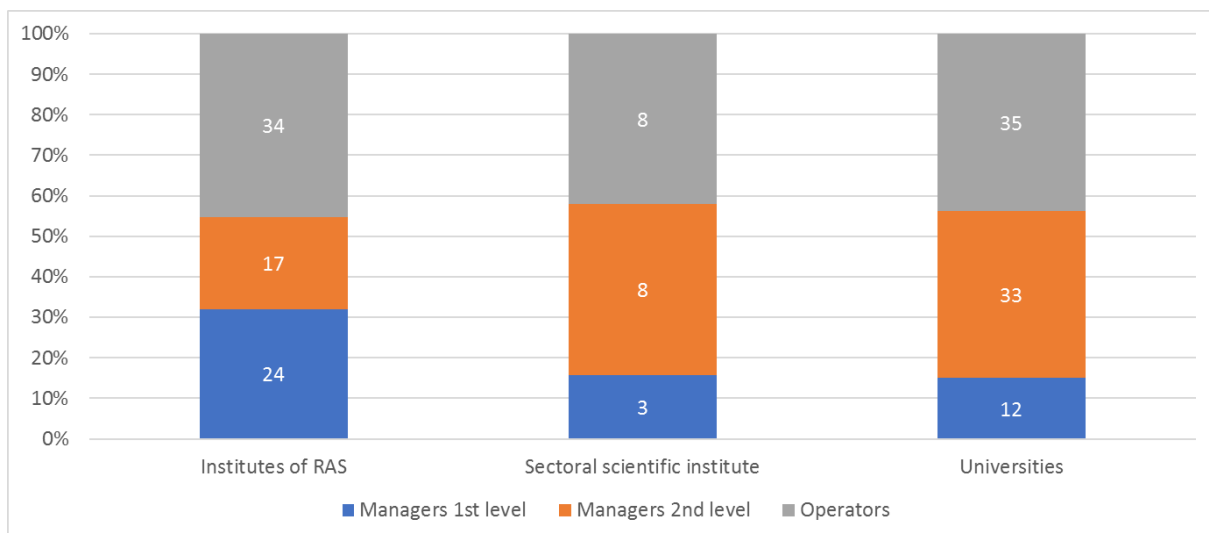
Fig. 6 - Distribution of positions by main types of organizations

Organizations of the LIST-11 and megascience in the survey are represented by 14 questionnaires, of which 4 were submitted by Managers of the 1st level and 10 – by Managers of the 2nd level.

4.2. The challenges in managing Russian research infrastructures

Based on the responses of the respondents to the second part of the survey, general problems in organizations were structured. The following groups of problems have been identified:

1. management and organization of the workflow (bureaucracy, low efficiency, management in science, organization of access to equipment, organization of equipment repair, control of equipment loading, the effectiveness of scientific research e.t.c.);
2. attracting financing (problems of stability of financing, procurement of new equipments, insufficient financing, e.t.c.);
3. training of specialists (lack of theoretical and practical basis, lack of qualified staff, attraction of young scientists);
4. third-party user aquisition and organisation of their work;
5. technology transfer and commercialization (promotion of scientific developments, transfer of intellectual property rights, attraction of industrial partners e.t.c.);
6. metrological support (standardization, certification, accreditation, etc.);
7. networking and international cooperation (cooperation with third-party CCUs, with megascience projects, involvement in international programs etc.

The distribution of responses according to the identified groups of problems is presented in Figure 7. Figure 8 shows the distribution of the responses across different categories of respondents.
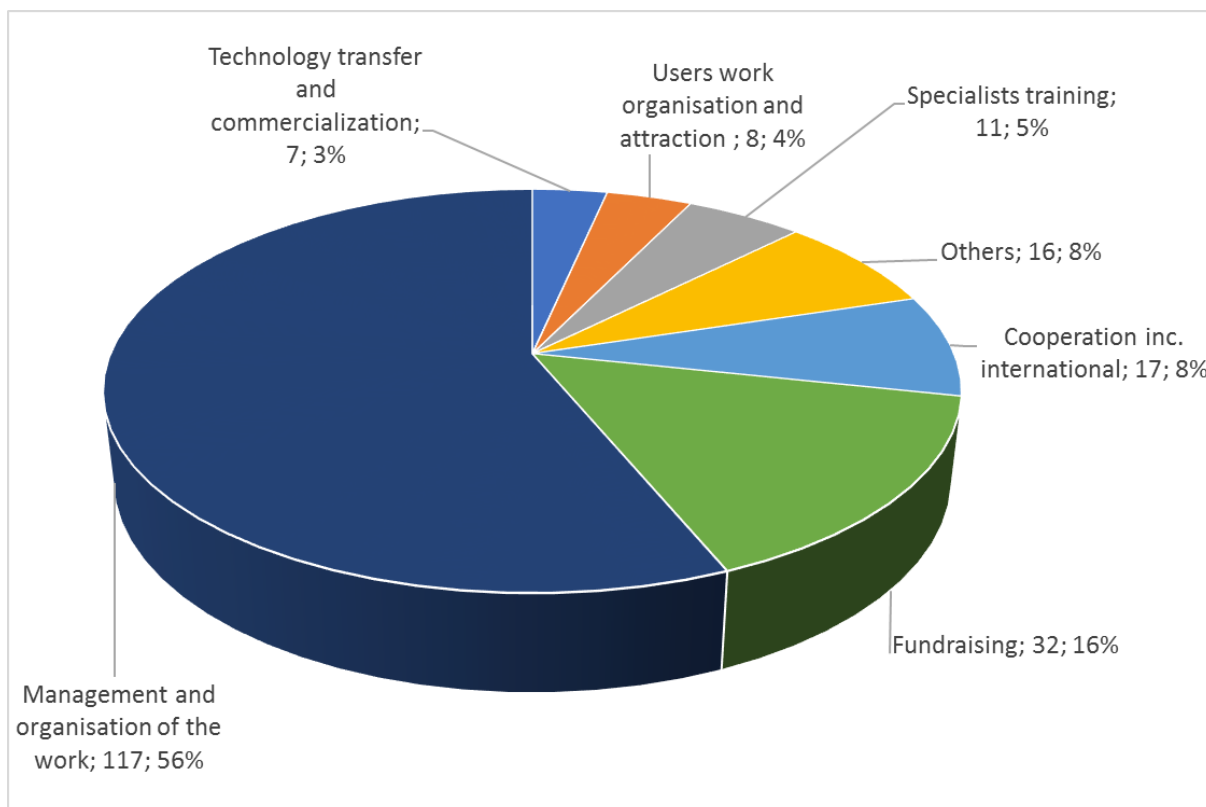
Fig. 7 - Distribution of responses according to the identified groups of problems
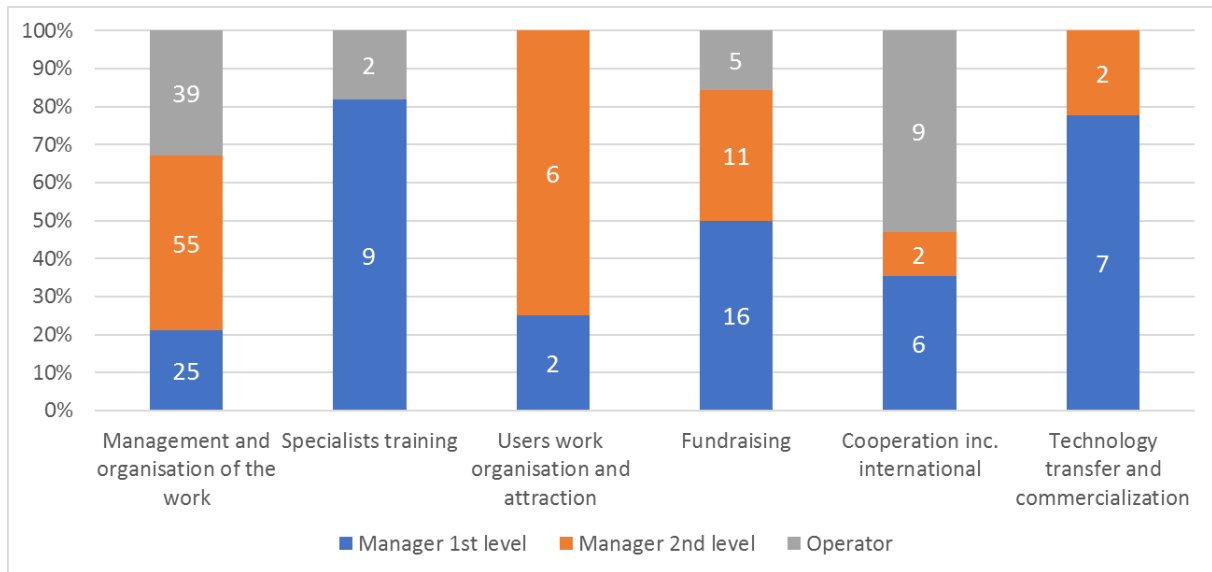
Fig. 8 – Distribution of the responses across different categories of respondents

The problem of management and organization of workflow was recognized by all three categories of respondents approximately at the same level. Technology transfer and commercialization was mostly the challenge for managers of the 1st level. Problem of third-party user aquisition and organizing their work mostly recognized by managers of the 2nd level. Operators identified problems in establishing networking and international cooperation. Fundraising problems were approximately of the same level for the managers at different levels, but rarely appeared in the answers of operators.
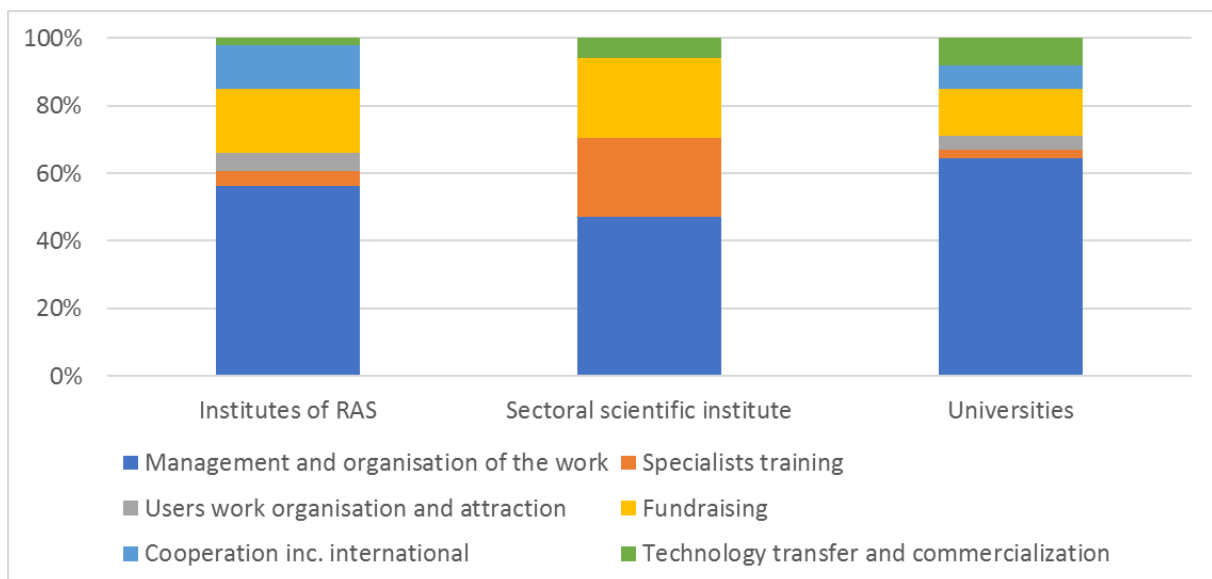
Fig. 9 - Distribution of the responses across different type of organizations
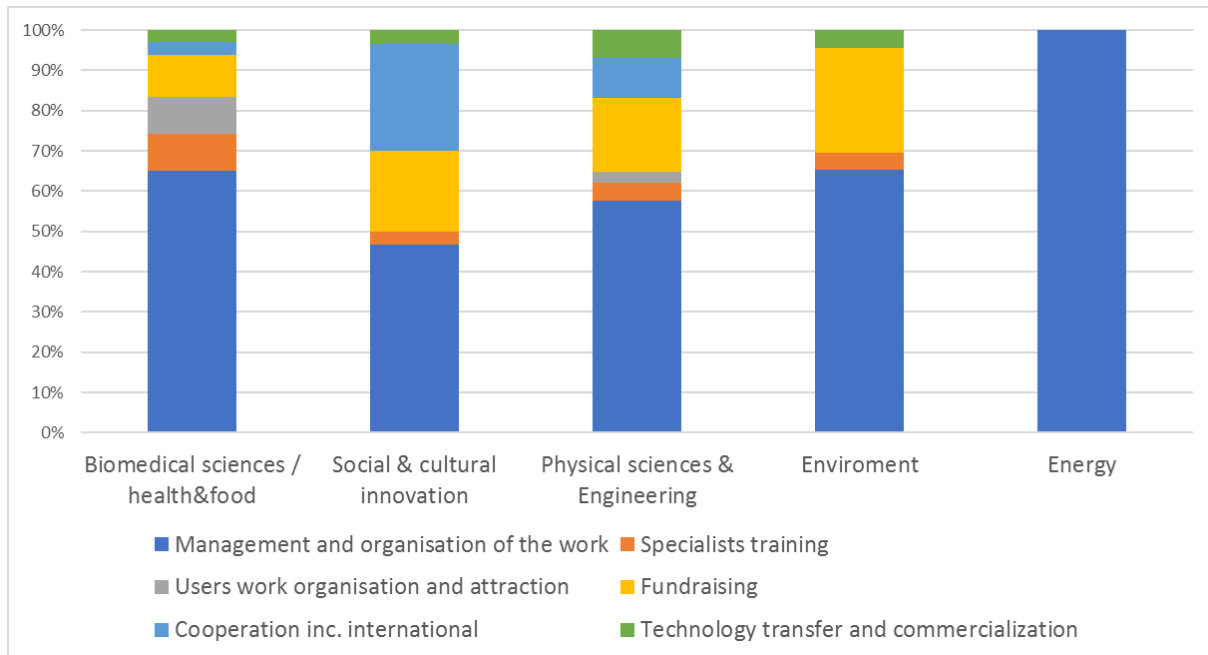
Fig. 10 - Distribution of the responses across different type of thematic domains
Results of self-assessment of knowledge/skills in the items relevant to different aspects of managing research infrastructures

4.3. Results of self-assessment of knowledge/skills in the items relevant to different aspects of managing research infrastructures

4.3.1. Question 1. Governance and Organisation

176 of 184 respondents answered to the question. The distribution of answers by thematic domains, positions of respondents and types of organizations is shown in Figures 11-13.

The most common answer was *3. «a little knowledge/skill but considerable development required»*: 90 of 176 respondents (51%). The share of answer *1«this competency is not applicable to my job»* and answer *2. «no knowledge/skill»* was 32 answers (18%).

The share of answer *3* varies within thematic domains from 44% for Social Sciences and Humanities to 80% for Energy domain.

The distribution of answers within thematic domains shows the predominance of answers with low competencies within the Environmental sciences domain (41%); in the remaining thematic domains, the share of answers ranged from 0% (for Energy) to 14% (for Physical sciences and engineering).

The distribution of answers by type of respondents' position (Figure 12) shows that basically the answer*1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* were often submitted by operators. The share of answer *4. «good level of knowledge/skill displayed, with a little development required»* increased from operators through managers at 2nd level to managers at the 1st level (21, 32 and 50%, respectively).

The distribution of answers by organization type (Figure 13) showed that 25% of answers *1. «this competency is not applicable to my job"* and *2. "no knowledge/skill»* were submitted by RAS representatives: the number of the latter was the largest of all organizations (Research centers - 5 %, Universities - 15%). The answers *3. «a little knowledge/skill but considerable development required»* constituted 48, 67 and 46% among the RAS representatives, research centers and Universities, respectively. The share of answers *4. «good level of knowledge/skill displayed, with a little development required»* and *5. «fully knowledgeable/skilled – no/very little development required»* constituted 26, 27 and 37% for RAS, research centers and Universities, respectively.

Thus, the competences in Governance and Organisation of RIs were not identified for Environmental sciences domain as well for operators and representatives of RAS. A large number of answers *3. «a little knowledge/skill but considerable development required»* indicates the need to develop these skills.

Fig. 11 – Distribution of respondents' answers within thematic domains to the question 1: Governance and Organisation

Fig. 12 - Distribution of respondents' answers depending on the position held to the question 1: Governance and Organisation

Fig. 13 - Distribution of respondents' answers depending on the type of the represented organization to the question 1: Governance and Organisation

4.3.2. Question 2. Strategic Management and Business Innovation

174 of 184 respondents answered to the question. The distribution of answers by thematic domains, positions of respondents and type of organizations is shown in Figures 14-16.

The most common answer was *3. «a little knowledge/skill but considerable development required»*: 88 from 174 (51%). The share of answers *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* was 58 answers (33%).

The share of answers *3* varies within thematic domains from 39% for Environmental sciences to 100% for Energy. The distribution of answers within thematic domains shows the predominance of answer 3 within the field of Environmental sciences - 58%, in the remaining thematic domains, the share of answer3 ranged from 0% (for Energy) to 33% (for Physical sciences and engineering).

The distribution of answers by type of respondents position (Figure 15) shows that basically the answers *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* were submitted by operators. The number of answer *4. «good level of knowledge/skill displayed, with a little development required»* increased from operators through 2nd level managers to 1st level managers (9, 15 and 31%, respectively).

The distribution of answers by organization type (Figure 16) shows that 46% of answers *1. «this competency is not applicable to my job* and *2. no knowledge/skill»* were presented among RAS representatives; the number of the latter was the largest of all organizations (research center - 22 %, university - 23%). The answer *3. «a little knowledge/skill but considerable development required»* constituted 45, 67 and 51% among the RAS representatives, research center and universities, respectively. The share of answers *4. «good level of knowledge/skill displayed, with a little development required»* and *5. «fully knowledgeable/skilled – no/very little development required»* was 8, 11 and 26% for RAS, research centers and universities, respectively.

Thus, the competences in Strategic Management and Business Innovation of RIs were not identified for Environmental sciences domain and to a greater extent for operators and also representatives of RAS. A large number of answer *3. «a little knowledge/skill but considerable development required»* indicates the need to develop these skills.
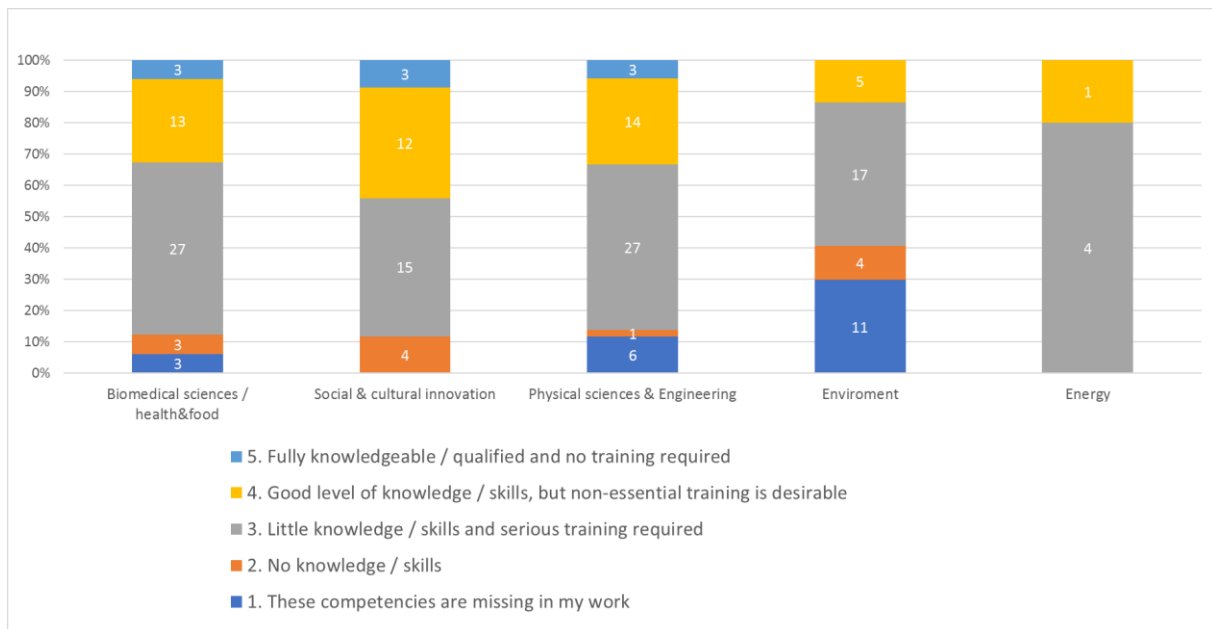
Fig. 14 – Distribution of respondents' answers within thematic domains to the question 2: Strategic Management and Business Innovation
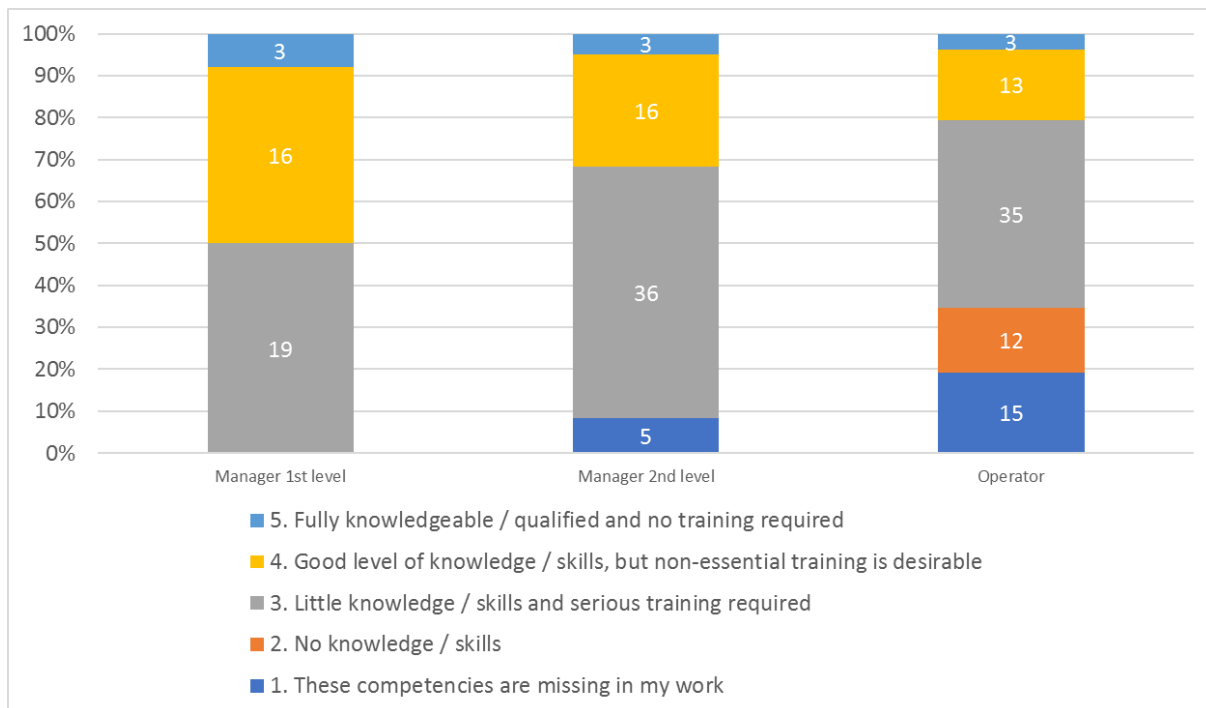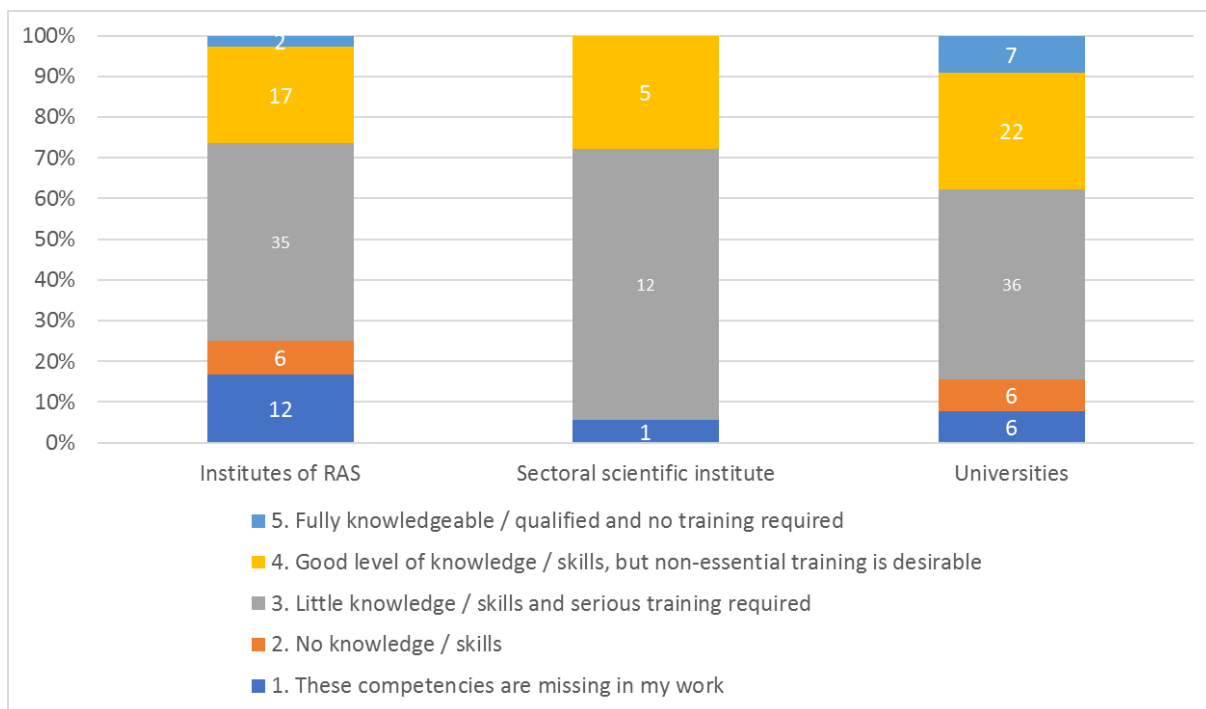

Fig. 15 - Distribution of respondents' answers depending on the position held to the question 2: Strategic Management and Business Innovation

Fig. 16 - Distribution of respondents' answers depending on the type of the represented organization to the question 2: Strategic Management and Business Innovation

4.3.3. Question 3 Financial Management

173 of 184 respondents answered to the question. The distribution of answers by thematic domains, positions of respondents and type of organizations is shown in Figures 17-19.

The most common answer is *3. «a little knowledge/skill but considerable development required»*: 78 from 172 (45%). The share of answers *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* was 67 answers (39%).

The part of answers *3* varies within thematic domains from 32% for Social sciences and humanities to 80% for Energy. The distribution of answers within thematic domains shows the predominance of answer 3 within the field of Environmental sciences 64%, in the remaining thematic domains, the share of answers ranged from 19% (for Physical sciences and engineering) to 38% (for Biomedical sciences/health and food).

The distribution of answers by type of position (Figure 18) shows that basically the answers *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* submitted by the operators. The maximum number of answer*4. «good level of knowledge/skill displayed, with a little development required»* was submitted by 1st level managers, while for 2nd level managers and operators the share was ~ 12%.

The distribution of answers by organization type (Figure 19) shows that 48% of answers *1. «this competency is not applicable to my job"* and *2. "no knowledge/skill»* were found

among RAS representatives; the number of the latter was the largest of all organizations (research center - 28 %, university - 33%). The answer *3. «a little knowledge/skill but considerable development required»* constituted 41, 67 and 43% among the RAS representatives, research center and universities, respectively. The part of answers *4. «good level of knowledge/skill displayed, with a little development required»* and *5. «fully knowledgeable/skilled – no/very little development required»* constituted 11, 6 and 24% for RAS, research center and universities, respectively. Thus, the competences in this domain were not identified in Environmental sciences domain and to a greater extent for operators and also representatives of RAS. The lurhe number of answer *3. «a little knowledge/skill but considerable development required»* indicates the need to develop these skills.
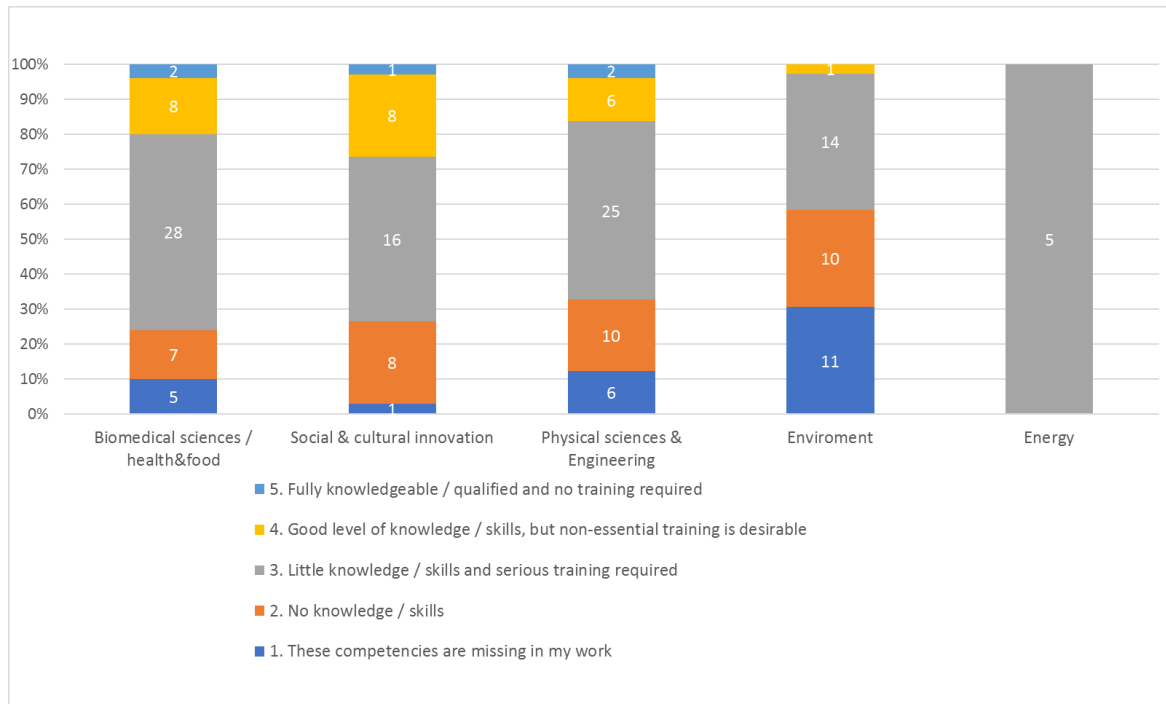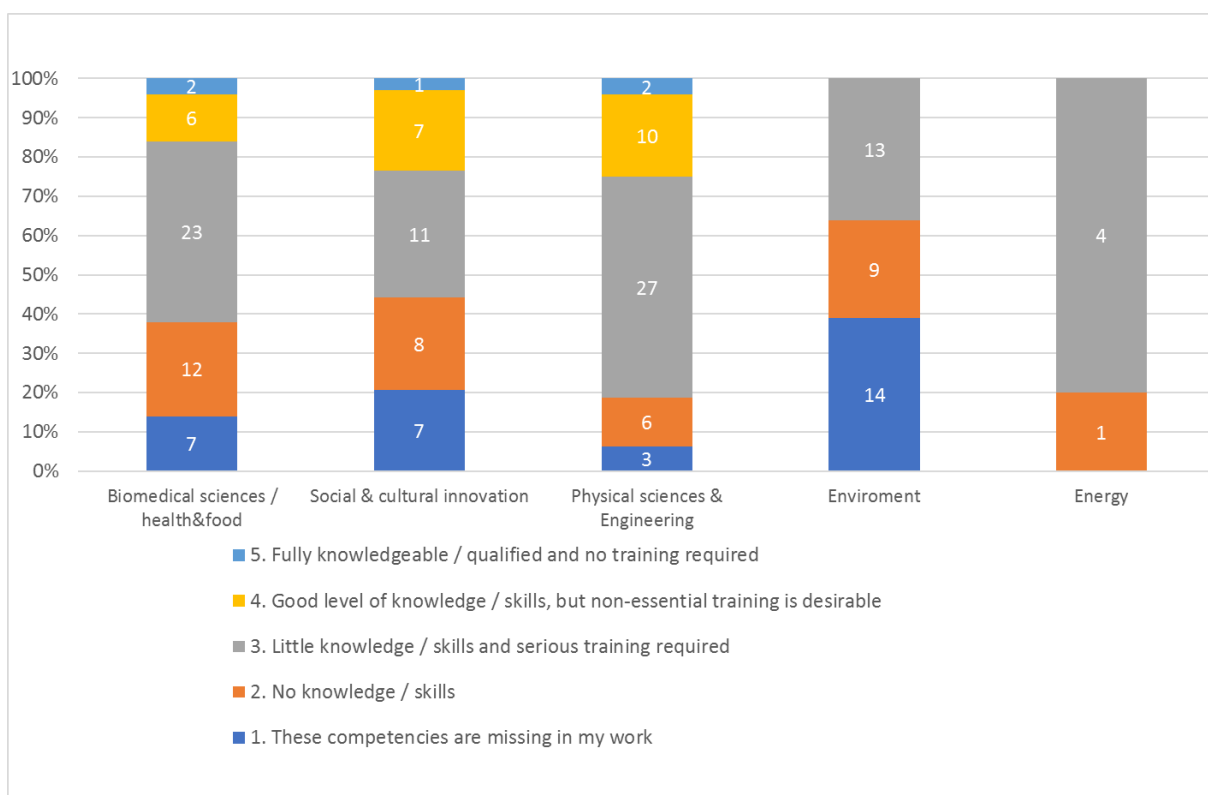

Fig. 17 – Distribution of respondents' answers within thematic domains to the question 3: Financial Management

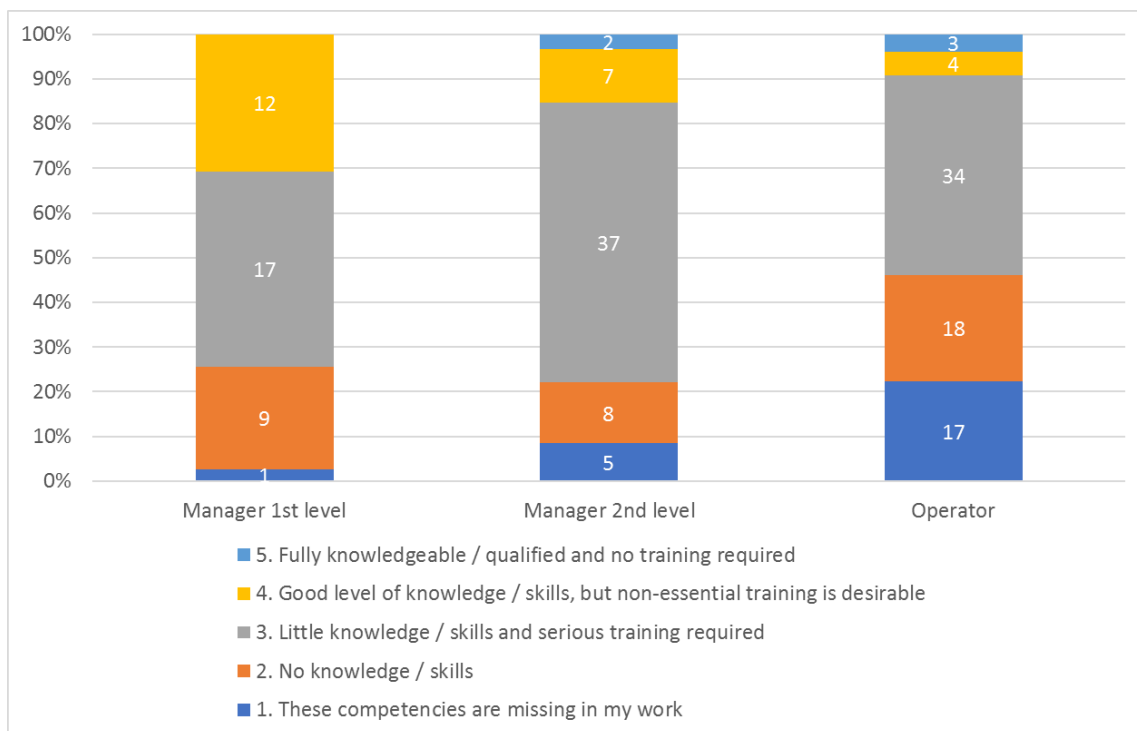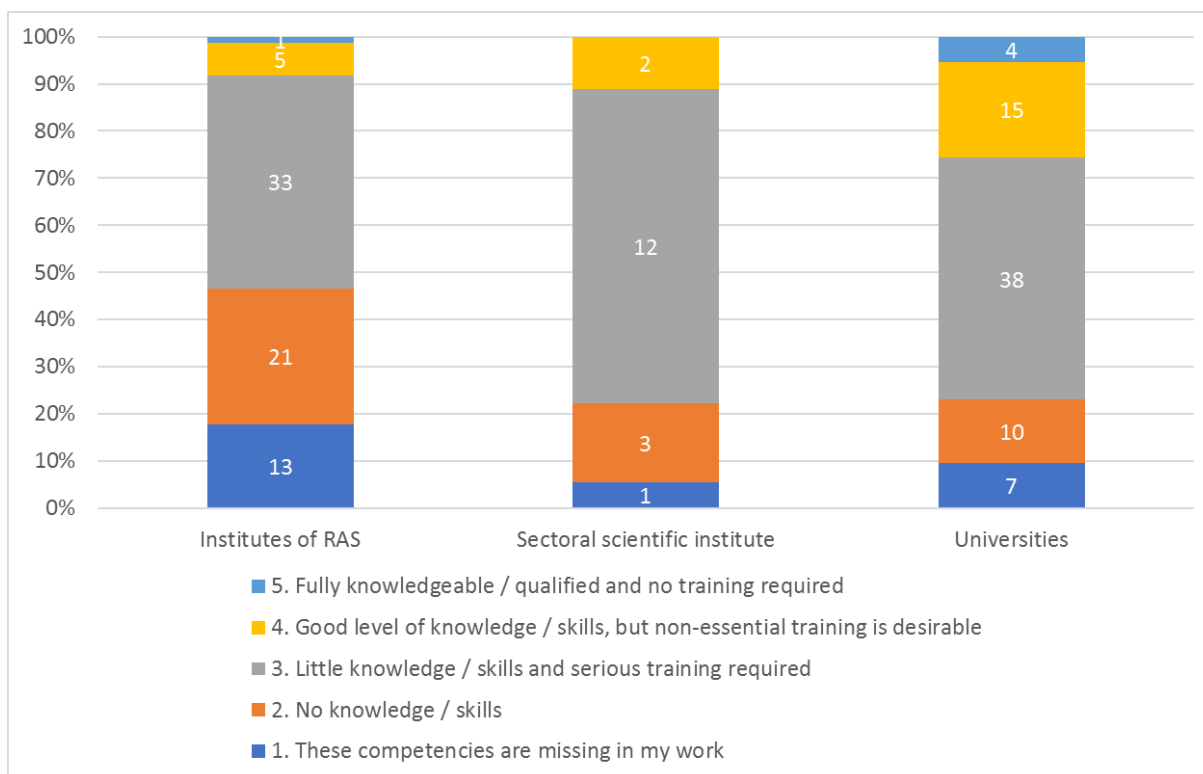Fig. 18 - Distribution of respondents' answers depending on the position held to the question 3: Financial Management

Fig. 19 - Distribution of respondents' answers depending on the type of the represented organization to the question 3: Financial Management

4.3.4. Question 4. Developing a sustainable funding model for your RI

174 of 184 respondents answeredto the question. The distribution of answers by thematic domains, positions of respondents and types of organizations is shown in Figures 20-22.

The most common answer is *3. «a little knowledge/skill but considerable development required»*: 80 from 174 (46%). The share of answers *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* was 70 answers (40%).

The share of answer *3* varies within thematic domains from 38% for Physical sciences and engineering to 80% for Energy. The distribution of answers within thematic domains shows the predominance of answers 2 and 3 in the field of Environmental sciences - 53%, in the remaining thematic domains, the share of answers ranged from 20% (for Energy) to 39% (for Physical sciences & Engineering).

The distribution of answers by type of position (Figure 21) shows that basically the answers *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* submitted by the operators. The large number of answer *4. «good level of knowledge/skill displayed, with a little development required»* were submitted by 1st level managers, while for 2nd level managers and operators the share was ~12 and 8% respectively.

The distribution of answers by organization type (Figure 22) shows that 51% of answer *1. «this competency is not applicable to my job* and *2. no knowledge/skill»* was presented among RAS representatives; the number of the latter was the largest of all organizations (research center - 22 %, university - 32%). The answer *3. «a little knowledge/skill but considerable development required»* constituted 42, 66 and 46% among the RAS representatives, research center and universities, respectively. The share of answer *4. «good level of knowledge/skill displayed, with a little development required»* and *5. «fully knowledgeable/skilled – no/very little development required»* constituted 7, 11 and 21% for RAS, research center and universities, respectively.

Thus, the competence nin this domain was identified in Environmental sciences domain and to a greater extent for operators and also representatives of RAS. The large number of answer *3. «a little knowledge/skill but considerable development required»* indicates the need to develop these skills.

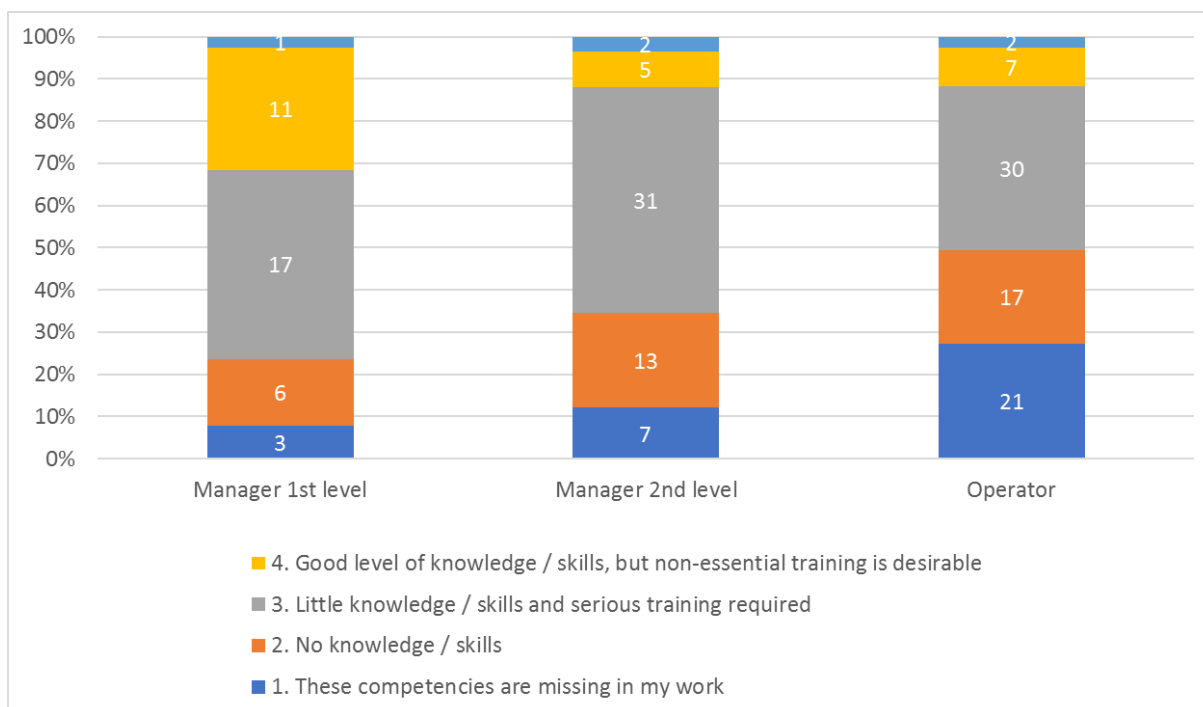Fig. 20 - Distribution of respondents' answers within thematic domains to the question 4:
Developing a sustainable funding model for your RI
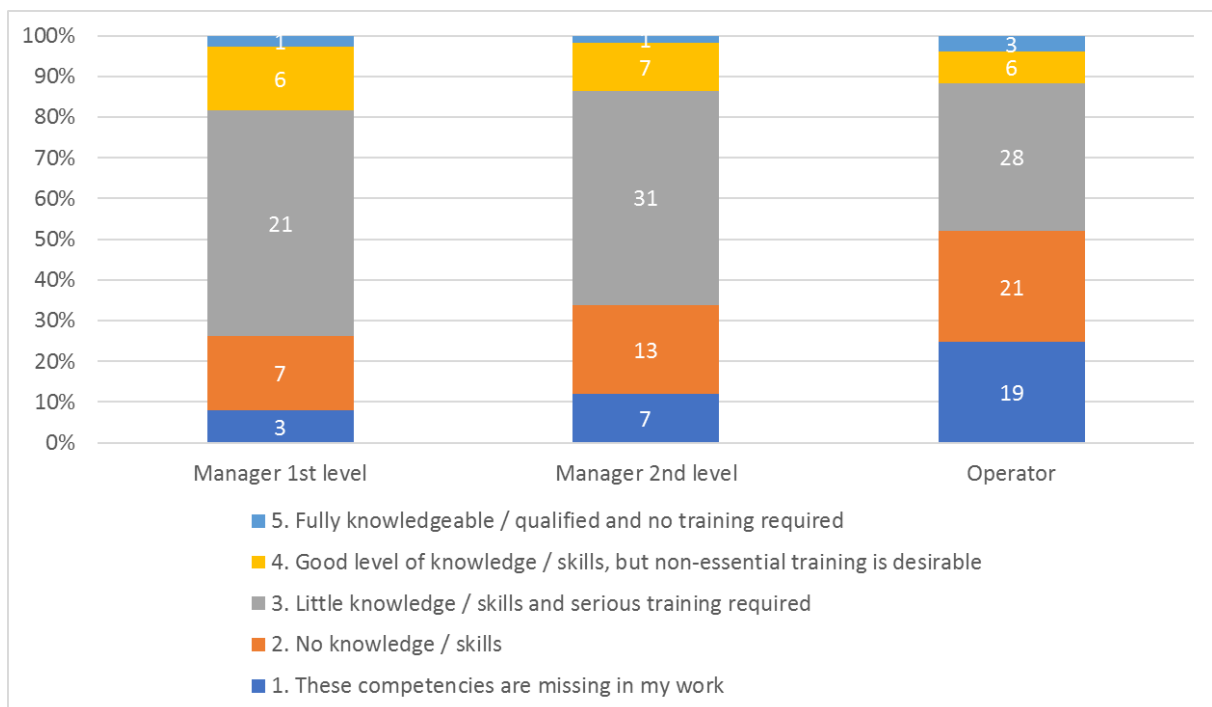
Fig. 21 - Distribution of respondents' answers depending on the position held to the question
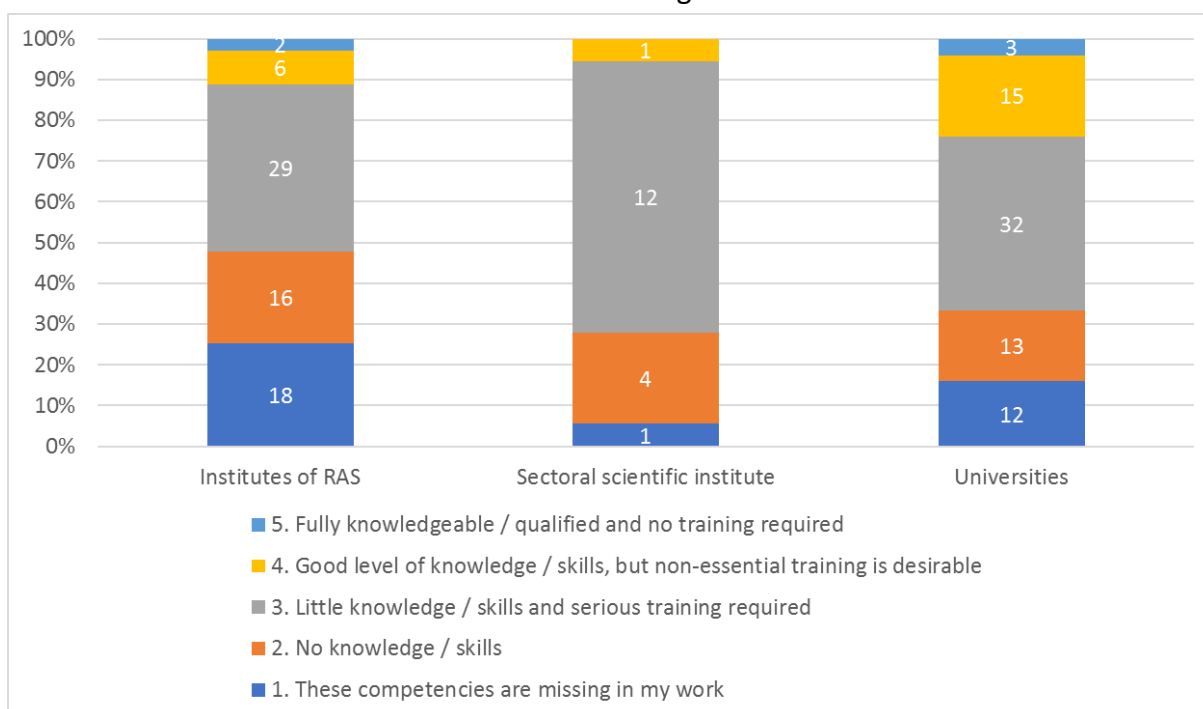4: Developing a sustainable funding model for your RI

Fig. 22 - Distribution of respondents' answers depending on the type of the represented organization to the question 4: Developing a sustainable funding model for your RI

4.3.5. Question 5. Leadership and Team Management

174 respondents from 184 responded to the question. The distribution of answers by thematic domains, positions of respondents and types of organizations is shown in Figures 23-25.

The most common answer is 3. «a little knowledge/skill but considerable development required»: 83 from 174 (48%). The total share of answers 1. «this competency is not applicable to my job» and 2. «no knowledge/skill» was 29 answers (16%).

The part of answers *3* varies within thematic domains from 35% for Social sciences and humanities to 80% for Energy. The distribution of answers within thematic domains shows the predominance of answers with low competencies within the field of Environmental sciences 32%, in the remaining thematic domains, the share of answers ranges from 0% (for Energy) to 14% (for Physical sciences and engineering).

The distribution of answers by type of position (Figure 24) shows that basically the answers are *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* accounted for by the operators. The answers *4. «good level of knowledge/skill displayed, with a little development required»* its maximum values in the answers of 1st level Managers – 63 %, while for 2nd level Managers and operators it is at the level of 36 and 22%.

The distribution of answers by organization type (Figure 25) shows that 20% of answers *1. «this competency is not applicable to my job* and *2. no knowledge/skill»* found among RAS representatives, which is the highest value among all organizations (research center - 6 %,

university - 17%). The answers *3. «a little knowledge/skill but considerable development required»* constitute 53, 78 and 35% among the RAS representatives, research center and universities, respectively. The part of answers *4. «good level of knowledge/skill displayed, with a little development required»* and *5. «fully knowledgeable/skilled – no/very little development required»* collected to 27, 17 and 48% for RAS, research center and universities, respectively.

Thus, the competence of this question is absence higher in Environmental sciences domain to a greater extent from operators and also representatives of RAS. The big part of answer *3. «a little knowledge/skill but considerable development required»* indicates the need for training for this competence.

Fig. 23 - Distribution of respondents' answers within thematic domains to the question 5: Leadership and Team Management

Fig. 24 - Distribution of respondents' answers depending on the position held to the question 5: Leadership and Team Management

Fig. 25 - Distribution of respondents' answers depending on the type of the represented organization to the question 5: Leadership and Team Management

4.3.6. Question 6. Service Management

174 of 184 respondents answered to the question. The distribution of answers by thematic domains, positions of respondents and types of organizations is shown in Figures 26-28.

The most common answer is *3. «a little knowledge/skill but considerable development required»*: 78 from 174 (45%). The share of answer *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* was 66 answers (38%).

The share of answer *3* varies within thematic domains from 37% for Social sciences and humanities to 60% for Energy. The distribution of answers within thematic domains shows the predominance of answer 3 \ within the field of Environmental sciences 52%, in the remaining thematic domains, the share of answers ranged from 32% (for Biomedical sciences/health and food) to 40% (for Energy).

The distribution of answers by type of position (Figure 27) shows that basically the answers *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* submitted by the operators. The answer *4. «good level of knowledge/skill displayed, with a little development required»* was found in feedback of the 1st level managers and the 2nd level managers – 22 %, while for operators it was ~13%.

The distribution of answers by organization type (Figure 28) shows that 45% of answers *1. «this competency is not applicable to my job"* and *2. "no knowledge/skill»* were found among RAS representatives; the number of the latter was the largest of all organizations (research center - 33 %, university - 34%). The answer *3. «a little knowledge/skill but considerable development required»* constituted 43, 44 and 45% among the RAS representatives, research center and universities, respectively. The share of answers *4. «good level of knowledge/skill displayed, with a little development required»* and *5. «fully knowledgeable/skilled – no/very little development required»* was ~ 10, 22 and 21% for RAS, research center and universities, respectively.

Thus, the expertise in this domain was not identified in Environmental sciences domain and to a greater extent for operators and also representatives of RAS. The large number of answer *3. «a little knowledge/skill but considerable development required»* indicates the need to develop these skills.
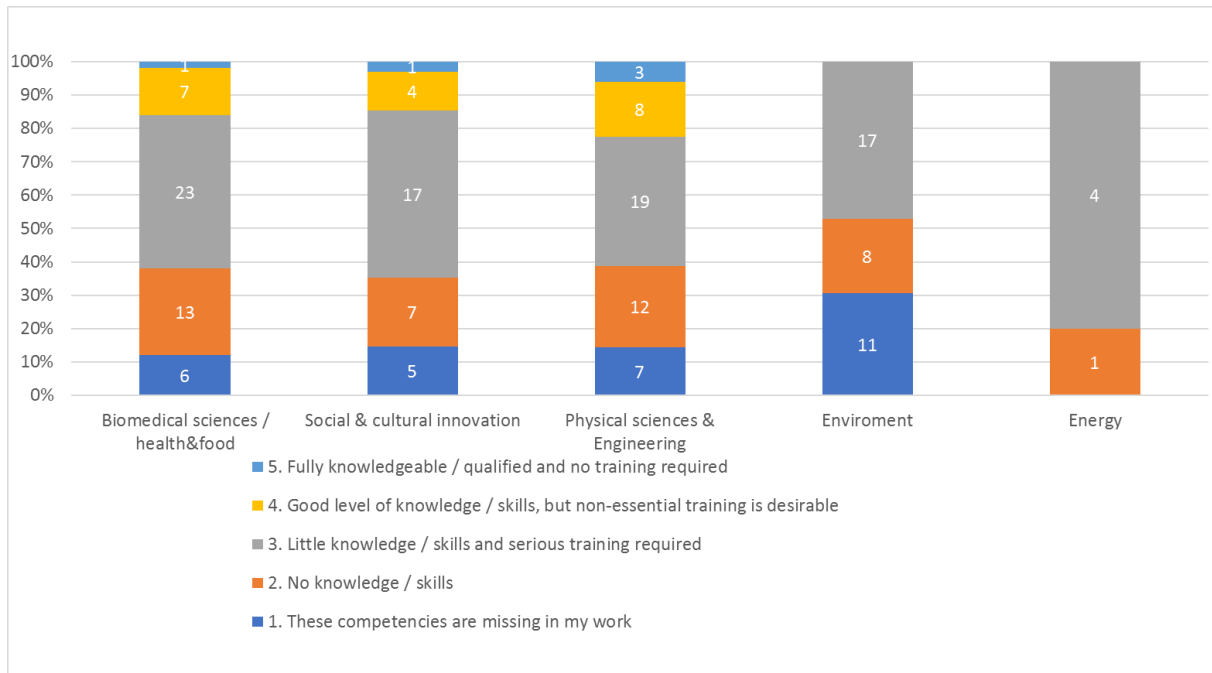
Fig. 26 - Distribution of respondents' answers within thematic domains to the question 6: Service Management
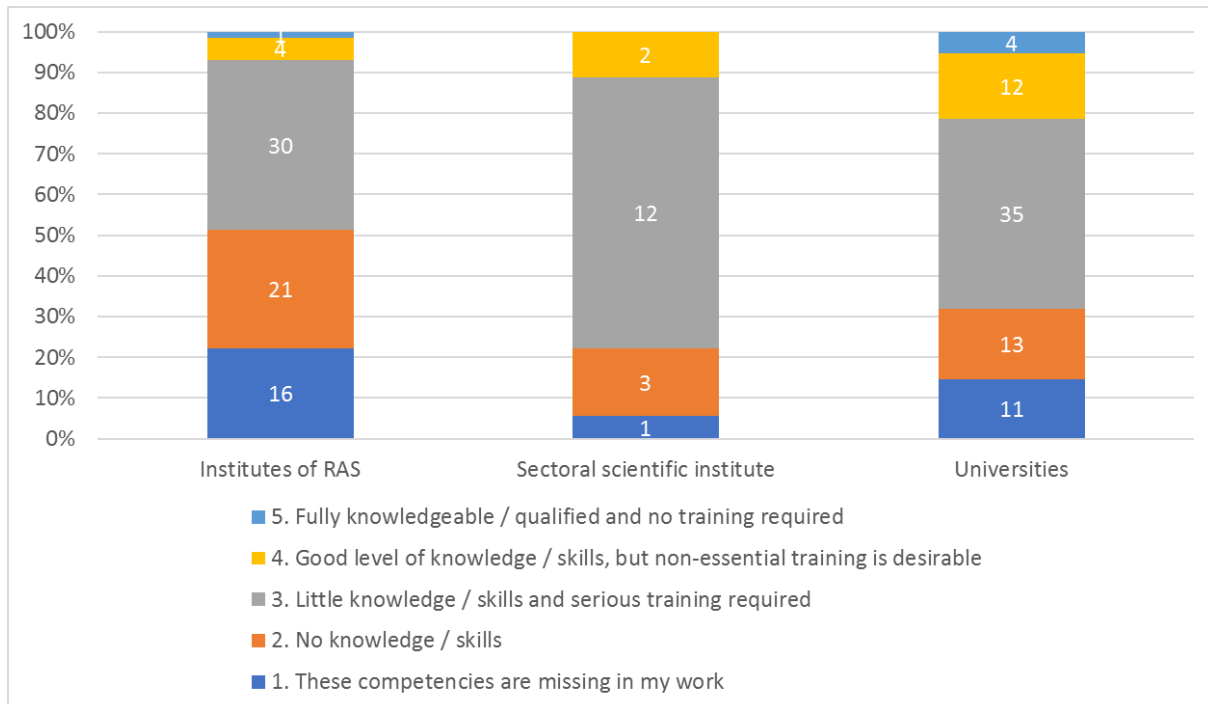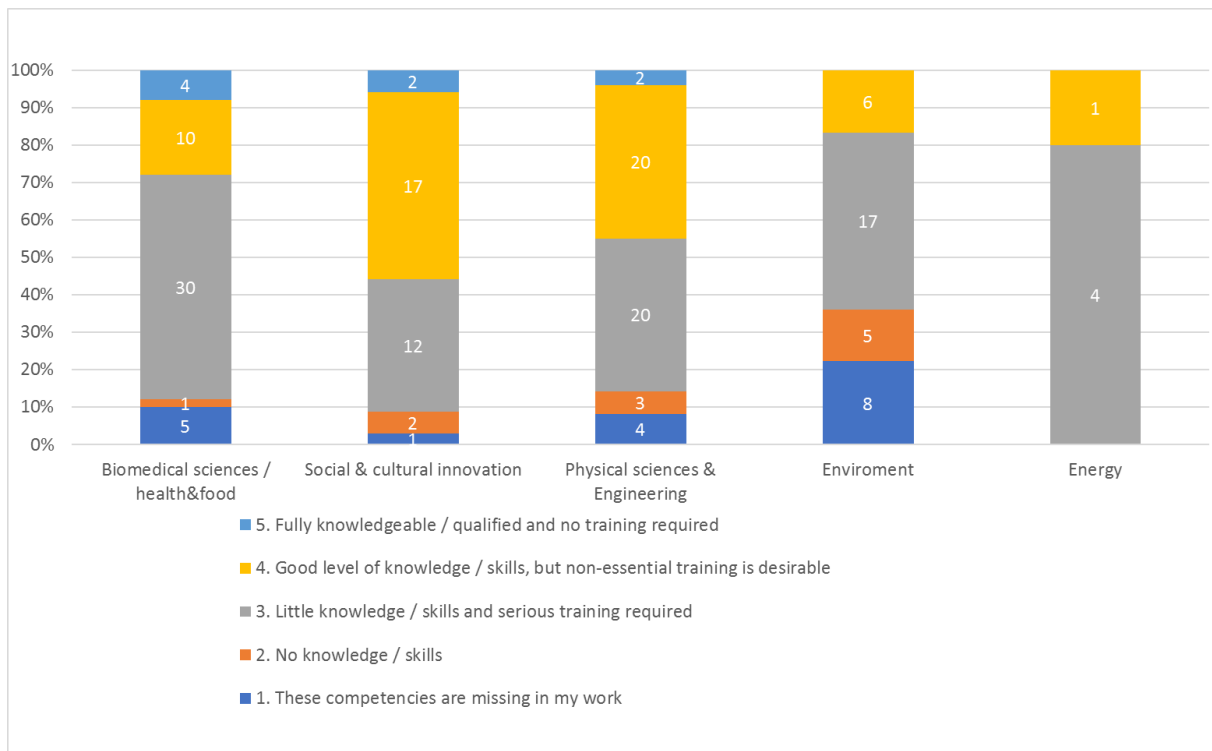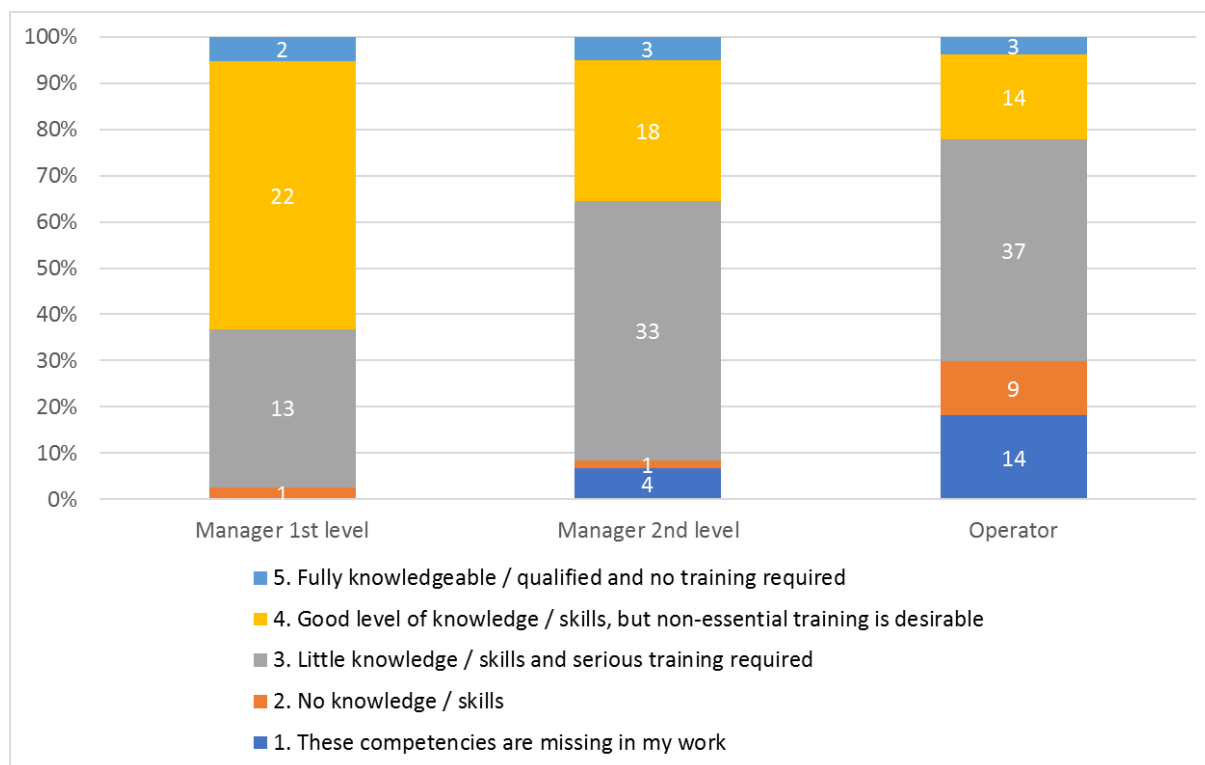

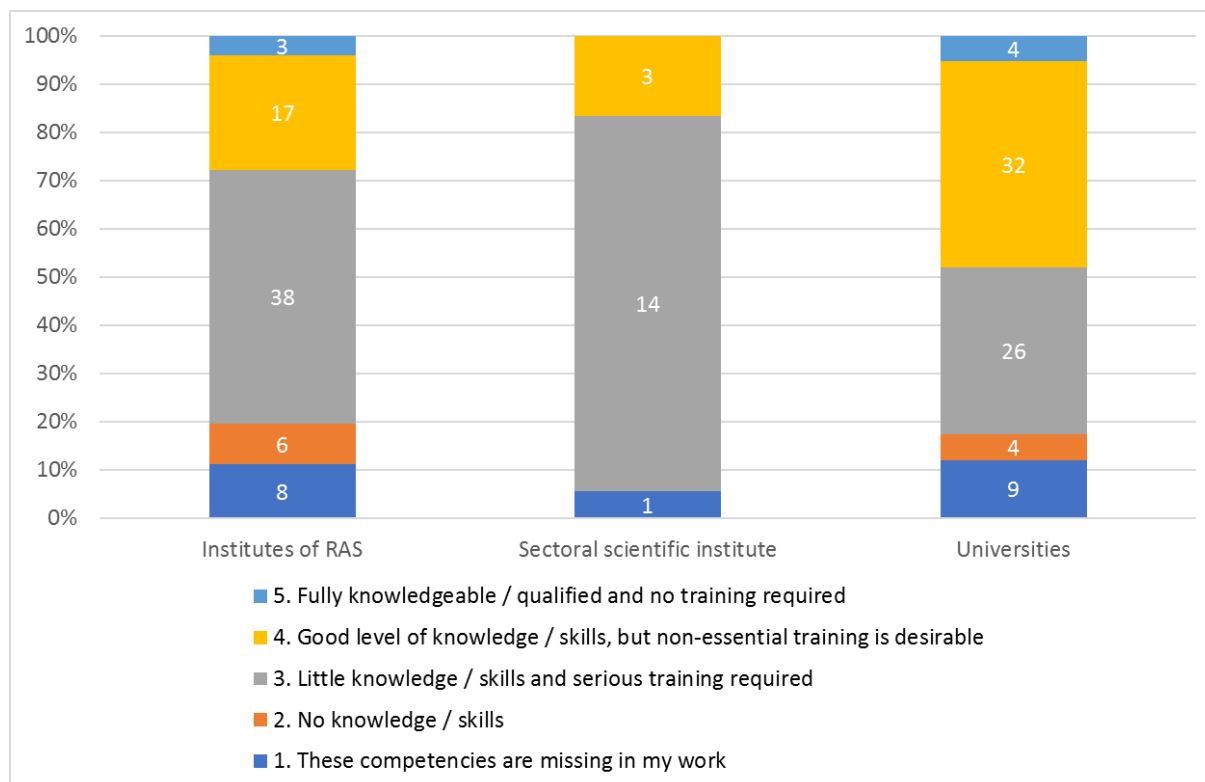Fig. 27 - Distribution of respondents' answers depending on the position held to the question 6: Service Management

Fig. 28 - Distribution of respondents' answers depending on the type of the represented organization to the question 6: Service Management

4.3.7. Question 7 International Law and Compliance

174 of 184 respondents answered to the question. The distribution of answers by thematic domains, positions of respondents and types of organizations is shown in Figures 29-31.

The most common answer is *3. «a little knowledge/skill but considerable development required»*: 87 from 174 (50%). . The share of answers *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* was 68 answers (39%).

The share of answers *3* varies within thematic domains from 44% for Social sciences and humanities to 80% for Energy. The distribution of answers within thematic domains shows the predominance of answer3 within the field of Environmental sciences 53%, in the remaining thematic domains, the share of answers ranged from 0% (for Energy) to 44% (for Social sciences and humanities).

The distribution of answers by type of position (Figure 30) shows that basically the answers *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* were submitted by the 2nd level managers and operators. The answer *4. «good level of knowledge/skill displayed, with a little development required»* was presented in feedback of 2nd level managers, while for the 1st level maagers and operators it was ~ 8 and 11% .

The distribution of answers by organization type (Figure 31) shows that 44% of answers *1. «this competency is not applicable to my job* and *2. no knowledge/skill»* were presented

among RAS representatives; the number of the latter was the largest of all organizations (research center - 17 %, university - 29%). The answer *3. «a little knowledge/skill but considerable development required»* constituted 53, 76 and 43% among the RAS representatives, research center and universities, respectively. The share of answers *4. «good level of knowledge/skill displayed, with a little development required»* and *5. «fully knowledgeable/skilled – no/very little development required»* was ~ 4, 4 and 17% for RAS, research center and universities, respectively.

Thus, the expertise in this domain was not identified in Environmental sciences domain and to a greater extent for operators and also representatives of RAS. The large number of answer *3. «a little knowledge/skill but considerable development required»* indicates the need to develop these skills.

Fig. 29 - Distribution of respondents' answers within thematic domains to the question 7: International Law and Compliance

Fig. 30 - Distribution of respondents' answers depending on the position held to the question 7: International Law and Compliance

Fig. 31 - Distribution of respondents' answers depending on the type of the represented organization to the question 7: International Law and Compliance

4.3.8. Question 8 Infrastructure and Resource Management

174 of 184 respondents answered to the question. The distribution of answers by thematic domains, positions of respondents and types of organizations is shown in Figures 29-31.

The most common answer is *3. «a little knowledge/skill but considerable development required»*: 87 from 174 (50%). . The share of answers *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* was 68 answers (39%).

The share of answers *3* varies within thematic domains from 44% for Social sciences and humanities to 80% for Energy. The distribution of answers within thematic domains shows the predominance of answer3 within the field of Environmental sciences 53%, in the remaining thematic domains, the share of answers ranged from 0% (for Energy) to 44% (for Social sciences and humanities).

The distribution of answers by type of position (Figure 30) shows that basically the answers *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill» were* submitted by the 2nd level managers and operators. The answer *4. «good level of knowledge/skill displayed, with a little development required»* was presented in feedback of 2nd level managers, while for the 1st level maagers and operators it was ~ 8 and 11% .

The distribution of answers by organization type (Figure 31) shows that 44% of answers *1. «this competency is not applicable to my job* and *2. no knowledge/skill»* were found among RAS representatives; the number of the latter was the largest of all organizations (research center - 17 %, university - 29%). The answer *3. «a little knowledge/skill but considerable development required»* constituted 53, 76 and 43% among the RAS representatives, research center and universities, respectively. The share of answers *4. «good level of knowledge/skill displayed, with a little development required»* and *5. «fully knowledgeable/skilled – no/very little development required»* was ~ 4, 4 and 17% for RAS, research center and universities, respectively.

Thus, the expertise in this domain was not identified in Environmental sciences domain and to a greater extent for operators and also representatives of RAS. The large number of answer *3. «a little knowledge/skill but considerable development required»* indicates the need to develop these skills.
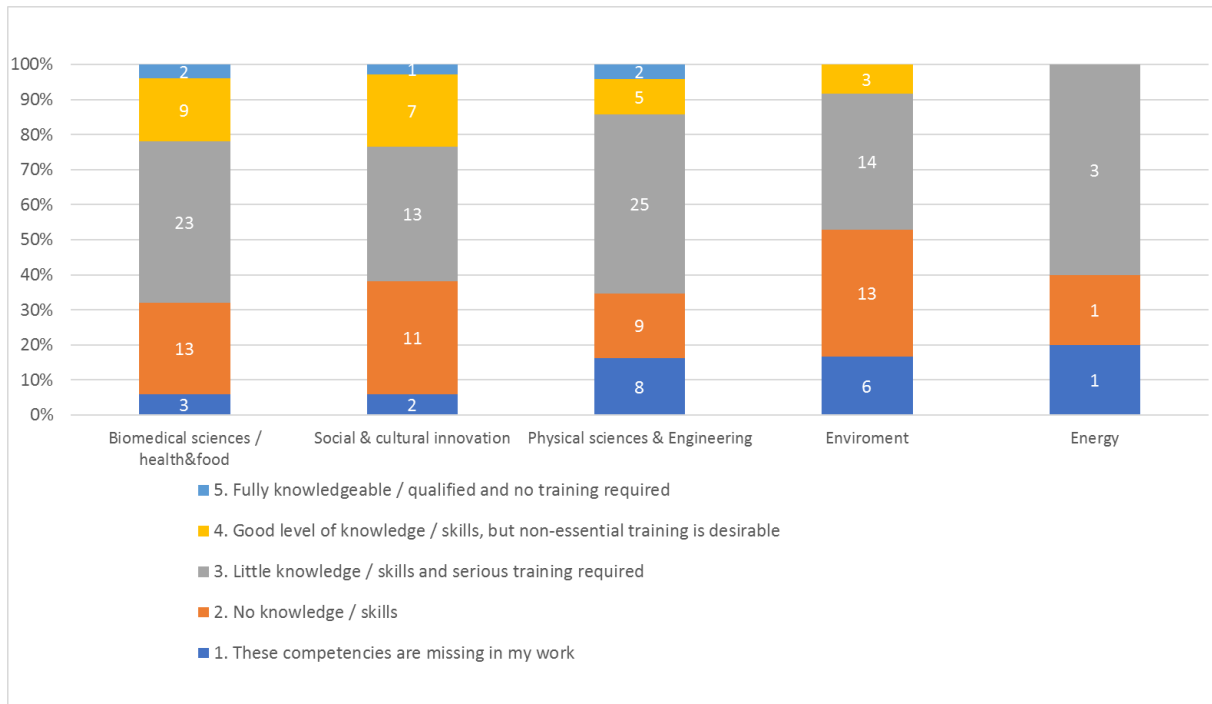
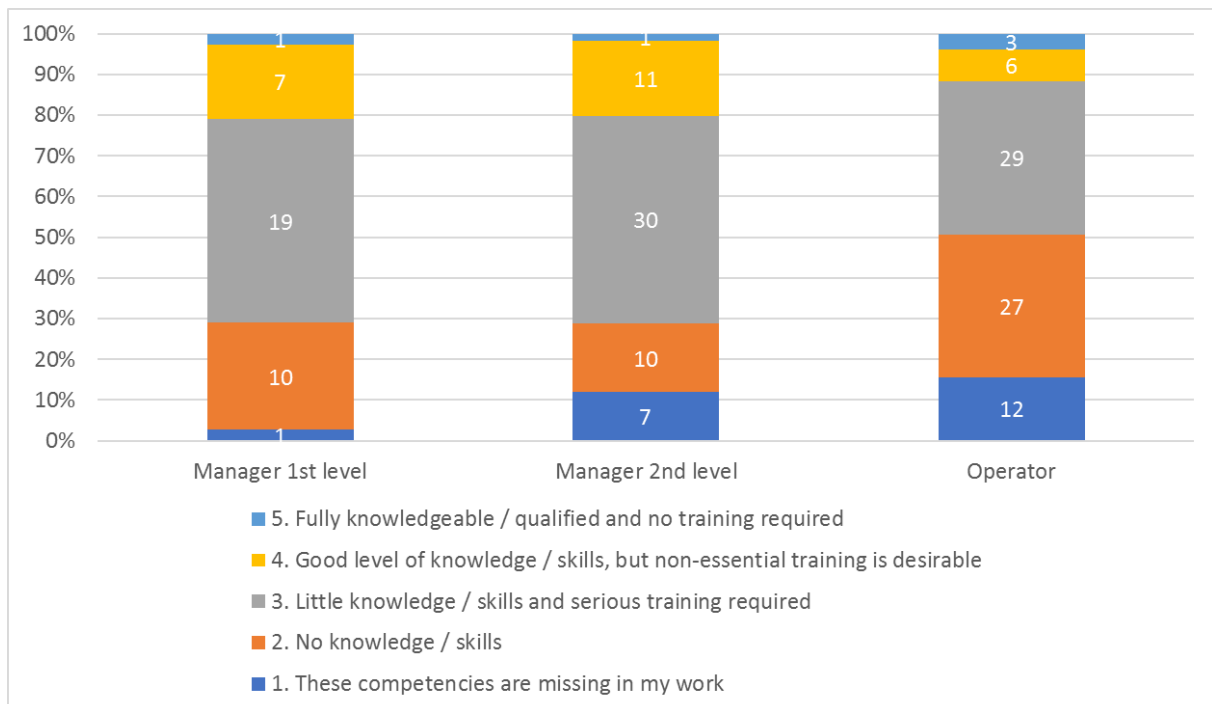Fig. 32 - Distribution of respondents' answers within thematic domains to the question 8: Infrastructure and Resource Management
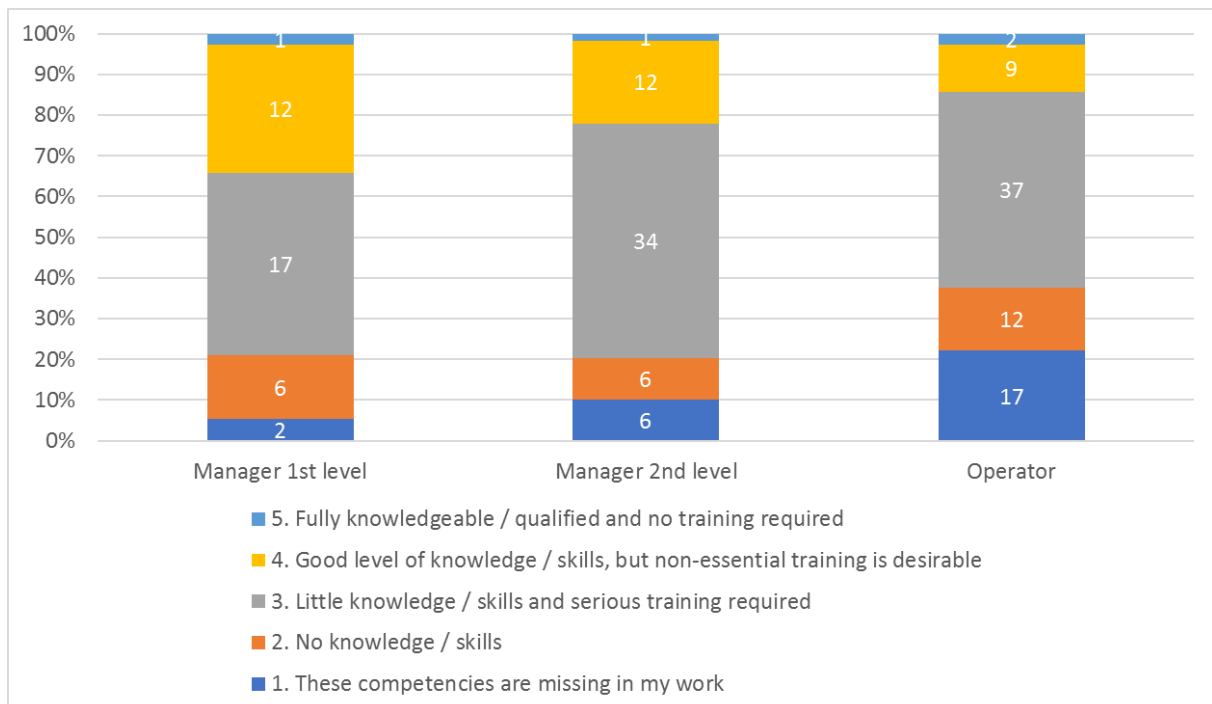
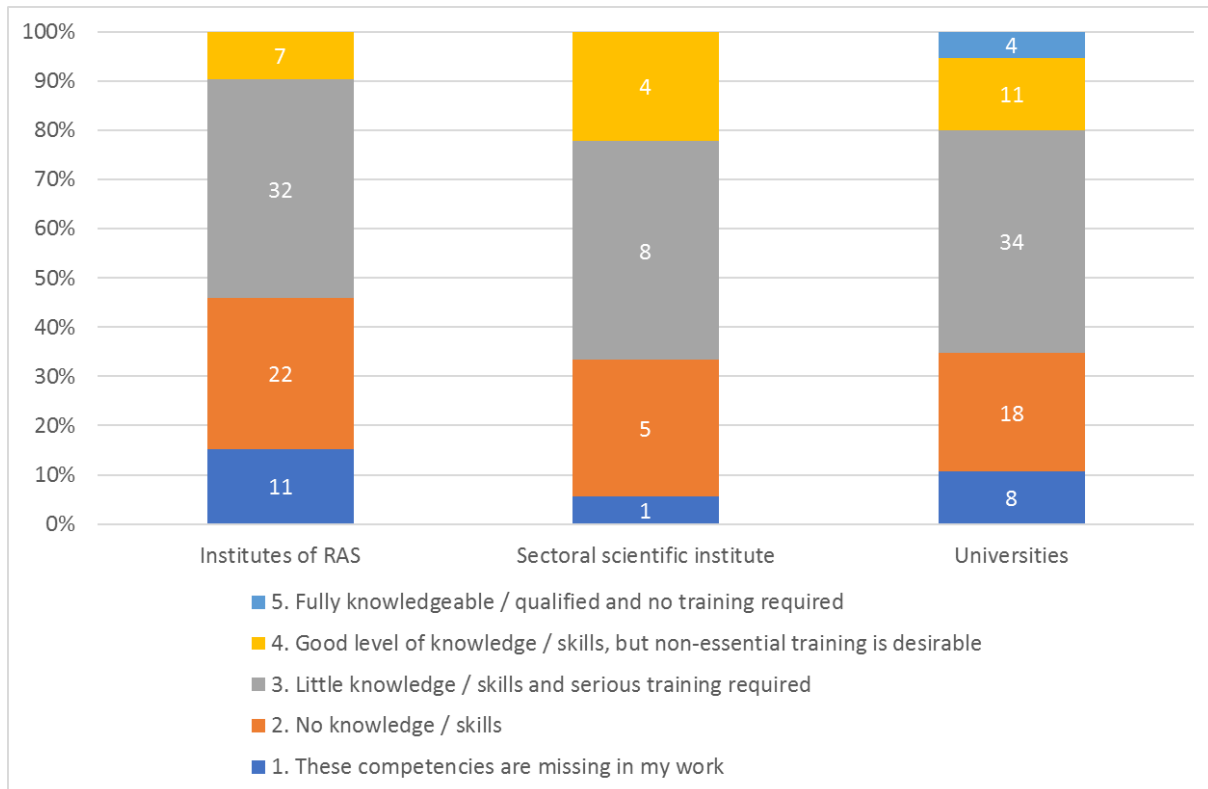Fig. 33 - Distribution of respondents' answers depending on the position held to the question 8: Infrastructure and Resource Management

Fig. 34 - Distribution of respondents' answers depending on the type of the represented organization to the question 8: Infrastructure and Resource Management

4.3.9. Question 9. Raising Awareness

172 of 184 respondents answered to the question. The distribution of answers by thematic domains, positions of respondents and types of organizations is shown in Figures 35-37.

The most common answer is *3. «a little knowledge/skill but considerable development required»*: 93 from 172 (54%). The share of answers *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* was 47 answers (27%).

The share of answer *3* varies within thematic domains from 52% for Physical sciences and engineering to 60% for Energy. The distribution of answers within thematic domains shows the predominance of answer 3 within the field of Environmental sciences 47%, in the remaining thematic domains, the share of answers ranged from 15 % (for Social sciences and humanities) to 30% (for Biomedical sciences/health and food).

The distribution of answers by type of position (Figure 36) shows that basically the answers *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* were submitted by the operators. The answer *4. «good level of knowledge/skill displayed, with a little development required»* was presented in the 1st level managers– 35 %, while for the 2nd level managers and operators the share was ~ 22 and 15%.

The distribution of answers by organization type (Figure 37) shows that 30% of answers *1. «this competency is not applicable to my job* and *2. no knowledge/skill»* was found among University representatives, the number of the latter was the largest of all organizations

(research center - 12 %, RAS - 28%). The answers *3. «a little knowledge/skill but considerable development required»* constituted 61, 61 and 36% among the RAS representatives, research center and universities, respectively. The share of answers *4. «good level of knowledge/skill displayed, with a little development required»* and *5. «fully knowledgeable/skilled – no/very little development required»* was ~ 10, 17 and 34% for RAS, research center and universities, respectively.

Thus, the expertise in this domain was not identified in Environmental sciences domain and to a greater extent for operators and also representatives of RAS. The large number of answer *3. «a little knowledge/skill but considerable development required»* indicates the need to develop these skills
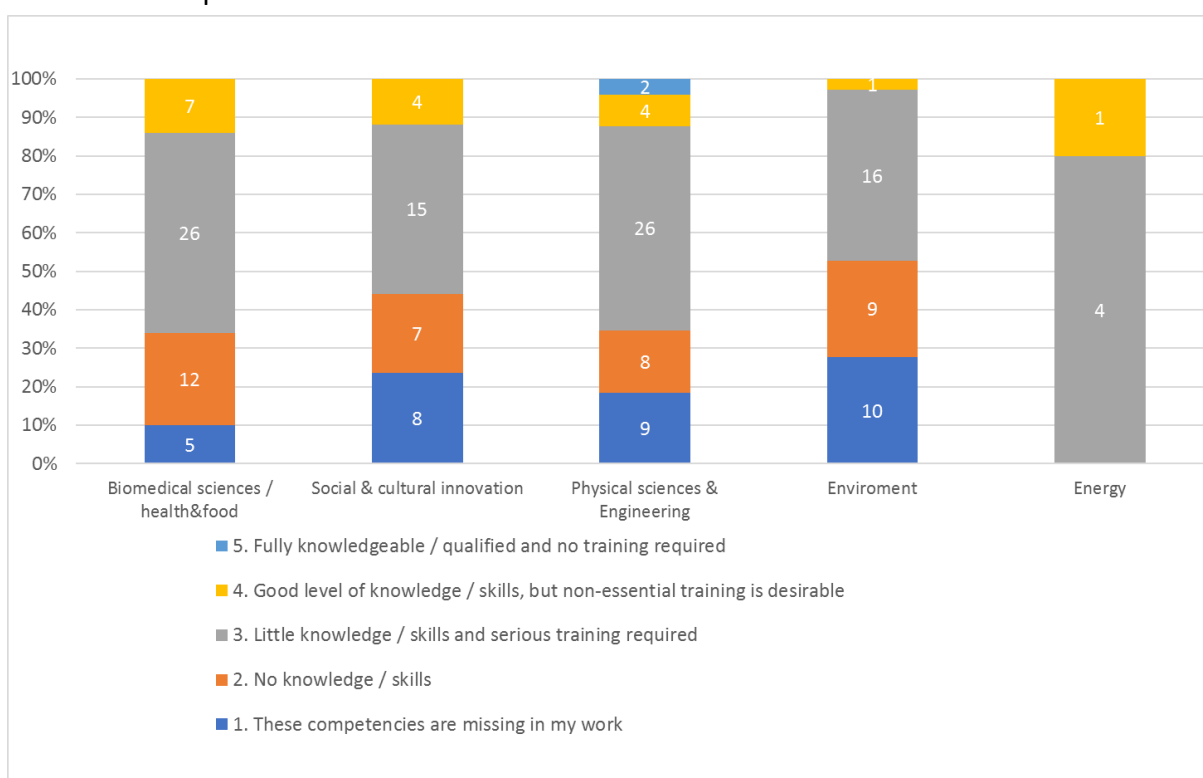

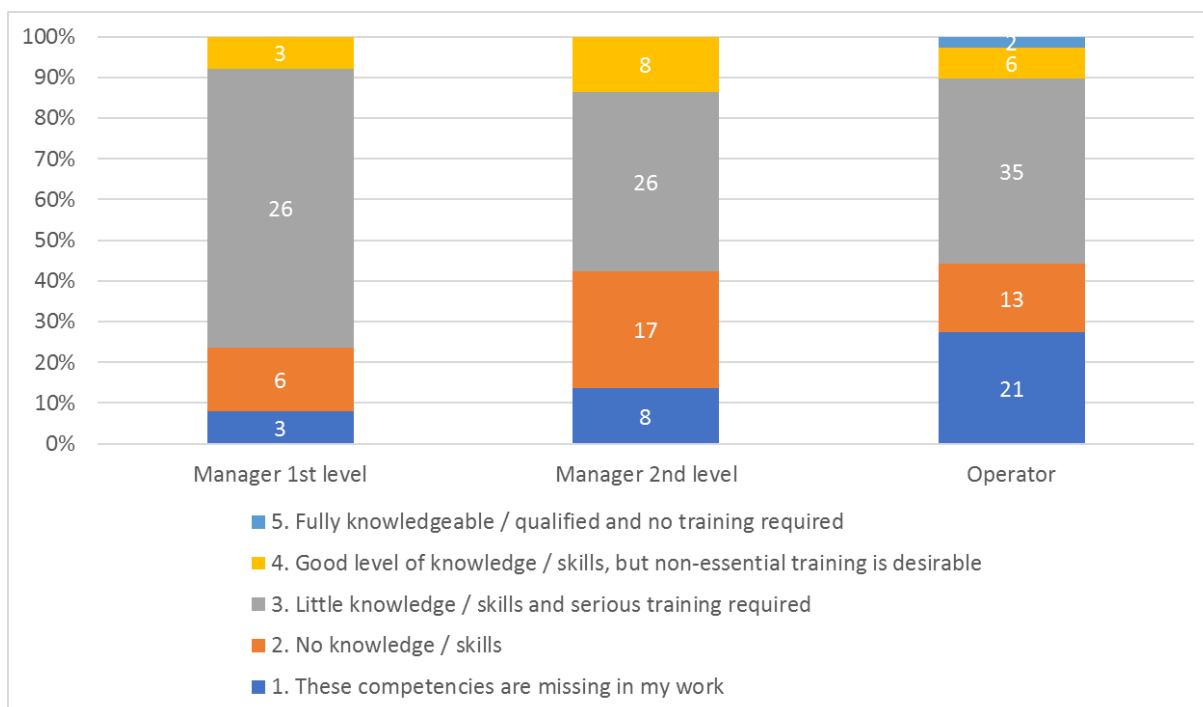Fig. 35 - Distribution of respondents' answers within thematic domains to the question 9: Raising Awareness

Fig. 36 - Distribution of respondents' answers depending on the position held to the question 9: Raising Awareness

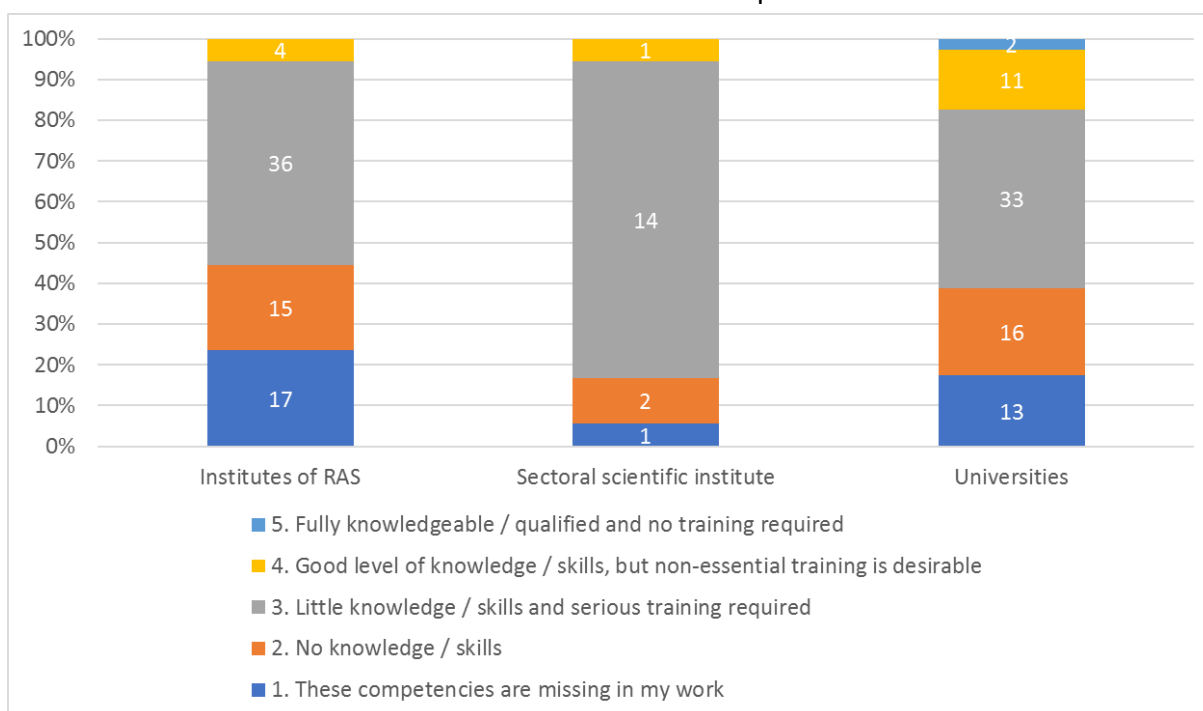

Fig. 37 - Distribution of respondents' answers depending on the type of the represented organization on the question 9: Raising Awareness

4.3.10. Question 10. International dimension of research infrastructure

172 of 184 respondents answered to the question. The distribution of answers by thematic domains, positions of respondents and types of organizations is shown in Figures 38-40.

The most common answer is *3. «a little knowledge/skill but considerable development required»*: 90 of 172 (52%). The share of answers *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* was ~54 answers (31%).

The shareof answers *3* varies within thematic domains from 37% for Environmental sciences to 80% for Energy. The distribution of answers within thematic domains shows the predominance of answers 3 within the field of Environmental sciences 51%, in the remaining thematic domains, the share of answers ranged from 20% (for Energy) to 29% (for Physical sciences and engineering).

The distribution of answers by type of position (Figure 39) shows that basically the answers *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* were submitted by the operators. The answer *4. «good level of knowledge/skill displayed, with a little development required»* was presented in feedback of the 1st level managers and the 2nd level mangers – 22 %, while for operators it was ~ 13%.

The distribution of answers by organization type (Figure 40) shows that 22% of answers *1. «this competency is not applicable to my job* and *2. no knowledge/skill»* were presentedamong RAS representatives, the number of the latter was the largest of all organizations (research center - 28 %, university - 31%). The answer *3. «a little knowledge/skill but considerable development required»* constituted 49, 55 and 52% among the RAS representatives, research center and universities, respectively. The share of answers *4. «good level of knowledge/skill displayed, with a little development required»* and *5. «fully knowledgeable/skilled – no/very little development required»* was ~ 17, 18 and 18% for RAS, research center and universities, respectively.

Thus, the expertise in this domain was not identified in Environmental sciences domain and to a greater extent for operators and also representatives of RAS. The lar number of answer *3. «a little knowledge/skill but considerable development required»* indicates the need to develop skills
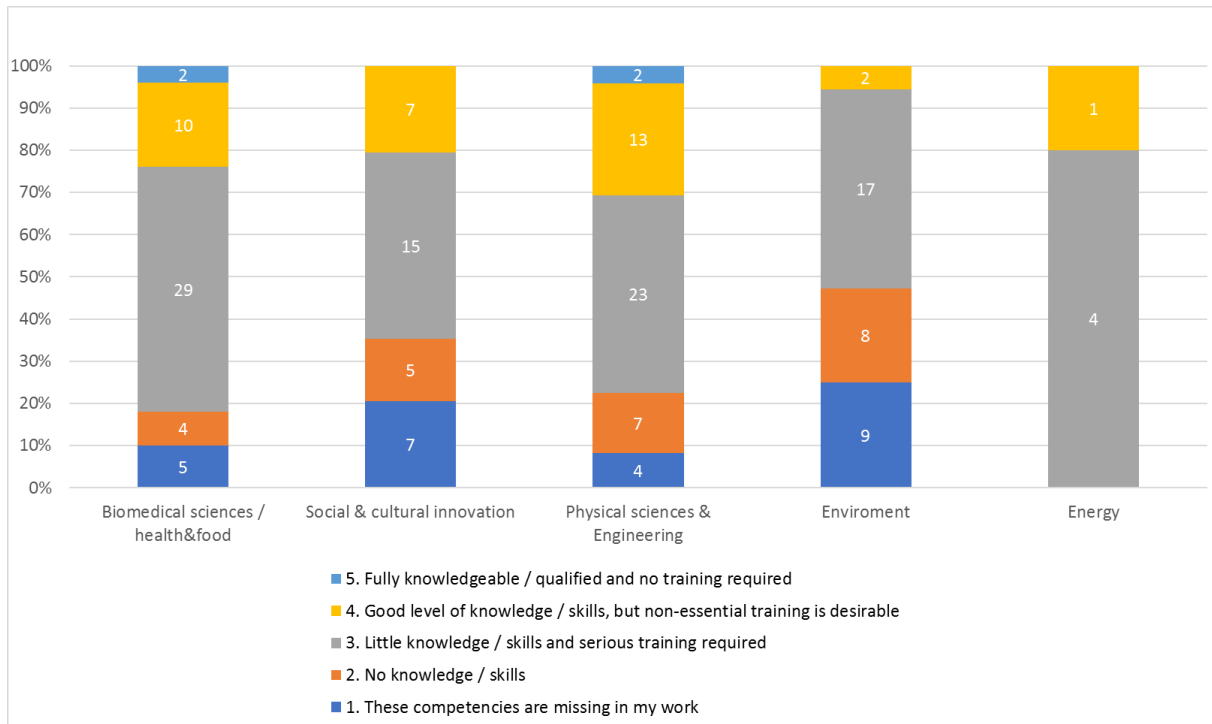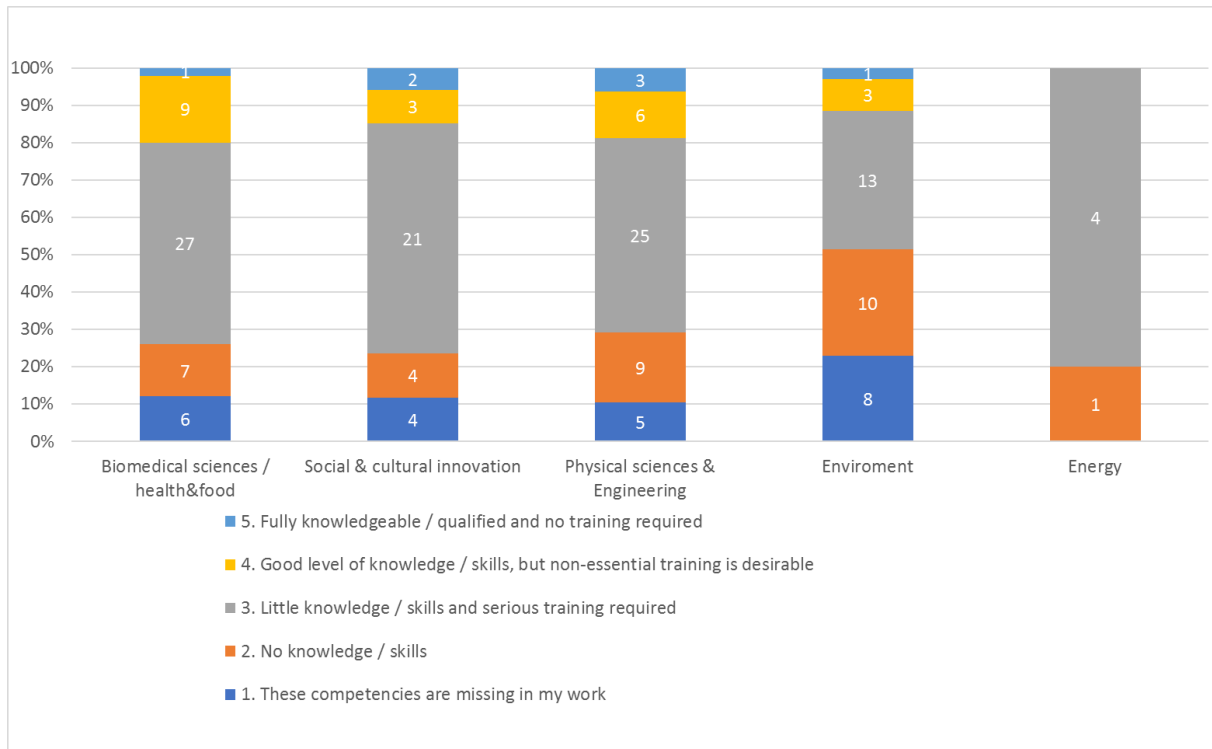
Fig. 38 - Distribution of respondents' answers within thematic domains to the question 10: International dimension of research infrastructure
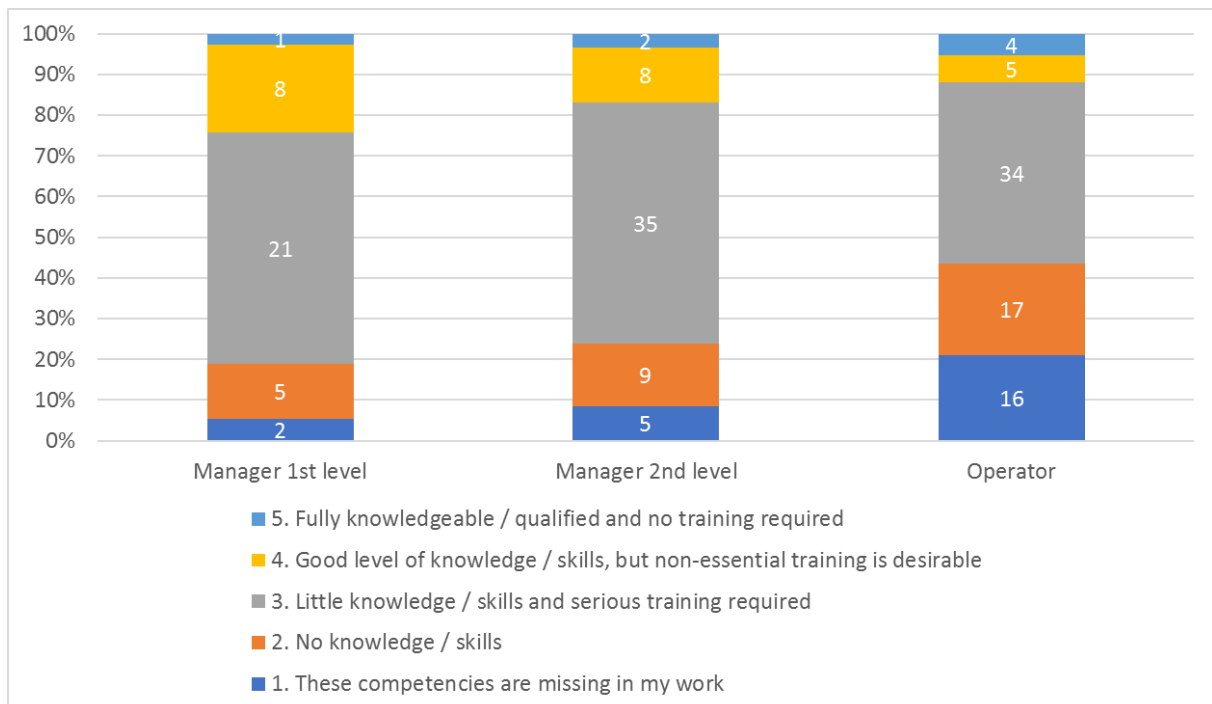
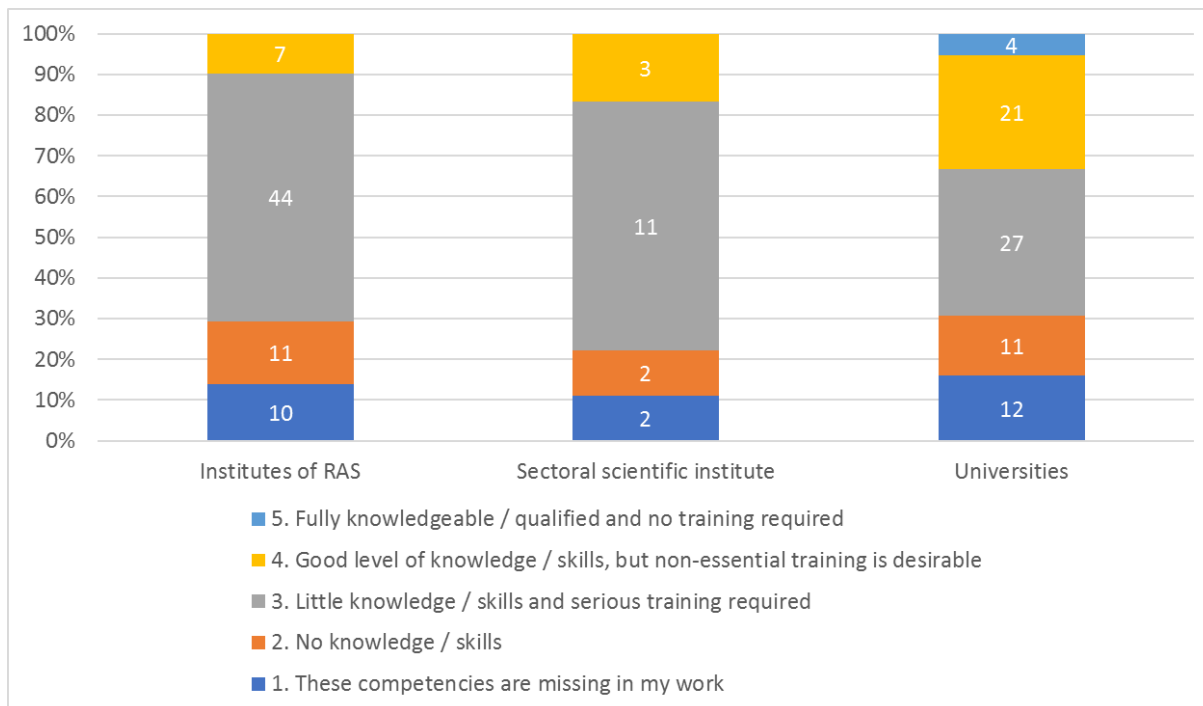Fig. 39 - Distribution of respondents' answers depending on the position held to the question 10: International dimension of research infrastructure
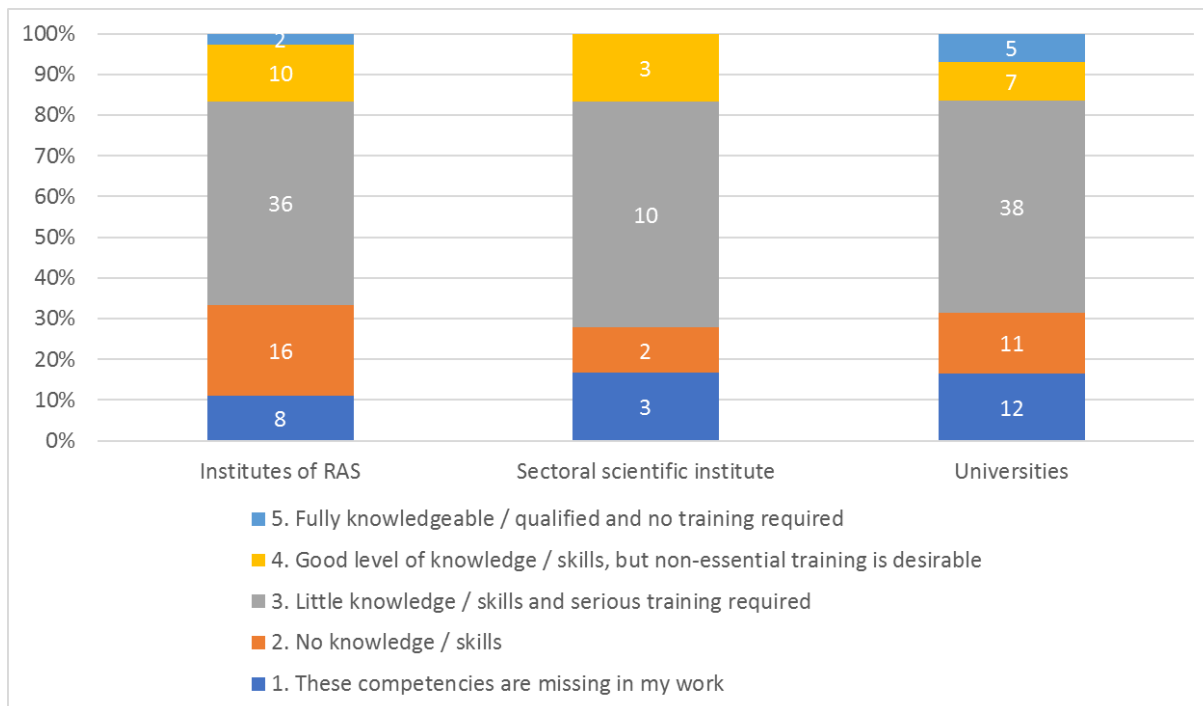
Fig. 40 - Distribution of respondents' answers depending on the type of the represented organization to the question 10: International dimension of research infrastructure

4.3.11. Question 11. Access to research infrastructure and User communities

174 of 184 respondents answered to the question. The distribution of answers by thematic domains, positions of respondents and types of organizations is shown in Figures 41-43.

The most common answer is *3. «a little knowledge/skill but considerable development required»*: 84 of 174 (48%). The share of answers *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill»* was 56 answers (32%).

The share of answer *3* varies within thematic domains from 38% for Social sciences and humanities to 60% for Energy. The distribution of answers within thematic domains shows the predominance of answer 3 within the field of Environmental sciences 42%, in the remaining thematic domains, the share of answer3 ranged from 20% (for Energy) to 35% (for Social sciences and humanities).

The distribution of answers by type of position (Figure 42) shows that basically the answers *1. «this competency is not applicable to my job»* and *2. «no knowledge/skill» were* submitted by the operators. The answer *4. «good level of knowledge/skill displayed, with a little development required»* were presented in feedback of the 1st level managers and the 2nd level managers – 17 %, while for operators it was ~ 15%.

The distribution of answers by organization type (Figure 43) shows that 32% of answers *1. «this competency is not applicable to my job and 2. no knowledge/skill»* were found among RAS representatives, the number of the latter was the largest of all organizations (research center - 28 %, university - 31%). The answer *3. «a little knowledge/skill but considerable*

development required» constituted 48, 67 and 38% among the RAS representatives, research center and universities, respectively. The share of answers *4. «good level of knowledge/skill displayed, with a little development required»* and *5. «fully knowledgeable/skilled – no/very little development required»* was ~ 14, 5 and 26% for RAS, research center and universities, respectively.

Thus, the expertise in this domain was not identified in Environmental sciences domain and to a greater extent for operators and also representatives of RAS. The large number of answer *3. «a little knowledge/skill but considerable development required»* indicates the need to develop these skills.
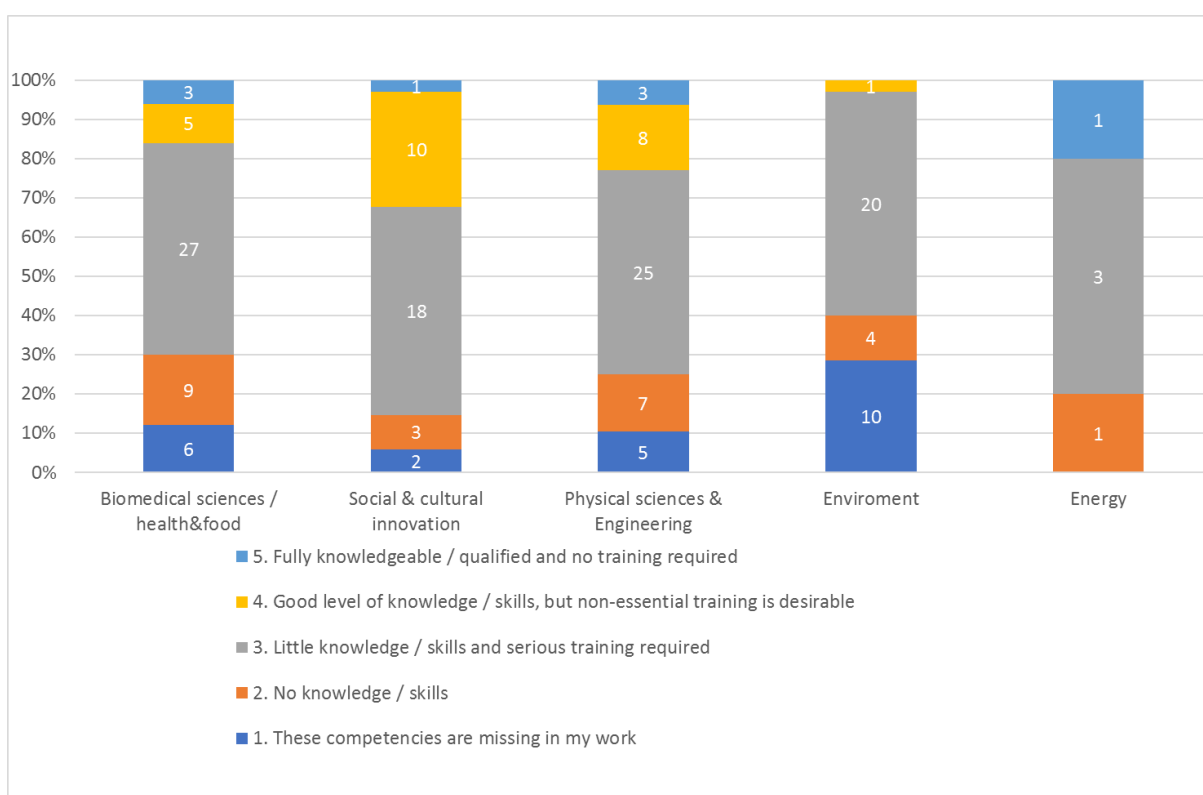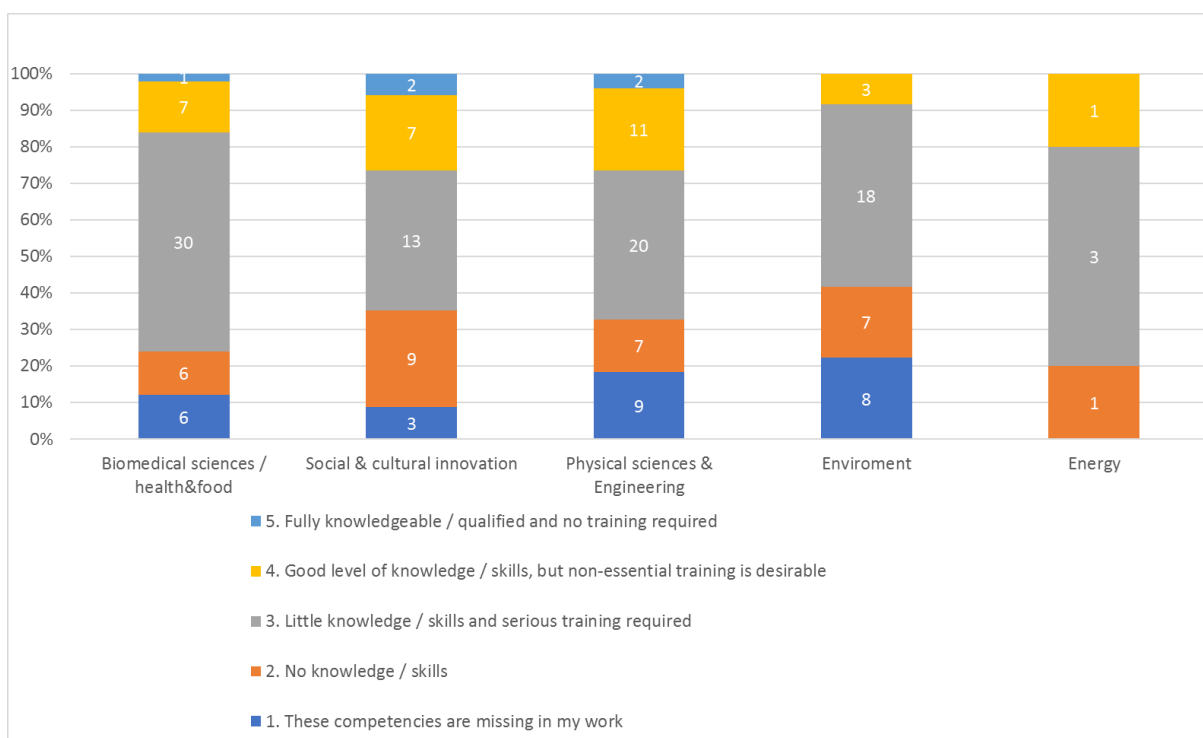

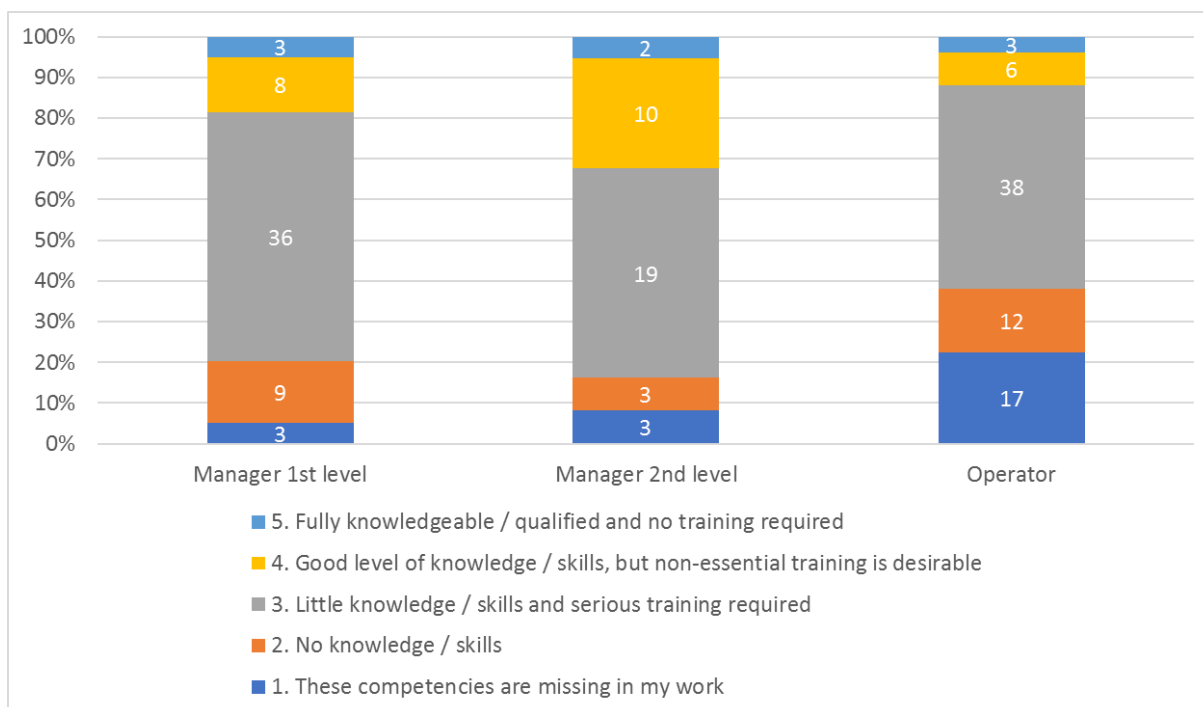Fig. 41 - Distribution of respondents' answers within thematic domains to the question 11: Access to research infrastructure and User communities
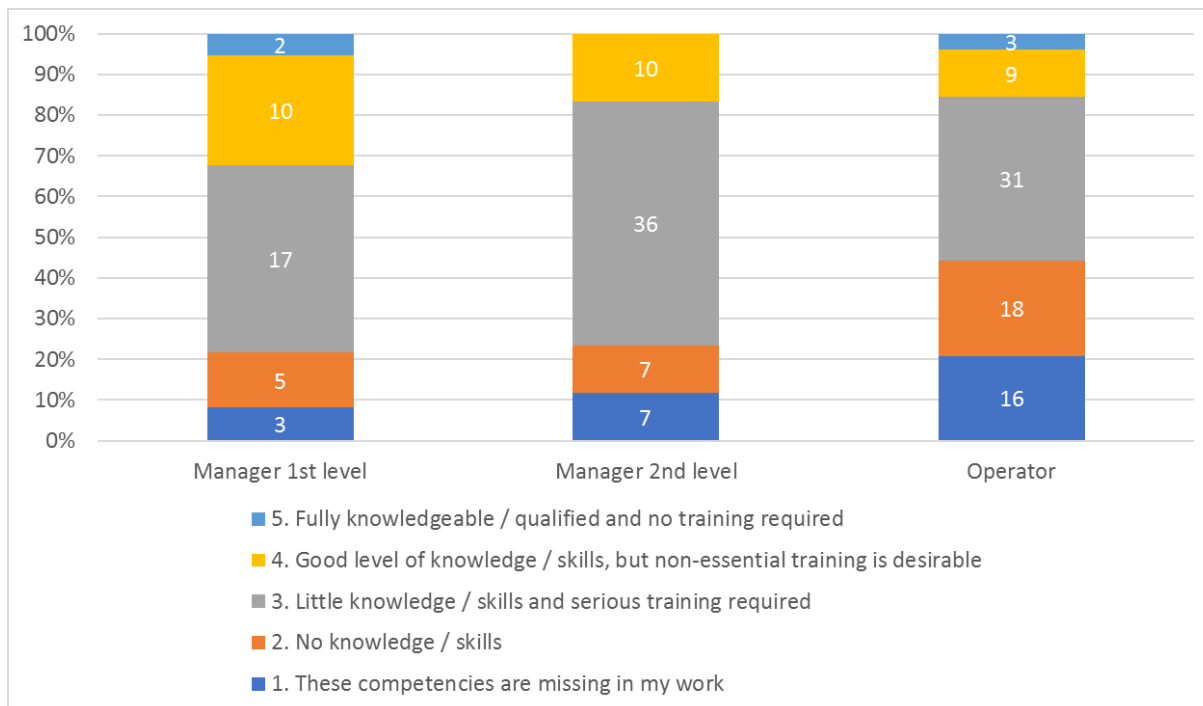
Fig. 42 - Distribution of respondents' answers depending on the position held to the question 11: Access to research infrastructure and User communities
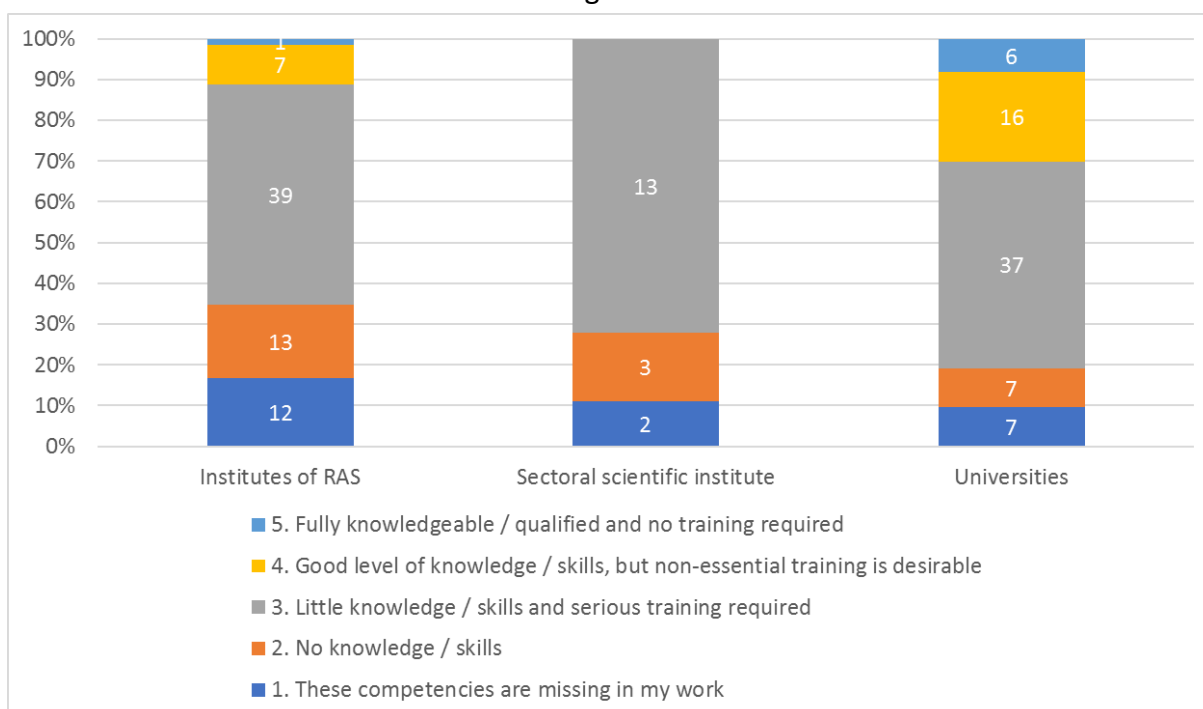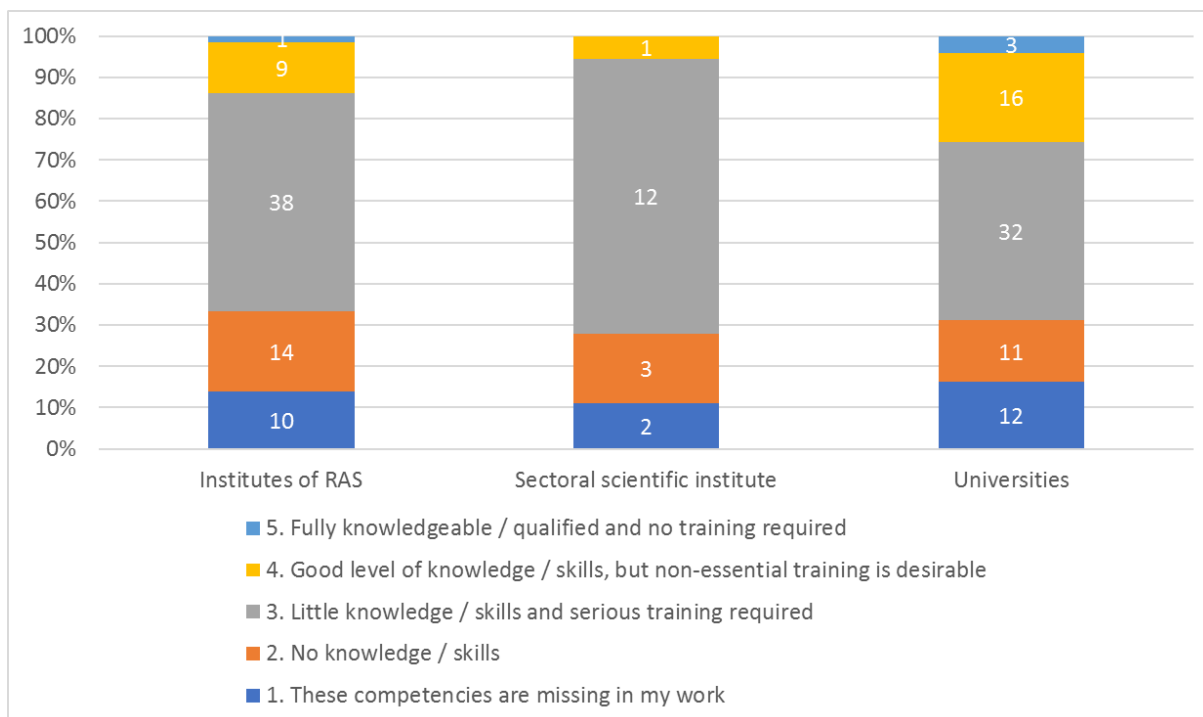

Fig. 43 - Distribution of respondents' answers depending on the type of the represented organization to the question 11: Access to research infrastructure and User communities

5. Exchange the experience and knowledge section

In this section, the respondents named a number of trainings courses, schools, workshops, which cover different issues related to research infrastructure management and in which

they would like to participate (Annex 4. List of training courses /workshops/schools/conferences, based on suggestions of respondents).

The respondents also named representatives of a number of European and Russian research infrastructures, with whom they would like to meet and discuss problems and topics related to the management of research infrastructures.

6. Conclusions and recommendations

Given the fact that at the final stage we have received 184 questionnaires from 105 organizations, together with deteriorating the situation of COVID-19 pandemic, the decision on postponing of the face-to-face interviews has been made.

Based on questionnaires analysis the following statements can be concluded:

1. The provided selections is statistically significant. It contains 35 questionnaires of each thematic domain except Energy;

2. The analysis of distribution of respondents on the position in the organization has been provided. The analysis reveal that the main part of respondents are operators;

3. The analysis of the collected questionnaires by types of scientific organizations has carried out. The analysis shows that all scientific organizations are almost equally represented in the selection, although the deviations from the average towards universities are occurs in the thematic domains for Social, Energy. In the Environmental domain the situation is opposite RAS representatives are predominate;

4. Based on the answers of the second part of questionnaires the common problems of the organizations have been set out and systematized. The most frequently displayed problem is the infrastructure management and organization. Thus, the management and organization of infrastructure work with approximately the same frequency occurs in all three categories of respondents. Training of specialists, technology transfer are more common problems cited by the managers of the 1st level. Attracting and working with users are more common problems cited by managers of the 2nd level. The operators indicate cooperation, including international, as a main problem. Fundraising problems are encountered with approximately the same frequency in the answers of managers of the 1st and 2nd level, but rarely occurs in the answers of operators.

5. The main pattern which can be traced in the answers to the questions 1-12 of the 3rd part of questionnaires is following, the common answer weakly depending on the thematic domain, containing from 50 to 100%, is «3. There is little knowledge / skills and serious training is required». As a rule, the level of competence of respondents from the fields of Environmental Sciences and Energy is lower than that of other domains.

6. An additional set of courses and trainings is set forth based on the suggestions and concerns of the respondents.

7. In order to solve problems identified in the paragraphs 4 and 5, it is proposed to move to the activities focused on the enhancing the general level of managerial competencies of employees of Russian infrastructures in accordance with the tasks 9.1, 9.2 and 9.5 of the work package.

We also offer to conduct surveys with managers and operators selected in the framework of competitive procedures, after completing the training. This will allow us to assess the impact of training on the knowledge and skills of personnel who support the work of Russian research infrastructures.

The survey results will be used to fulfill the following tasks within WP9:

- Launch of a specific "CREMLIN plus Fellowship Programme", aimed at supporting the participation of managers and operators of the RU RIs in thematic and horizontal courses, summer schools and workshops dedicated to improving their skills and ways of managing RU RIs in different thematic areas Task 9.1

- Organization and delivery of staff/knowledge exchanges between EU and RU RIs – Task 9.2

- Launch of the Russian fellowship programme to EMMRI - Task 9.3

- Launch of the pilot mentoring/coaching Programme for leaders of RU RIs – Task 9.4

Annex 1: The Survey

IDENTIFYING THE CHALLENGES IN MANAGING RESEARCH INFRASTRUCTURES IN RUSSIA AND URGENT TRAINING NEEDS
A SURVEY, WP9, CREMLINplus

This survey is conducted within the CREMLINplus project (Grant 871072) of the EU Research and Innovation Programme Horizon 2020

Website: https://www.cremlinplus.eu/

The main respondents to the survey are the managers and operators of the 11 priority organizations implementing research infrastructures mentioned in the list, recommended by the Ministry of Science and Higher Education of the Russian Federation (LIST-11) and the five Russian megascience projects.

The CREMLINplus project will use the survey results to fulfill the following tasks of the project:

- Identification of managerial challenges facing the Russian research infrastructures (RU RIs);

- Launch of a specific "CREMLIN plus Fellowship Programme", aimed at supporting the participation of managers and operators of the RU RIs in thematic and horizontal courses, summer schools and workshops dedicated to improving their skills and ways of managing RU RIs in different thematic areas;

- Organization and delivery of staff/knowledge exchanges between EU and RU RIs;

- Launch of the pilot mentoring/coaching Programme for leaders of RU RIs.

Research Infrastructures (RIs) are facilities that provide resources and services for research communities to conduct research and foster innovation.

They can be used beyond research e.g. for education or public services and they may be single-sited, distributed, or virtual.

They include major scientific equipment or sets of instruments; collections, archives or scientific data; computing systems and communication networks; any other research and innovation infrastructure of a unique nature which is open to external users.

RIs are run by scientists and technicians (operators) and directed by managers (at multiple levels, e.g. group-, section-, department heads and executives) supported by administrative staff

See also: https://ec.europa.eu/info/research-and-innovation/strategy/european-research-infrastructures_en

The CREMLINplus project protects your personal information. The survey results will be stored and used in accordance with the laws of the Russian Federation on the protection of personal data and the EU General Data Protection Regulation 2016/679 (EU GDPR).

We ask you to agree to the use of your personal data for the purposes of the CREMLINplus project.

Do you give your permission to use your data by participating in this survey being used for the purposes of the project CREMLINplus"?

◉ Yes

○ No

◉ **I agree to the processing of my personal data as part of CREMLINplus project**

GENERAL INFORMATION

E-mail address

Name and Surname

Organization

Job title/role in the research infrastructure

Type of organization

+ University

☐   Institute of the Russian Academy of Sciences

☐   International organization

☐   Research Center

☐ Other

What scientific field/fields does your infrastructure support?

- ○ Biomedical sciences/health and food
- ○ Energy
- ○ Environmental sciences
- ○ E-infrastructure
- ○ Physical sciences and engineering
- ○ Social sciences and humanities
- ○ Other: _____

At what stage is the Research Infrastructure of your organization?

- ◉ Planning/design phase
- ○ Construction phase
- ○ Operational phase (within 5 years of construction)
- ○ Operational maturity (more than 5 years of construction
- ○ n/a

Mission (please, provide a brief description of the organization's mission):

```



```

THE CHALLENGES IN MANAGING YOUR RESEARCH INFRASTRUCTURE AND RELATED URGENT TRAINING NEEDS

1. Name your Research Infrastructure's management/leadership challenges and related training needs you feel most relevant (Up to 3 points)

```



```

2. Please, provide more detailed information on your Research Infrastructure's highest priority management/leadership problems and related training needs (addition to point I)

PLEASE, RATE YOUR DEGREE OF SKILL / KNOWLEDGE IN EACH OF THE ITEMS BELOW RELATED TO MANAGING RESEARCH INFRASTRUCTURES

SELF-ASSESSMENT OF YOUR KNOWLEDGE/SKILLS IN THE ITEMS BELOW RELEVANT TO DIFFERENT ASPECTS OF MANAGING RESEARCH INFRASTRUCTURES

1. **Governance and Organization** (design the governance structure of the research infrastructure, assign roles and responsibilities within the RI, set up of operating systems of the organization, assign performance targets and monitor results of different organizational units/nodes)

○ 1 = this competency is not applicable to my job

○ 2 = No knowledge/skill

◉ 3 = A little knowledge/skill but considerable development required

○ 4 = Good level of knowledge/skill displayed, with a little development required

○ 5 = fully knowledgeable/skilled – no/very little development required

Please add any further details on features of **governance and organization** of your organization's research infrastructure

2. **Strategic Management and Business Innovation** (understanding the ecosystem of the RI, define the business model and develop the business plan of the RI, translating mission and vision into a strategic plan, understanding how to monitor the strategy execution)

○ 1 = this competency is not applicable to my job

○ 2 = No knowledge/skill

◉ 3 = A little knowledge/skill but considerable development required

○ 4 = Good level of knowledge/skill displayed, with a little development required

○ 5 = fully knowledgeable/skilled – no/very little development required

Please add any further details on features of **strategic management and business innovation** within your organization's research infrastructure

<div style="border:1px solid #000; height:100px;"></div>

3. Financial Management (understanding how to interpret financial data, balance sheets and cash flow, understanding the costs of different service lines, understanding how to monitor spending, expenses and budgets, understanding how to develop a financial plan)

○ 1 = this competency is not applicable to my job

○ 2 = No knowledge/skill

⦿ 3 = A little knowledge/skill but considerable development required

○ 4 = Good level of knowledge/skill displayed, with a little development required

○ 5 = fully knowledgeable/skilled – no/very little development required

Please add any further details on features of **financial management** within your organization's research infrastructure

<div style="border:1px solid #000; height:80px;"></div>

negotiating with potential funders; new funding tools: private-public partnerships, special projects, commercial funding, fee for service, consultancy, the evaluation of investment projects)

○ 1 = this competency is not applicable to my job

○ 2 = No knowledge/skill

⦿ 3 = A little knowledge/skill but considerable development required

○ 4 = Good level of knowledge/skill displayed, with a little development required

○ 5 = fully knowledgeable/skilled – no/very little development required

Please add any further details if you have the experience of developing a **sustainable funding model** for your research infrastructure

5. Leadership and Team Management (envision the future, engage people and support their empowerment, understanding how to influence, inspire and motivate others, building a common vision among stakeholders and organizations, managing efficiently interpersonal and organizational conflicts, understanding how to give constructive feedback to teams)

- ○ 1 = this competency is not applicable to my job
- ○ 2 = No knowledge/skill
- ◉ 3 = A little knowledge/skill but considerable development required
- ○ 4 = Good level of knowledge/skill displayed, with a little development required
- ○ 5 = fully knowledgeable/skilled – no/very little development required

Please add any further details on features of **leadership and team management** within your organization's research infrastructure

6. Service Management (understanding how to develop new service solutions in the organization, knowing how to challenge standard practices and current procedures, Implementing best practice methods within the organization)

- ○ 1 = this competency is not applicable to my job
- ○ 2 = No knowledge/skill
- ◉ 3 = A little knowledge/skill but considerable development required
- ○ 4 = Good level of knowledge/skill displayed, with a little development required
- ○ 5 = fully knowledgeable/skilled – no/very little development required

Please add any further details on features **service management** within your organization's research infrastructure

```
```

7. **International Law and Compliance (**compliance with laws and regulations in different settings, public procurement, contract issues in different settings: IPR regulations and data and material sharing, privacy and ethical issues)

- ○ 1 = this competency is not applicable to my job

- ○ 2 = No knowledge/skill

- ● 3 = A little knowledge/skill but considerable development required

- ○ 4 = Good level of knowledge/skill displayed, with a little development required

- ○ 5 = fully knowledgeable/skilled – no/very little development required

Please add any further details if you have the experience of implementing **international law** in managing your research infrastructure

```
```

8. **Infrastructure and Resource Management (**research and administrative data management: storage of data, archiving, privacy, data protection and sharing issues; compliance with national and international regulations, best practices and standards; creating a disaster mitigation and recovery plan)

- ○ 1 = this competency is not applicable to my job

- ○ 2 = No knowledge/skill

- ● 3 = A little knowledge/skill but considerable development required

- ○ 4 = Good level of knowledge/skill displayed, with a little development required

- ○ 5 = fully knowledgeable/skilled – no/very little development required

Please add any further details if you have the experience of **infrastructure and resource management** within your research infrastructure

9. **Raising Awareness (**target communication to different groups, identify relevant stakeholders such as: public or scientific community, the organization [employees], policy makers and funding bodies; choosing the right communication channel to maximize impact, core elements of a successful branding strategy, communicating value creation and impact)

- ○ 1 = this competency is not applicable to my job
- ○ 2 = No knowledge/skill
- ● 3 = A little knowledge/skill but considerable development required
- ○ 4 = Good level of knowledge/skill displayed, with a little development required
- ○ 5 = fully knowledgeable/skilled – no/very little development required

Please add any further details if you have the experience on how to **raise awareness** about your research infrastructure

10. **International dimension of research infrastructure** (strategy for promoting RI in global science and education space and attracting international users; ensuring long-term cooperation with foreign RIs on different issues, e.g. for joint development of instrumentation; providing the international trainings for **User communities**; managing data/experience / knowledge exchange with foreign partners; managing the participation of the infrastructure in European and other international programmes, projects and initiatives)

- ○ 1 = this competency is not applicable to my job
- ○ 2 = No knowledge/skill
- ● 3 = A little knowledge/skill but considerable development required
- ○ 4 = Good level of knowledge/skill displayed, with a little development required
- ○ 5 = fully knowledgeable/skilled – no/very little development required

Please add any further details if you have the experience on involvement of your research infrastructure into **international cooperation and related activities:**

[text box]

11. **Access to research infrastructure and User communities** (establishing the Access policy [by defining the Access modes, fees and costs, the selection process, the eligibility and restriction criteria, the data management plan, confidentiality and data protection issues, IPR and ethical issues; the safety and health regulations and the measures supporting the users travel and accommodation; the experience of providing access to infrastructure and managing a specialized website]; developing a strategy to promote the infrastructure among possible user groups; establishing a strategy **to create a User Community** and to integrate it in the RIs development)

- ○ 1 = this competency is not applicable to my job
- ○ 2 = No knowledge/skill
- ◉ 3 = A little knowledge/skill but considerable development required
- ○ 4 = Good level of knowledge/skill displayed, with a little development required
- ○ 5 = fully knowledgeable/skilled – no/very little development required

Please add any further details on the experience of providing **access to your research infrastructure**

[text box]

EXCHANGING THE EXPERIENCE AND KNOWLEDGE

I. **Please, list any topics relevant to your personal management/leadership development and training needs (up to 3 points)**

[text box]

II. E**xchanging the experience / knowledge** (please, name representatives of European and Russian research infrastructures, specific groups of people with whom you would like to meet and discuss problems and topics related to the management of research infrastructures)

III. **Exchanging experience / knowledge** (please, name trainings /summer schools/workshops/courses/programmes, which cover different issues related to research infrastructure management and in which you would like to participate)

Thank you very much for participating in the survey!

Annex 2: The list of the survey recipients

N	email	Surname, Name, patronymic	Organization
1	aleksandr.dvoynikov@tsagi.ru	Dvoinikov Alexander Alexandrovich	Central Aerohydrodynamic Institute
2	vjaz@meteo.ru	Vyazilov Evgeny Dmitrievich	All-Russian Scientific Research Institute of Hydrometeorological Information - World Data Center (VNIIGMI-WDC)
3	grisha@ms2.inr.ac.ru	Rubtsov Grigory Igorevich	Federal State Budgetary Institution of Science Institute for Nuclear Research of the Russian Academy of Sciences
4	cp-secr@crys.ras.ru	Dadinova Lyubov Alexandrovna	Federal Research Center "Crystallography and Photonics" RAS
5	A.S.Arakcheev@inp.nsk.su	Alexey Arakcheev	Budker Institute of Nuclear Physics of SB RAS
6	ksfursov@hse.ru	Fursov Konstantin Sergeevich	National Research University Higher School of Economics
7	lacerta999@gmail.com	Sotnikova Yulia Vladimirovna	Special Astrophysical Observatory of the Russian Academy of Sciences (SAO RAS)
8	mmp@bionet.nsc.ru	Moshkin Mikhail Pavlovich	Federal Research Center Institute of Cytology and Genetics SB RAS
9	eagorodnova@mail.ru	Elena Alexandrovna Gorodnova	Federal State Budgetary Institution "National Medical Research Center for Obstetrics, Gynecology and Perinatology named after Academician V.I. Kulakov" of the Ministry of Health of the Russian Federation

10	alexis.savel@gmail.com	Savelyev Alexey Anatolievich	"Center for Medical Accreditations" of the Science Park of St. Petersburg State University
11	kucerka@nf.jinr.ru	Kucerka Norbert	Joint Institute for Nuclear Research
12	senin_ra@nrcki.ru	Senin Roman Alekseevich	National Research Center "Kurchatov Institute"
13	Natalia.Polukhina@cern.ch	Polukhina Natalia Gennadievna	National University of Science Technology "MISiS"
14	vvlassao@gmail.com	Vlasyuk Valery Valentinovich	Federal State Budgetary Institution of Science Special Astrophysical Observatory of the Russian Academy of Sciences
15	vanvkm@gmail.com	Vasilenko Alexander Nikolaevich	G.K. Skryabin Institute of Biochemistry and Physiology of Microorganisms of the Russian Academy of Sciences
16	m.baturova@spbu.ru	Baturova Maria Albertovna	Saint Petersburg State University (SPbSU), Science Park
17	mpokrovskaia@list.ru	Pokrovskaya Maria Sergeevna	FSBI "National Medical Research Center of Therapy and Preventive Medicine" of the Ministry of Health of Russia
18	n-dukhova@mail.ru	Dukhova Natalia Nikolaevna	MRRC them. A.F. Tsyba - branch of the Federal State Budgetary Institution "National Medical Research Center of Radiology" of the Ministry of Health of Russia
19	natalyabez@ya.ru	Semyonova Natalia Sergeevna	MRRC them. A.F. Tsyba - branch of the Federal State Budgetary Institution "National Medical Research Center of Radiology" of the Ministry of Health of Russia

20	samborsky.stas@yandex.ru	Samborskiy Stanislav Mikhailovich	MRRC them. A.F. Tsyba - branch of the Federal State Budgetary Institution "National Medical Research Center of Radiology" of the Ministry of Health of Russia
21	lemi@miee.ru	Kukin Vladimir Nikolaevich	Federal State Autonomous Educational Institution of Higher Education "National Research University" Moscow Institute of Electronic Technology "
22	inter_otdel@mail.ru	Mullabayeva Svetlana Mininkhaevna	FGBU "Scientific Medical Research Center for Obstetrics, Gynecology and Perinatology named after Academician V.I.Kulakov" of the Ministry of Health of the Russian Federation
23	sersel@miee.ru	Selishchev Sergey Vasilievich	Federal State Autonomous Educational Institution of Higher Education "National Research University" Moscow Institute of Electronic Technology "
24	domelyanovich@gmail.com	Omelyanovich Dmitry Alexandrovich	International Research Center "Coherent X-ray Optics for Megasciences" FGAOU VO "Immanuel Kant Baltic Federal University" (MNITs RO IKBFU)
25	Ivshina@iegm.ru	Ivshina Irina Borisovna	Institute of Ecology and Genetics of Microorganisms - Branch of the Federal State Budgetary Institution of Science of the Perm Federal Research Center of the Ural Branch of the Russian Academy of Sciences
26	Alexey.kurochkin@spbu.ru	Alexey Kurochkin	Saint Petersburg State

		University
27	andrey.romanychev@spbu.ru	Romanychev Andrey Ivanovich	Saint Petersburg State University
28	artem.muravev@nasbio.ru	Muraviev Artem Igorevich	National Association of Biobanks and Biobanking Professionals (NASBio)
29	grivtsova@mail.ru	Grivtsova Lyudmila Yurievna	MRRC them. A.F. Tsyba - branch of the Federal State Budgetary Institution of National Medical Research Center of Radiology of the Ministry of Health of Russia
30	samardak.as@dvfu.ru	Samardak Alexander Sergeevich	Far Eastern Federal University
31	ognevav@gmail.com	Ognev Alexey Vyacheslavovich	Far Eastern Federal University
32	taskaev@inp.nsk.su	Taskaev Sergey Yurievich	Institute of Nuclear Physics SB RAS
33	decan46@yandex.ru	Sheveleva Svetlana Viktorovna	Southwestern State University
34	onoff_10@mail.ru	Dmitry A. Belov	Institute for Analytical Instrumentation RAS (IAP RAS)
35	nadelyaeva@med.ru	IRINA IVANOVNA NADELYAEVA	Federal State Budgetary Scientific Institution "Petrovsky Russian Scientific Center for Surgery "
36	sci-secretary@ism.ac.ru	Kamynina Olga Konstantinovna	Institute of Structural Macrokinetics, Russian Academy of Sciences (Russian acronym ISMAN)
37	akolpashchikova@gaugn.ru	Kolpashchikova Anastasia Andreevna	State Academic University for the Humanities (GAUGN)
38	vniikormov@mail.ru	Dumacheva Elena Vladimirovna	FWRC FPA (previously, the All-Russian Williams Fodder Research Institute)
39	dmitrserg@gmail.com	Dmitrenko	FSBSI Institute for Linguistic

		Sergey Yurievich	Research RAS
40	obogarkov@mail.ru	Ogarkov Oleg Borisovich	FEDERAL STATE BUDGETARY SCIENTIFIC INSTITUTION "RESEARCH CENTER FOR FAMILY HEALTH AND HUMAN REPRODUCTION"
41	kuzenkov_se@stu.lipetsk.ru	Kuzenkov Sergey Evgenievich	Federal State Budgetary Educational Institution of Higher Education "Lipetsk State Technical University"
42	belalina04@gmail.com	Sonina Alina Alexandrovna	Novosibirsk Institute of Organic Chemistry. N.N. Vorozhtsov SB RAS
43	olsia-soboleva@bk.ru	Soboleva Olga Nikolaevna	Federal State Budgetary Educational Institution of Higher Education «Vyatka State University» (FSBEI HE «VyatSU»)
44	avredkov@gmail.com	Alexey Redkov	Institute for Problems in Mechanical Engineering of the Russian Academy of Sciences
45	litvinets@list.ru	Litvinets Sergey Gennadievich	Federal State Budgetary Educational Institution of Higher Education «Vyatka State University» (FSBEI HE «VyatSU»)
46	volkova.obninsk@gmail.com	Volkova Polina Yurievna	Federal State Budgetary Educational Institution All-Russian Scientific Research Institute of Radiology and Agroecology
47	knyazevyegor@mail.ru	Knyazev Egor Vladimirovich	Omsk Scientific Center SB RAS
48	d_disa@mail.ru	Davydov Denis Alexandrovich	Polar-Alpine Botanical Garden-Institute
49	boris.kozelov@gmail.com	Kozelov Boris Vladimirovich	FGBNU "Polar Geophysical Institute"
50	mikhail.podlutskii@gmail.com	Podlutsky Mikhail	Federal State Budgetary Scientific Institution "All-

		Sergeevich	Russian Scientific Research Institute of Radiology and Agroecology"
51	pishenin.ivan@gmail.com	Pishenin Ivan Andreevich	Federal State Budgetary Scientific Institution "All-Russian Scientific Research Institute of Radiology and Agroecology"
52	podobedmyu@gmail.com	Podobed Marina Yurievna	Ministry of Science and Higher Education of the Russian Federation Russian Institute of Radiology and Agroecology
53	anfiyj@gmail.com	Anfinogenova Nina Dzhonovna	Tomsk National Research Medical Center of the Russian Academy of Sciences
54	larkina.tasya@yandex.ru	Larkina Taisiya Igorevna	Peoples' Friendship University of Russia (RUDN) University
55	romanov_valera@mail.ru	Romanov Valery Stanislavovich	Federal State Budgetary Scientific Institution "Federal Scientific Center for Vegetable Growing" (FGBNU FNTSO)
56	inst.biomed.chem@gmail.com	Emelyanova Daria Leonidovna	The Institute of Biomedical Chemistry (former Institute of Biological and Medical Chemistry)
57	bondarenco.e@gmail.com	Bondarenko Ekaterina Valerievna	FGBNU All-Russian Research Institute of Radiology and Agroecology
58	yanai@inbox.ru	Ilyinskaya Yana Anatolyevna	Russian State Hydrometeorological University (RSHU)
59	olesya.ibmh@gmail.com	Golovko Olesya Alekseevna	Orekhovich Research Institute of Biomedical Chemistry (IBMKh)
60	kulikovadaska@mail.ru	Kulikova Daria Alexandrovna	Bashkir State University
61	parfenovatm@ipgg.sbras.ru	Parfenova Tatiana Mikhailovna	Federal State Budgetary Institution of Science Institute of Petroleum Geology and

			Geophysics named after A.A. Trofimuk of the Siberian Branch of the Russian Academy of Sciences (INGG SB RAS)
62	karmanovskayanv@gmail.com	Karmanovskaya Natalia Vladimirovna	FSBEI HE "Norilsk State Industrial Institute"
63	anna.namyatova@gmail.com	Namyatova Anna Alekseevna	Zoological Institute of the Russian Academy of Sciences
64	mikheeva-nf@rudn.ru	Mikheeva Natalia Fedorovna	Peoples' Friendship University of Russia (RUDN) University
65	habibbaty@gmail.com	Al-Shaida Zina Azzam Abdulwahab	Peoples' Friendship University of Russia (RUDN) University
66	cyber-nik@yandex.ru	Oskin Nikolay Sergeevich	Peoples' Friendship University of Russia (RUDN) University
67	sibdrug@mail.ru	Voroshilov Denis Sergeevich	FGAOU VO "Siberian Federal University"
68	marakhova_ai@pfur.ru	Marakhova Anna Igorevna	Peoples' Friendship University of Russia (RUDN) University
69	avponaryadov@geo.komisc.ru	Alexey Ponaryadov	IG FRC Komi Scientific Center Ural Branch of RAS
70	vellkom@list.ru	Countryman Vitaly Leonidovich	FSBEI HE Priamur State University named after Sholem Aleichem
71	mn.priemysheva@yandex.ru	Priemysheva Marina Nikolaevna	FSBSI Institute for Linguistic Research RAS
72	iidanshikova@geo.komisc.ru	Danshchikova Irina Ivanovna	Institute of Geology, FRC Komi Scientific Center, Ural Branch of RAS, Syktyvkar
73	Llw000@yandex.ru	Lygina Larisa Valerievna	FSBEI VO "VGUIT"
74	artem_kuzovlev@fnkcrr.ru	Kuzovlev Artem Nikolaevich	Federal Scientific and Clinical Center of Reanimatology and Rehabilitation (FNKTs RR)
75	ignatiev.grigoriy@gmail.com	Ignatiev Grigory Vladimirovich	IG FRC Komi Scientific Center Ural Branch of RAS

76	valyaeva@geo.komisc.ru	Valyaeva Olga Viktorovna	IG FRC Komi Scientific Center Ural Branch of RAS
77	abdulrazzak3sayed@gmail.com	Syed Ahmad Abdulrazzak	RUDN University
78	ygrakov@yanddex.ru	Grakova Oksana Vasilievna	Institute of Geology, Federal Research Center, Komi Scientific Center, Ural Branch of the Russian Academy of Sciences
79	smirnova_macha1989@mail.ru	Smirnova Maria Nikolaevna	Federal State Budgetary Institution of Science Institute of General and Inorganic Chemistry. N.S. Kurnakov Russian Academy of Sciences
80	skripkaaa@mgri.ru	Violin Anri Anrievich	engineering center MGRI
81	renchik_vhi@mail.ru	Mikailova Rena Alexandrovna	All-Russian Research Institute of Radiology and Agroecology
82	nii_apk_sar@mail.ru	Dmitry Serdobintsev	FSBSI "PNIIEO APK"
83	iskotik@geo.komisc.ru	Kotik Ivan Sergeevich	Institute of Geology, Komi Science Center, Ural Branch of RAS
84	inf-nii-apk-sar@mail.ru	Zavorotin Evgeny Feofanovich	FSBSI "PNIIEO APK"
85	abdul-77@yandex.ru	Isaev Abdulgalim Budaevich	Dagestan State University
86	dashushkov@geo.komisc.ru	Shushkov Dmitry Alexandrovich	IG FRC Komi Scientific Center Ural Branch of RAS
87	max-12-99@yandex.ru	Nechaev Maxim Sergeevich	Institute of Geology named after N.P. Yushkina
88	markova63@mail.ru	Marina Kovaleva	Novosibirsk State University of Economics and Management (NSUEU)
89	skripkaaa@mgri.ru	Violin Anri Anrievich	Engineering center MGRI
90	kchgu-nauka@mail.ru	Kubanova Marina Nazirovna	Karachay-Cherkess State University named after U.D. Alieva

91	cholpan1@mail.ru	Chotchaeva Cholpan Bilyalovna	Karachay-Cherkess State University named after U. D. Alieva
92	aliunovan@vogu35.ru	Alyunov Alexander Nikolaevich	FSBEI HE "Vologda State University"
93	gudkova-ia@rudn.ru	Kochetkova Irina Andreevna	Peoples' Friendship University of Russia
94	alvaly@mail.ru	Kazakova Elizaveta Alexandrovna	Ministry of Science and Higher Education of the Russian Federation Russian Institute of Radiology and Agroecology
95	victoria.ed@rirae.ru	Nushtaeva Victoria Eduardovna	Federal State Budgetary Scientific Institution "All-Russian Scientific Research Institute of Radiology and Agroecology"
96	popov-va@rudn.ru	Popov Vladimir Alekseevich	Peoples' Friendship University of Russia
97	ruslan.saduov@gmail.com	Ruslan Talgatovich Saduov	FSBEI HE "Bashkir State University"
98	pinchme@mail.ru	Pinchuk Mikhail Ernestovich	Federal State Budgetary Institution of Science Institute of Electrophysics and Electric Power Industry of the Russian Academy of Sciences (IEE RAS)
99	fnv-tgp@mail.ru	Yamaletdinova Natalia Vladimirovna	Institute of Law of the Bashkir State University
100	self88@yandex.ru	Shuisky, Alexander Sergeevich	Institute of Geology, FRC Komi Scientific Center, Ural Branch of RAS
101	zubkov_av@pfur.ru	Zubkov Alexander Vladimirovich	Federal State Autonomous Educational Institution of Higher Education "Peoples' Friendship University of Russia"
102	naila61@mail.ru	Orazova Nayla	FSBEI HE "KARACHAYEVO-

		Abdrasilovna	CHERKESS STATE UNIVERSITY NAMED AFTER U.D. ALIEV"
103	bev@vniisoi.ru	Banetskaya Evgeniya Valerievna	FSBSI All-Russian Research Institute of Soybeans
104	karaman@inbox.ru	Denisenko Yulia Konstantinovna	Vladivostok Branch of the Federal State Budgetary Scientific Institution "Far Eastern Scientific Center of Physiology and Pathology of Respiration" - Scientific Research Institute of Medical Climatology and Rehabilitation Treatment
105	maa@vniisoi.ru	Malashonok Anastasia Alexandrovna	FGBNU All-Russian Research Institute of Soybeans
106	baizile94@gmail.com	Sukhanov Alexander Sergeevich	Federal State Budget Education Institution of Higher Education «Irkutsk National Research Technical University»
107	alacher@list.ru	Chernyshova Alena Leonidovna	Research Institute of Oncology TNIMTS
108	Kuskovkv@tyuiu.ru	Kuskov Konstantin Viktorovich	Tyumen Industrial University
109	mae777@mail.ru	Mishurnov Alexander Evgenievich	UNPC "STM" Omsk State Technical University (OmSTU)
110	kristin-kop@inbox.ru	Kopyeva Kristina Vasilievna	Research Institute of Cardiology, TNIMTs
111	konstzav@gmail.com	Zavadovsky Konstantin Valerievich	Research Institute of Cardiology, Tomsk NIMTs
112	petelina@infarkta.net	Petelina Tatiana Ivanovna	Tyumen Cardiology Research Center, Tomsk National Research Medical Center of the Russian Academy of

		Sciences, Tomsk, Russia
113	lana.lavrenteva.1984@mail.ru	Lavrentieva Svetlana Igorevna	FGBNU All-Russian Research Institute of Soybeans
114	nikolay.skryabin@medgenetics.ru	Scriabin Nikolay Alekseevich	Tomsk National Research Medical Center RAS
115	evgspar@rambler.ru	Petukhova Evgeniya Spartakovna	Federal State Budgetary Institution of Science Federal Research Center "Yakutsk Scientific Center SB RAS"
116	nfokina@krc.karelia.ru	Fokina Natalia Nikolaevna	Karelian Scientific Center RAS
117	ddd1978@inbox.ru	Danilov Andrey Anatolievich	FSBEI HE Khakass State University named after N.F. Katanova
118	maria.litvinova.2015@yandex.ru	Litvinova Maria Alexandrovna	FGBNU NIIR them. V.A. Nasonova
119	zlobinae@mail.ru	Kaigorodova Evgeniya Viktorovna	Research Institute of Oncology, Tomsk NIMTs
120	yaitskayan@gmail.com	Yaitskaya Natalya Alexandrovna	Federal State Budgetary Institution of Science "Federal Research Center" Subtropical Scientific Center of the Russian Academy of Sciences "
121	nrprorector@volsu.ru	Dzedik Valentin Alekseevich	Volgograd State University
122	popov_a_u@list.ru	Popov Andrey Yurievich	Omsk State Technical University (OmSTU)
123	ooa.tma@kuzstu.ru	Ostanin Oleg Alexandrovich	Kuzbass State Technical University named after T.F. Gorbachev
124	grankina_nn@khsu.ru	Grankina Natalia Nikolaevna	Federal State Budgetary Educational Institution of Higher Education "Khakass State University named after N. F. Katanova "
125	krum_x@mail.ru	Krumina Ksenia	Omsk State Technical

		Vasilievna	University (OmSTU)
126	tamu.kad@yandex.ru	Kadokhov Taimuraz Alanovich	Federal State Budgetary Institution of Science Federal Scientific Center "Vladikavkaz Scientific Center of the Russian Academy of Sciences"
127	zarov.evgen@yandex.ru	Zarov Evgeny Andreevich	FSBEI HE Yugorsk State University
128	brilly08@mail.ru	Anikeeva Ekaterina Sergeevna	Federal State Budgetary Scientific Institution "Research Institute for Complex Problems of Cardiovascular Diseases"
129	ponomarev_dmitr@mail.ru	Dmitry Ponomarev	Federal State Autonomous Scientific Institution Institute of Microwave Semiconductor Electronics named after V.G. Mokerov Russian Academy of Sciences
130	ov.eugene@gmail.com	Ovcharenko Evgeny Andreevich	Federal State Budgetary Scientific Institution "Research Institute for Complex Problems of Cardiovascular Diseases"
131	dunaeva_e@niishk.ru	Dunaeva Elizaveta Andreevna	FGBUN "Research Institute of Agriculture of Crimea"
132	amak@inbox.ru	Makhnach Alexander Valentinovich	Institute of Psychology RAS
133	miasnikovasa@vogu35.ru	Myasnikova Svetlana Alexandrovna	Vologda State University
134	vasemenov@ifaran.ru	Semenov Vladimir Anatolievich	FGBUN Institute of Atmospheric Physics A.M. Obukhov RAS
135	chetvernya.nikita@gmail.com	Chetvernya Nikita Andreevich	Chelyabinsk State University

136	igor-perovskij@yandex.ru	Perovskiy Igor Andreevich	Institute of Geology. N.P. Yushkin Komi Scientific Center of the Ural Branch of the Russian Academy of Sciences
137	k-alloyarov@ya.ru	Alloyarov Konstantin Borisovich	FGAOU VO "Murmansk State Technical University"
138	akanukov@list.ru	Kanukov Alexander Sergeevich	Geophysical Institute - a branch of the Federal State Budgetary Institution of Science of the Federal Scientific Center "Vladikavkaz Scientific Center of the Russian Academy of Sciences"
139	rodionova@nsuada.ru	Rodionova Yulia Valerievna	Federal State Budgetary Educational Institution of Higher Education "Kryachkov Novosibirsk State University of Architecture, Design and Arts"
140	afanaseva_ov@spbstu.ru	Afanasyeva Olga Valerievna	Peter the Great St. Petersburg Polytechnic University
141	poa@icmm.ru	Plekhov Oleg Anatolievich	Perm Federal Research Center of the Ural Branch of the Russian Academy of Sciences
142	pochta.avd@gmail.com	Doroshenko Anna Valerievna	Federal State Budgetary Educational Institution of Higher Education "National Research Moscow State University of Civil Engineering" (NRU MGSU).
143	fokin.ilya@gmail.com	Fokin Ilya Vladimirovich	Center for Petrophysical and Geomechanical Research, IPE RAS
144	gnedovskaya@mail.ru	Gnedovskaya Elena Vladimirovna	Federal State Budgetary Scientific Institution "Scientific Center of Neurology"
145	evginia@mail.ru	Ageeva Evgeniya Valerievna	Baikal State University
146	nka@vniisoi.ru	Nikulchev	FGBNU All-Russian Research

		Konstantin Anatolievich	Institute of Soybeans
147	avsurov@ieeras.ru	Surov Alexander Viktorovich	FSBSI Institute of Electrophysics and Electric Power Industry of the Russian Academy of Sciences (IEE RAS)
148	dw-08@mail.ru	Shvetsova Daria Andreevna	Chelyabinsk State University
149	rysev_pavel@list.ru	Rysev, Pavel, Valerievich	Federal State Budgetary Educational Institution of Higher Education "Omsk State Technical University"
150	barannik@iemspb.ru	Barannik Irina Anatolyevna	Federal State Budgetary Scientific Institution "Institute of Experimental Medicine" FGBNU "IEM"
151	k.golokhvast@vir.nw.ru	Golokhvast Kirill Sergeevich	FGBNU Federal Research Center All-Russian Institute of Plant Genetic Resources. N.I. Vavilova
152	zarema1177@yandex.ru	Uzdenova Zarema Kemalovna	ALIEV Karachay-Cherkess State University
153	betts@irioh.ru	Betz Kristina Valerievna	Federal State Budgetary Scientific Institution " Izmerov Scientific Research Institute of Occupational Medicine"
154	solnishko234@yandex.ru	Yagotintseva Natalia Vladimirovna	Federal State Budgetary Educational Institution of Higher Education «Privolzhsky Research Medical University» of the Ministry of Health of the Russian Federation
155	lolikkolbik@gmail.com	Kolbina Olga Nikolaevna	Federal State Budgetary Educational Institution of Higher Education «Privolzhsky Research Medical University» of the Ministry of Health of the Russian Federation

156	sergey-59@ya.ru	Nikolaev Sergey Pavlovich	Federal State Budgetary Scientific Institution "Scientific Research Institute of Occupational Medicine named after Academician N.F. Izmerov"
157	shvedovsa@mgsu.ru	Shvedov Stefan Andreevich	National Research University MOSCOW STATE UNIVERSITY OF CIVIL ENGINEERING
158	svetlana8725@mail.ru	Karakotova Svetlana Abugalievna	ALIEV Karachay-Cherkess State University
159	laipanova19671903@mail.ru	Laipanova Indira Bashirovna	ALIEV Karachay-Cherkess State University
160	Zemchura@mail.ru	Khachirova Zimfira Kemalovna	ALIEV Karachay-Cherkess State University
161	yurikornev@mail.ru	Kornev Yuri Vitalievich	Institute of Applied Mechanics of the Russian Academy of Sciences (IPRIM RAS)
162	kuchugura@mail.ru	Vasilieva Zhanna Vyacheslavovna	Federal State Autonomus Budgetary Educational Institution of Higher Education "Murmansk State Technical University
163	v.a.blaginin@usue.ru	Blaginin Viktor Andreevich	Ural State University of Economics
164	suldf@yandex.ru	Suleymanov Damir Fanilevich	Ufa State Petroleum Technical University
165	Laponows92@mail.ru	Laponov Sergey Vladimirovich	Ufa State Petroleum Technical University
166	J-9101980@yandex.ru	Popova Olga Vladimirovna	Institute of Philosophy RAS
167	zinaidarozhkova@gmail.com	Rozhkova Zinaida Igorevna	Institute of Philosophy RAS
168	nezv@yandex.ru	Nezvitskaya Tatiana Viktorovna	Federal State Budget Institution "State Historical, Architectural and Ethnographic Museum-

			Reserve" Kizhi "
169	kovaleva@mirea.ru	Kovaleva Anna Nikolaevna	Federal State Budgetary Educational Institution of Higher Education "MIREA - Russian Technological University"
170	laura_fidarova@mail.ru	Dzobelova Laura Vladimirovna	Geophysical Institute of the Vladikavkaz Scientific Center of the Russian Academy of Sciences
171	marina@barulina.ru	Barulina Marina Alexandrovna	Institute for Problems of Precision Mechanics and Control RAS
172	bborlakova@mail.ru	Borlakova Bablina Magomedovna	Federal State Budgetary Educational Institution of Higher Education "Karachayevo_Cherkessm State University named after U.D. Aliyev"
173	pbykov@imet.ac.ru	Bykov Pavel Andreevich	Federal State Budgetary Institution of Science Institute of Metallurgy and Materials Science. A.A. Baikov Russian Academy of Sciences
174	wolfludmila@mail.ru	Volkova Lyudmila Vladimirovna	Federal State Budgetary Educational Institution of Higher Education «Privolzhsky Research Medical University» of the Ministry of Health of the Russian Federation
175	xaritonov@mail.ru	Kharitonov Sergey Sergeevich	FGBNU ALL-RUSSIAN RESEARCH INSTITUTE OF PHYTOPATOLOGY
176	puzanov.vyu@yandex.ru	Puzanov Vladimir Yurievich	Federal State Budgetary Educational Institution of Higher Education «Privolzhsky Research Medical University» of the Ministry of Health of the Russian Federation

177	egidarev@yandex.ru	Egidarev Evgeny Gennadievich	Pacific Institute of Geography FEB RAS
178	coluria@mail.ru	Dutova Svetlana Vyacheslavovna	Federal State Budgetary Educational Institution of Higher Education "Khakass State University named after N. F. Katanov"
179	nborisov@rggu.ru	Borisov Nikolay Alexandrovich	Russian State University for the Humanities
180	olga16.08@mail.ru	Vdovina Olga Alexandrovna	FSBEI HE "Penza State University of Architecture and Construction"
181	kosarev_nikolai@mail.ru	Kosarev Nikolay Ivanovich	Siberian Federal University
182	Dmitriy.kochelev92@mail.ru	Dmitry Koshelev	All-Russian Research Institute of Irrigated Agriculture
183	telegin@imp.uran.ru	Telegin Andrey Vladimirovich	Mikheev Institute of Metal Physics Ural Branch of RAS
184	mdemin@ncfu.ru	Demin, Maxim Sergeevich	Federal State Budgetary Educational Institution of Higher Education "North Caucasus Federal University"

Annex 3: final mailing list

1	FEDERAL STATE BUDGETARY INSTITUTION "TECHNOLOGICAL INSTITUTE FOR SUPERHARD AND NOVEL CARBON MATERIALS" (FSBI TISNCM)
2	Federal State Budgetary Institution of Science Engelhardt Institute of Molecular Biology of the Russian Academy of Sciences
3	Federal State Budgetary Institution of Science Ioffe Physico-Technical Institute of the Russian Academy of Sciences
4	Federal State Institution "Federal Research Center" Crystallography and Photonics "of the Russian Academy of Sciences"
5	Federal State Budgetary Educational Institution of Higher Education "Kuban State University"
6	Federal State Unitary Enterprise "Institute of Chemical Reagents and High-Purity Chemical Substances of the National Research Center" Kurchatov Institute "
7	Federal State Autonomous Educational Institution of Higher Education "National University of Science and Technology" MISiS "
8	Federal State Autonomous Educational Institution of Higher Education "Lomonosov Northern (Arctic) Federal University"
9	Federal State Autonomous Educational Institution of Higher Education Southern Federal University
10	Federal State Autonomous Educational Institution of Higher Education "National Research Tomsk State University"
11	Federal State Autonomous Educational Institution of Higher Education "Moscow Institute of Physics and Technology (National Research University)"
12	Federal State Budgetary Educational Institution of Higher Education "National Research Moscow State University of Civil Engineering"
13	Federal State Budgetary Educational Institution of Higher Education "Moscow State Technological University" STANKIN "
14	Federal State Autonomous Educational Institution of Higher Education "National Research University" Moscow Institute of Electronic Technology "
15	Federal State Budgetary Institution of Science Institute of Nuclear Physics G.I.Budker Siberian Branch of the Russian Academy of Sciences
16	Federal State Budgetary Institution of Science Rzhanov Institute of Semiconductor Physics, Siberian Branch of the Russian Academy of Sciences
17	Federal State Budgetary Scientific Institution "Federal Research Center Institute of Cytology and Genetics of the Siberian Branch of the Russian Academy of Sciences"
18	Federal State Budgetary Scientific Institution "Orekhovich Research Institute of Biomedical Chemistry "Russian Academy of Medical Sciences
19	Federal State Budgetary Educational Institution of Higher Education "Voronezh State

	University"
20	Federal State Autonomous Educational Institution of Higher Education "Ural Federal University"
21	Federal State Budgetary Scientific Institution "All-Russian Scientific Research Institute of Agricultural Biotechnology"
22	Federal State Unitary Enterprise "Gorynina Central Research Institute of Structural Materials" Prometheus" of the National Research Center "Kurchatov Institute"
23	Federal State Unitary Enterprise "All-Russian Scientific Research Institute of Optical and Physical Measurements"
24	Federal State Budgetary Scientific Institution "Federal Research Center for Fundamental and Translational Medicine"
25	Federal State Budgetary Educational Institution of Higher Education "Moscow Polytechnic University"
26	Federal State Budgetary Institution of Science Institute of Chemical Physics Problems of the Russian Academy of Sciences
27	Joint Stock Company "Research Center for the Study of Surface and Vacuum Properties"
28	Federal State Autonomous Educational Institution "Peoples' Friendship University of Russia"
29	Federal State Budgetary Educational Institution of Higher Education "Ryazan State Radio Engineering University"
30	Open Joint Stock Company "All-Russian twice Orders of the Red Banner of Labor Heat Engineering Research Institute"
31	Federal State Budgetary Institution of Science Institute of Metallurgy of the Ural Branch of the Russian Academy of Sciences
32	Federal State Budgetary Institution of Science Dagestan Federal Research Center of the Russian Academy of Sciences
33	Federal State Budgetary Institution "Russian Scientific Center for Radiology and Surgical Technologies named after Academician A.M. Granov "of the Ministry of Health of the Russian Federation
34	Federal State Budgetary Educational Institution of Higher Education "Irkutsk National Research Technical University"
35	All-Russian Electrotechnical Institute - a branch of the Federal State Unitary Enterprise " Zababakhin Russian Federal Nuclear Center - All-Russian Scientific Research Institute of Technical Physics"
36	Federal State Budgetary Educational Institution of Higher Education "Michurinsk State Agrarian University"
37	Federal State Budgetary Scientific Institution "All-Russian Scientific Research Institute of Agricultural Microbiology"

38	Joint Stock Company "Order of the Red Banner of Labor Research Karpov Institute of Physics and Chemistry"
39	State Scientific Center - Scientific Research Institute of Atomic Reactors
40	State Research and Design Institute of Rare Metal Industry "Giredmet"
41	Federal State Budgetary Educational Institution of Higher Education "Volga State Technological University"
42	Federal State Budgetary Educational Institution of Higher Education "Kazan National Research Technological University"
43	Federal State Budgetary Educational Institution of Higher Education "Tver State Technical University"
44	Federal State Budgetary Educational Institution of Higher Education "St. Petersburg Mining University"
45	Federal State Budgetary Educational Institution of Higher Education Khetagurovs North-Ossetian State University
46	Federal State Budgetary Educational Institution of Higher Education "Yaroslavl State University "
47	Federal State Autonomous Scientific Institution "Central Research and Development Institute of Robotics and Technical Cybernetics"
48	Federal State Autonomous Educational Institution of Higher Education "National Research Tomsk Polytechnic University"
49	Federal State Budgetary Educational Institution of Higher Education "North Caucasian Mining and Metallurgical Institute (State Technological University)"
50	Federal State Budgetary Educational Institution of Higher Education "National Research University" MPEI "
51	Federal State Autonomous Educational Institution of Higher Education "National Research Nuclear University" MEPhI "
52	Federal State Autonomous Educational Institution of Higher Education "Kazan (Volga Region) Federal University"
53	Federal State Budgetary Scientific Institution "Research and Production Complex" Technological Center "
54	Federal State Budgetary Educational Institution of Higher Education "Perm National Research Polytechnic University"
55	Federal State Budgetary Educational Institution of Higher Education "Mendeleevs Russian University of Chemical Technology"
56	Federal State Budgetary Institution of Science Special Astrophysical Observatory of the Russian Academy of Sciences
57	Institute for Physics of Microstructures RAS - Branch of the Federal State Budgetary Scientific Institution "Federal Research Center Institute of Applied Physics of the Russian Academy of Sciences"

58	Federal State Budgetary Institution of Science Institute of Gene Biology of the Russian Academy of Sciences
59	Federal State Budgetary Educational Institution of Higher Education "Millionshchikov Grozny State Oil Technical University "
60	Federal State Budgetary Educational Institution of Higher Education "Berbekovs Kabardino-Balkarian State University "
61	Federal State Budgetary Educational Institution of Higher Education "Samara State Technical University"
62	Federal State Budgetary Educational Institution of Higher Education "Ivanovo State University of Chemical Technology"
63	Federal State Autonomous Educational Institution of Higher Education "Far Eastern Federal University"
64	Federal State Budgetary Institution "National Research Center" Kurchatov Institute "
65	Federal State Autonomous Educational Institution of Higher Education "South Ural State University (National Research University)"
66	Federal State Budgetary Educational Institution of Higher Education "Lomonosov Moscow State University"
67	Federal State Budgetary Institution of Science Lebedev Physical Institute of the Russian Academy of Sciences
68	Federal State Unitary Enterprise "Lukin Research Institute for Physical Problems"
69	Federal State Budgetary Scientific Institution "Federal Research Center Institute of Applied Physics of the Russian Academy of Sciences"
70	Federal State Budgetary Educational Institution of Higher Education "St. Petersburg State University"
71	Federal State Institution "Federal Research Center" Fundamental Foundations of Biotechnology "of the Russian Academy of Sciences"
72	Federal State Budgetary Institution "State Research Institute of Genetics and Selection of Industrial Microorganisms of the National Research Center" Kurchatov Institute "
73	Federal State Budgetary Educational Institution of Higher Education "Tyumen Industrial University"
74	Federal State Budgetary Educational Institution of Higher Education "Perm State National Research University"
75	Federal State Budgetary Institution of Science Institute of Chemical Physics. N.N. Semenov Russian Academy of Sciences
76	Federal State Autonomous Educational Institution of Higher Education "Belgorod State National Research University"
77	Federal State Budgetary Institution of Science Institute of Astronomy of the Russian Academy of Sciences

78	Interdepartmental Supercomputer Center of the Russian Academy of Sciences - a branch of the Federal State Institution "Federal Scientific Center Scientific Research Institute for System Research of the Russian Academy of Sciences"
79	Federal State Budgetary Institution of Science Institute of Physiologically Active Substances of the Russian Academy of Sciences
80	Federal State Autonomous Educational Institution of Higher Education "Lobachevsky National Research Nizhny Novgorod State University"
81	Federal State Budgetary Educational Institution of Higher Education "Tomsk State University of Control Systems and Radioelectronics"
82	Federal State Budgetary Educational Institution of Higher Education "Irkutsk State University"
83	Federal State Budgetary Scientific Institution Ufa Federal Research Center of the Russian Academy of Sciences
84	Federal State Unitary Enterprise "All-Russian Scientific Research Institute of Aviation Materials"
85	Federal State Budgetary Institution of Science Institute of Bioorganic Chemistry. Academicians M.M. Shemyakin and Yu.A. Ovchinnikov Russian Academy of Sciences
86	Federal State Budgetary Institution of Science "Udmurt Federal Research Center of the Ural Branch of the Russian Academy of Sciences"
87	Federal State Autonomous Educational Institution of Higher Education "Korolev Samara National Research University"
88	Federal State Autonomous Educational Institution of Higher Education "Tyumen State University"
89	Federal State Budgetary Educational Institution of Higher Education "Kemerovo State University"
90	Federal State Budgetary Institution of Science "Institute for Nuclear Research of the Russian Academy of Sciences"
91	Federal State Budgetary Institution of Science Institute of Organometallic Chemistry. G.A. Razuvaev of the Russian Academy of Sciences
92	Federal State Budgetary Scientific Institution "Federal Research Center" Krasnoyarsk Scientific Center of the Siberian Branch of the Russian Academy of Sciences "
93	Federal State Budgetary Institution of Science Institute of Automation and Electrometry of the Siberian Branch of the Russian Academy of Sciences
94	Federal State Budgetary Institution of Science Institute of Applied Astronomy of the Russian Academy of Sciences
95	Federal State Institution "Federal Scientific Center Scientific Research Institute for System Research of the Russian Academy of Sciences"
96	Federal State Autonomous Educational Institution of Higher Education "Ulyanov (Lenin) St. Petersburg State Electrotechnical University" LETI "

97	Federal State Budgetary Educational Institution of Higher Education "Astrakhan State Medical University" of the Ministry of Health of the Russian Federation
98	Skolkovo Institute of Science and Technology (Skoltech)
99	Federal State Budgetary Educational Institution of Higher Education "Voino-Yasenetsky Krasnoyarsk State Medical University "of the Ministry of Health of the Russian Federation
100	Federal Budgetary Institution of Science "St. Petersburg Research Institute of Epidemiology and Microbiology. Pasteur "of the Federal Service for Supervision of Consumer Rights Protection and Human Welfare
101	Federal State Budgetary Institution of Science Federal Research Center "Prokhorov Institute of General Physics Russian Academy of Sciences "
102	Federal State Budgetary Educational Institution of Higher Education "Kuzbass State Agricultural Academy"
103	Federal State Autonomous Educational Institution of Higher Education "Ammosov North-Eastern Federal University"
104	Joint Stock Company "Research Institute of Molecular Electronics"
105	Federal State Budgetary Institution "Almazov National Medical Research Center" of the Ministry of Health of the Russian Federation
106	Federal State Autonomous Educational Institution of Higher Education "Sevastopol State University"
107	Budgetary institution of higher education of the Khanty - Mansiysk Autonomous Okrug - Ugra "Surgut State University"
108	Federal State Budgetary Educational Institution of Higher Education "Morozov Voronezh State Forestry University"
109	Federal State Budgetary Scientific Institution "Federal Scientific Center of Beekeeping"
110	Federal State Budgetary Educational Institution of Higher Education Tambov State Technical University
111	Federal State Budgetary Institution of Science Institute of Economics of the Ural Branch of the Russian Academy of Sciences
112	Federal State Budgetary Educational Institution of Higher Education "Stolypin Omsk State Agrarian University"
113	Federal State Autonomous Scientific Institution Mokerov Institute of Microwave Semiconductor Electronics Russian Academy of Sciences
114	Federal Research Center "Informatics and Management" of the Russian Academy of Sciences
115	Federal State Budgetary Educational Institution of Higher Education "MIREA - Russian Technological University"
116	Federal State Institution "Keldysh Federal Research Center Institute of Applied

	Mathematics of the Russian Academy of Sciences "
117	Federal State Budgetary Institution of Science Institute of Synthetic Polymeric Materials named after N.S. Enikolopov Russian Academy of Sciences
118	Federal State Budgetary Institution of Science "Federal Research Center" Pushchino Scientific Center for Biological Research of the Russian Academy of Sciences "
119	Federal State Budgetary Educational Institution of Higher Education "State Academic University of the Humanities"
120	Federal State Budgetary Institution of Science "Order of the Red Banner of Labor Nikitsky Botanical Garden - National Scientific Center of the Russian Academy of Sciences"
121	Federal State Budgetary Educational Institution of Higher Education "Moscow State University of Food Production"
122	Federal State Budgetary Institution of Science North-Eastern Complex Scientific Research Institute named after ON. Shilo of the Far Eastern Branch of the Russian Academy of Sciences
123	Federal State Budgetary Institution of Science "Federal Research Center" Institute of Catalysis named after G.K. Boreskov of the Siberian Branch of the Russian Academy of Sciences "
124	Sericulture Research Station - Branch of the Federal State Budgetary Scientific Institution "North Caucasus Federal Scientific Agrarian Center"
125	Federal State Budgetary Institution of Science "National Scientific Center for Marine Biology named after A.V. Zhirmunsky "of the Far Eastern Branch of the Russian Academy of Sciences
126	Federal State Budgetary Institution of Science Special Design Bureau of Automation Means for Marine Research of the Far Eastern Branch of the Russian Academy of Sciences
127	Federal State Budgetary Institution of Science Institute of Petroleum Geology and Geophysics named after A.A. Trofimuk of the Siberian Branch of the Russian Academy of Sciences
128	Federal State Budgetary Scientific Institution "Crimean Astrophysical Observatory of the Russian Academy of Sciences"
129	Federal State Budgetary Institution "St. Petersburg Nuclear Physics Institute" B.P. Konstantinov of the National Research Center "Kurchatov Institute"
130	Federal State Budgetary Institution of Science Institute of Protein of the Russian Academy of Sciences
131	Federal State Budgetary Institution of Science Institute of Chemistry of High-Purity Substances. G. G. Devyatykh of the Russian Academy of Sciences
132	Federal State Budgetary Institution of Science Geological Institute of the Siberian Branch of the Russian Academy of Sciences

133	Federal State Budgetary Educational Institution of Higher Education "Oryol State Agrarian University named after N.V. Parakhina "
134	Federal State Budgetary Institution of Science Institute of Cosmophysical Research and Radio Wave Propagation of the Far Eastern Branch of the Russian Academy of Sciences
135	Federal State Budgetary Institution of Science Federal Research Center "Karelian Scientific Center of the Russian Academy of Sciences"
136	Federal State Budgetary Educational Institution of Higher Education "Kazan State Academy of Veterinary Medicine named after N.E. Bauman "
137	Federal State Budgetary Institution "Institute of High Energy Physics named after A.A. Logunov of the National Research Center "Kurchatov Institute"
138	Federal State Autonomous Educational Institution of Higher Education "Crimean Federal University named after V. I. Vernadsky"
139	Federal State Budgetary Scientific Institution Federal Scientific Center "All-Russian Scientific Research and Technological Institute of Poultry" of the Russian Academy of Sciences
140	Federal State Budgetary Scientific Institution "Tomsk National Research Medical Center of the Russian Academy of Sciences"
141	Federal State Budgetary Institution of Science Institute of Molecular and Cellular Biology, Siberian Branch of the Russian Academy of Sciences
142	Federal State Budgetary Scientific Institution "All-Russian Research Institute of Horse Breeding"
143	Federal State Budgetary Institution of Science Institute of Geology of Diamond and Precious Metals of the Siberian Branch of the Russian Academy of Sciences
144	Federal State Budgetary Scientific Institution Samara Research Institute of Agriculture named after N.M. Tulaykova "
145	Federal State Budgetary Institution of Higher Education "Izhevsk State Technical University named after M.T. Kalashnikov "
146	Kemerovo Research Institute of Agriculture - a branch of the Federal State Budgetary Institution of Science of the Siberian Federal Scientific Center of Agrobiotechnology of the Russian Academy of Sciences
147	Federal State Unitary Enterprise "Selection and Genetic Center" Smena "
148	Federal Budgetary Institution of Science "State Scientific Center for Applied Microbiology and Biotechnology" of the Federal Service for Supervision of Consumer Rights Protection and Human Wellbeing of the Russian Federation
149	Federal State Budgetary Scientific Institution Scientific Research Institute of Therapy and Preventive Medicine
150	Federal State Autonomous Educational Institution of Higher Education "Immanuel Kant Baltic Federal University"

151	Federal State Budgetary Institution of Science Institute of Chemical Biology and Fundamental Medicine of the Siberian Branch of the Russian Academy of Sciences
152	Federal State Budgetary Institution "Institute of Theoretical and Experimental Physics named after A.I. Alikhanov National Research Center "Kurchatov Institute"
153	Federal State Budgetary Educational Institution of Higher Education "Moscow Automobile and Road Construction State Technical University (MADI)"
154	Federal State Budgetary Educational Institution of Higher Education "First Saint Petersburg State Medical University named after Academician I.P. Pavlova "of the Ministry of Health of the Russian Federation
155	Federal State Budgetary Institution of Science. Scientific station of the Russian Academy of Sciences in Bishkek
156	Federal State Autonomous Educational Institution of Higher Education "Peter the Great St. Petersburg Polytechnic University"
157	Stavropol Botanical Garden named after V.V. Skripchinsky - branch of the Federal State Budgetary Scientific Institution "North Caucasus Federal Scientific Agrarian Center"
158	Institute of Biochemistry and Genetics - a separate structural unit of the Federal State Budgetary Scientific Institution of the Ufa Federal Research Center of the Russian Academy of Sciences
159	Federal State Budgetary Scientific Institution "Medical Genetic Research Center"
160	State Research Center Federal State Unitary Enterprise "Central Aerohydrodynamic Institute named after Professor N.Ye. Zhukovsky "
161	Federal State Budgetary Scientific Institution "All-Russian Scientific Research Institute of Potato Farming named after A.G. Lorkha "
162	Federal State Budgetary Scientific Institution "All-Russian Research Institute of Feed named after V.R. Williams "
163	Federal State Budgetary Institution of Science Institute of Ecology and Evolution A.N. Severtsov Russian Academy of Sciences
164	Federal State Budgetary Educational Institution of Higher Education "Moscow State University of Medicine and Dentistry named after A.I. Evdokimov "of the Ministry of Health of the Russian Federation
165	Federal State Budgetary Institution of Science of the Order of the Red Banner of Labor Institute of Petrochemical Synthesis. A.V. Topchieva of the Russian Academy of Sciences
166	Federal State Budgetary Scientific Institution "Baikal Museum of the Irkutsk Scientific Center"
167	Federal State Budgetary Institution of Science "Federal Scientific Center for Biodiversity of Terrestrial Biota of East Asia" of the Far Eastern Branch of the Russian Academy of Sciences

168	Federal State Budgetary Scientific Institution "Federal Scientific Center of Legumes and Groats"
169	Federal State Budgetary Institution of Science Institute of Industrial Ecology of the Ural Branch of the Russian Academy of Sciences
170	Federal State Budgetary Institution of Science Tobolsk Complex Scientific Station of the Ural Branch of the Russian Academy of Sciences
171	Federal State Budgetary Scientific Institution "Institute of Agroengineering and Environmental Problems of Agricultural Production"
172	Federal State Budgetary Educational Institution of Higher Education "Nizhny Novgorod State Technical University named after R.E. Alekseev"
173	Federal State Budgetary Institution of Science Federal Research Center "Marine Hydrophysical Institute RAS"
174	Federal State Budgetary Institution of Science Siberian Institute of Plant Physiology and Biochemistry, Siberian Branch of the Russian Academy of Sciences
175	Federal State Budgetary Institution of Science Institute of General Genetics. N.I. Vavilov Russian Academy of Sciences
176	Federal State Budgetary Scientific Institution "Scientific Center for Family Health and Human Reproduction"
177	Federal State Budgetary Scientific Institution "Research Institute of Epidemiology and Microbiology named after G.P. Somova "
178	Federal State Budgetary Scientific Institution "Research Institute of Vaccines and Serums named after I.I. Mechnikov "
179	Federal State Budgetary Scientific Institution "Federal Scientific Center for Agrobiotechnology of the Far East named after A.K. Seagulls "
180	Federal State Budgetary Institution of Science Institute of Ethnology and Anthropology named after N.N. Miklouho-Maclay of the Russian Academy of Sciences
181	Federal State Budgetary Institution of Science "Institute of Physiology. I.P. Pavlova of the Russian Academy of Sciences "
182	Federal State Budgetary Scientific Institution "All-Russian Selection and Technological Institute of Horticulture and Nursery"
183	Federal State Autonomous Educational Institution of Higher Education "Novosibirsk National Research State University"
184	Federal State Budgetary Educational Institution of Higher Education "Baltic State Technical University" VOENMEKH " D.F. Ustinov "
185	Federal State Autonomous Educational Institution of Higher Education "Volgograd State University"
186	Federal State Budgetary Scientific Institution "Soil Institute named after V.V. Dokuchaev "
187	Federal State Budgetary Educational Institution of Higher Education "Kazan National

	Research Technical University named after A.N. Tupolev-KAI "
188	Federal State Budgetary Educational Institution of Higher Education "Russian Economic University named after G.V. Plekhanov "
189	Federal State Budgetary Scientific Institution "Institute of Experimental Medicine"
190	Federal State Budgetary Institution of Science Joint Institute for High Temperatures of the Russian Academy of Sciences
191	Federal State Budgetary Scientific Institution "Federal Research Center of Virology and Microbiology"
192	Federal State Budgetary Institution of Science Institute of Organoelement Compounds. A.N. Nesmeyanov of the Russian Academy of Sciences
193	Federal State Budgetary Scientific Institution "Scientific Center of Neurology"
194	Federal State Budgetary Institution of Science Federal Research Center for Nutrition, Biotechnology and Food Safety
195	Federal State Budgetary Institution of Science Federal Research Center "Kola Scientific Center of the Russian Academy of Sciences"
196	Federal State Budgetary Educational Institution of Higher Education "Saratov State Medical University named after V. I. Razumovsky" of the Ministry of Health of the Russian Federation
197	Federal State Budgetary Educational Institution of Higher Education "Saratov State Technical University named after Yu.A. Gagarin"
198	Federal State Autonomous Educational Institution of Higher Education "Russian State University of Oil and Gas (National Research University) named after I.M. Gubkin "
199	Institute of Biochemistry and Physiology of Microorganisms named after G.K. Scriabin - a separate subdivision of the Federal State Budgetary Institution of Science "Federal Research Center" Pushchino Scientific Center for Biological Research RAS "
200	Scientific and Production Association "Central Scientific Research Institute of Mechanical Engineering Technology"
201	Federal State Budgetary Educational Institution of Higher Education "Moscow Aviation Institute (National Research University)"
202	Federal State Autonomous Educational Institution of Higher Education "National Research University Higher School of Economics"
203	Federal State Autonomous Educational Institution of Higher Education "National Research University ITMO"
204	Federal State Autonomous Educational Institution of Higher Education First Moscow State Medical University named after I.M. Sechenov of the Ministry of Health of the Russian Federation (Sechenov University)
205	Federal State Autonomous Educational Institution of Higher Education "Siberian Federal University"
206	Federal State Autonomous Educational Institution of Higher Education "Tyumen State

	University"

Annex 4 List of training courses/workshops/schools/conferences named by respondents of survey, which cover different issues related to research infrastructure management and in which you would like to participate

N	Name of the event	Organiser	Date & venue	website
1	GEO Week 2020	the Group on Earth Observations (GEO)	2-6 November 2020 online	https://www.earthobservations.org/geoweek2020.php
2	FIDIC International Infrastructure Conference 2021	International Federation of consulting engineers	Geneva, Switzerland 12.09 – 14.09 2021	https://fidic.org/events/fidic-international-infrastructure-conference-2021-geneva-switzerland
3	WORKSHOP"BUILDING LEADERSHIP IN EUROPEAN RESEARCH INFRASTRUCTURES"; Big Science Business Forum (BSBF 2021)	CERN, EMBL, ESA, ESO, ESRF, XFEL, SKA, ILL	28.09 - 01.09.2021 Granada, Spain	https://www.bsbf2020.org/
4	No scheduled events (we will monitor)	KNOWMAK project RISIS-KNOWMAK (Knowledge in the making in the European society)		https://www.knowmak.e
5	How to improve the efficiency of research infrastructures, operation, to optimize the access			comments: Most of these topics are included in different European training courses, e.g. in EMMRI modules. However, some topics may

	of foreign users to Russian facilities, to cooperate effectively with producers of scientific equipment	EoI		be the subject of specific new training courses developed and implemented under CREMLINplus in Russia.
6	Global Open Science Cloud Workshop (ZOOM) within EGI conference	EGI	3-4 Nov.2020	https://indico.egi.eu/event/5255/
7	Certificate - Principles of Biobanking	University of Luxembourg Competence Centre (ULCC).	June-July 2021	https://wwwen.uni.lu/studies/fstm/certificate _principles_of_biobanking/application
8	HOW TO BUILD A BIOBANK	Medical Univesity of Graz	15. - 16.04.2021	https://www.medunigraz.at/rektorat/vizerekt orin-fuer-forschung-und-internationales/international-biobanking-and-education/how-to-build-a-biobank-basic/
9	6th European Crystallographic School	European Crystallographic Assosiation	**4 – 10 July 2021, Budapest**	https://www.ecs6.chemcryst.hu/
10	First IS-ENES3 virtual Autumn School on Climate data use for impact assessments	the IS-ENES consortium	Nov 04, 2020 09:00 AM to Dec 10, 2020 09:00 AM	https://is.enes.org/events/trainings-and-education/first-is-enes-autumn-school-on-climate-data-use-for-impact-and-adaptation-assessments#:~:text=This%20is%20the%20first %20in,%2DJune)%20schools%20in%202021.&t ext=The%20total%20length%20of%20the%20A utumn%20School%20is%20six%20weeks.