

SURVEY METHODOLOGY AND OUTCOMES



EUROPEAN UNION
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Operational Programme Research,
Development and Education



FZU Institute of Physics
of the Czech
Academy of Sciences



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1 PART 1: INTERNAL PROCESS AND METHODOLOGY OF THE SURVEY

1.1 Survey methodology

To elaborate the Gap Analysis, the Institute of Physics of the Czech Academy of Sciences (FZU) followed the specific instructions set in the “Draft GUIDELINES to the implementation of the strengthened Human Resources Strategy for Researchers (HRS4R)”. The survey itself combined quantitative and qualitative research methods, where quantitative methods served as the verification of the initial hypothesis and qualitative methods provided an opportunity to explore the findings in closer detail.

1.2 Analysis procedure

The determination of the research problem included:

- Taking into account the existing knowledge and conclusions
- Determining the subject of the research
- Choosing effective ways of input collection
- Data collection
- Analysis
- Formulation of conclusions

For the purpose of the Gap Analysis, the following techniques of data collection were used:

- Observation
- Analysis of internal documents
- Survey
- In-depth interviews

1.2.1 Preliminary analysis

The Institute of Physics of the Czech Academy of Sciences (FZU) implements the strengthened Human Resources Strategy for Researchers (HRS4S) as a part of the project “Improving quality of the strategic management in the Institute of Physics of the Czech Academy of Sciences” co-funded by the European Structural and Investments Fund, Operational Programme Research, Development and Education. Therefore, the main part of our working hypothesis was formulated at the stage of the feasibility study during the application process for the grant in 2017. The formulation of the hypothesis was preceded by a preliminary analysis which included inputs from participant observations and document analysis – i.e. qualitative methods of data collection.

Participant observations had been performed over the years preceding the grant application. Members of administration staff combined systematic observation of the everyday practice within the institute with noted discrepancies in internal communication and direct feedback from researchers. Moreover, they collected and examined all relevant documents - i.e. internal regulations and national legislation.

1.2.2 Internal analysis (GAP)

The implementation of the strengthened HRS4R was initiated by the official endorsement of the 40 principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers on November 9th, 2017. The first meeting of the Working Group for HRS4R took place on January 4th, 2018. The Working Group concluded an agreement on the common approach and methods of data collection and elaboration of the Gap Analysis. Instructions from the “Draft GUIDELINES to the implementation of the strengthened Human Resources Strategy for Researchers” were taken into



account including the requirement of addressing a wide range of stakeholders and researchers, as well as a variety of management departments. Activities of the Working Group for HRS4R were sponsored by the Director of the Institute of Physics, RNDr. Michael Prouza, Ph.D., and the Science Secretary, Ing. Jiří Červenka, Ph.D.

The Working Group for HRS4R consists of the following members:

| Name | Position | Category | Location |
|-------------------------------------|----------------------------------------------|----------------|---------------|
| Ing. Lenka Černá | HR Coordinator | Administrative | Dolní Břežany |
| Mgr. Dominika Jírová | HR Coordinator | Administrative | Dolní Břežany |
| Bc. Olga Lakomá | HR Coordinator | Administrative | Dolní Břežany |
| Bc. Klára Daňková | Training and Mentoring Programme Coordinator | Administrative | Prague |
| Mgr. Ilona Gottwaldová BPhil Isl | Grant Office Manager | Administrative | Prague |
| Bc. Milada Moudrá | PR Manager | Administrative | Prague |
| Ing. Lucie Beránková | HR Coordinator | Administrative | Prague |
| Mgr. Pavla Novotná | Project Administrator | Administrative | Prague |
| Mgr. Ivo Svejkský, MBA, Ph.D. | Manager for International Cooperation | Administrative | Prague |
| Ing. Iva Babčanová | Head of Personnel Department | Administrative | Prague |
| Mgr. Monika Hochmanová | Training and Mentoring Programme Coordinator | Administrative | Prague |

Timeline of the main meetings of the Working Group

| Term of the meeting / Action of WG | The main theme | Participants |
|------------------------------------|------------------------------------------------------------------------------|------------------------------------|
| 04/01/2018 | Kick off meeting of WG | WG members, M. Prouza, J. Červenka |
| 24/01/2018 | Coordination and preparation of the in-depth interviews | WG members |
| 08/03/2018 | Online survey preparation | WG members |
| 30/04/2018 | Information and coordination meeting | WG members |
| 11/05/2018 | In-depth interviews evaluation | WG members |
| 04/06/2018 | Data processing and results online survey evaluation | WG members |
| 11/06/2018 | Formulation of the first version of the GAP analysis | WG members |
| 28/06/2018 | Formulation of the second version of the GAP analysis | WG members |
| 23/07/2018 | Improvement details and formulation of the final version of the GAP analysis | WG members |
| 30/07/2018 | Action plan template preparation | WG members |
| 08/08/2018 | Discussion and Action Plan targets proposals | WG members |



| | | |
|------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 30/08/2018 | The final version of AP | WG members |
| 05/09/2018 | Revision of AP and creation of attachments | WG members |
| 17/09/2018 | Discussion about the last version AP | WG members |
| 05/10/2018 | GAP analysis and AP sent to European Committee (EC) | WG members / SC |
| 06/10/2018 | AP posted on FZU websites | WG members / SC |
| 05/12/2018 | Realization of the AP, creation of Implementation teams | WG members |
| 04/01/2019 | Coordination meeting about the revision of the AP and GAP analysis | WG members |
| 10/01/2019 | Coordination meeting about the revision of the AP and GAP analysis | WG members |
| 24/01/2019 | Whole-institute seminar about AP, implementation teams | WG, SC, FZU employees |
| 08/02/2019 | Updated AP and GAP sent to EC and updated websites inform. at www.fzu.cz/en/hr-award | WG, SC |

In order to complement the already mentioned qualitative methods of data collection with a quantitative method, the Working Group for HRS4R decided on March 8th, 2018 to organise an online survey. The survey was conducted with the aim to verify the formulated hypothesis and to include the largest possible range of researchers. The minimum expected return on the online questionnaire was assessed at 20 % of the employees. The Working Group for HRS4R prepared an online questionnaire consisting of 40 main statements (44 questions) from the European Charter for Researchers and the Code of Conduct for the recruitment of Researchers. The online questionnaire was available through Google Forms platform and all employees were invited to participate in the survey through the internal messaging system “Zpravodaj” on April 26th, 2018. Anonymous opinions were collected from April 26th till June 3rd, 2018 with the total number of responses stopping at 318 (which represents 24 % of all the employees at FZU). The overview of collected answers is presented in Part 2 “Summary of the survey results”.

Concurrently, a third qualitative method of data collection was incorporated – interviewing. The sample of respondents was chosen bearing in mind the requirement of including researchers from various units, of different nationalities and genders, and at different stages of their research career (R1 to R4). As a

general rule, the in-depth interviews were led by one or two members of the Working Group for HRS4R and respected the anonymity of the provided opinions. Each in-depth interview took approximately 1 hour and it usually focused on one of the 4 main sections of the European Charter and the Code (1. Ethical and Professional Aspects; 2. Recruitment and Selection, 3. Working Conditions and Social Security; 4. Training and Development). Interviews for each section always had the same structure based on a partial questionnaire defining an interview scheme - it consisted of open questions. By the end of June 2018 representatives of the Working Group for HRS4R interviewed and collected opinion from 57 researchers and members of administrative support. The overview of provided answers is presented in Part 3 “Summary of in-depth interviews”.



1.3 Steering Committee

The Steering Committee was appointed upon a decision of the Director with respect to the requirements of the “Draft GUIDELINES to the implementation of the strengthened HRS4R”

The Steering committee consists of the following members:

| Name | Position | Category | Location |
|-------------------------------|-------------------------------------------------------|----------------------------------|-----------------|
| RNDr. Michael Prouza, Ph.D. | FZU Director | Researcher – R4 | Prague |
| Ing. Iva Babčanová | Head of Personnel Department | Administrative | Prague |
| Ing. Jaroslav Bezděk | Head of Administration Unit - Slovanka | Administrative | Prague |
| RNDr. Martina Boháčová, Ph.D. | Deputy Head of Department | Researcher – R3 | Prague |
| Ing. Jiří Červenka, Ph.D. | Science Secretary | Researcher – R4 | Prague |
| RNDr. Antonín Fejfar, CSc. | Statutory Deputy Director | Researcher – R4 | Prague |
| doc. RNDr. Petr Kužel Ph.D. | Senior researcher | Researcher – R4 | Prague |
| Ing. Štěpán Potocký, Ph.D. | Researcher | Researcher – R3 | Prague |
| Ing. Zdeňka Příhodová | Head of Administration Unit - Cukrovarnická | Administrative | Prague |
| Ladislav Půst, Ph.D. | Deputy Head of Division | Administrative/ Researcher R3 | Dolní Břežany |
| RNDr. Jiří J. Mareš, CSc. | Deputy Director for Cukrovarnická site | Researcher - R4 | Prague |
| Ing. Roman Hvězda | Deputy Director for ELI Beamlines and Hilase projects | Administrative | Dolní Břežany |



Timeline of the main meetings of the Steering Committee

| Term of the meeting / Action of SC | The main theme | Participants |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| 14/06/2018 | First meeting, GAP analysis process | SC, WG |
| 11/07/2018 | GAP analysis revision | SC, WG |
| 01/08/2018 | GAP analysis revision | SC, WG |
| 08/08/2018 | AP preparation | SC, WG |
| 22/08/2018 | AP preparation | SC, WG |
| 06/09/2018 | AP revision | SC, WG |
| 17/09/2018 | AP revision | SC, WG |
| 03/10/2018 | AP and GAP last version revision | SC, WG |
| 10/12/2018 | Discussion about Implementation teams | SC, WG |
| 11/12/2018 | The Consensus report from the European Commission was accepted. Some changes in GAP and AP were needed. The term for the update by 11/02/2019 | |
| 21/01/2019 | Revision of the updated AP and GAP | SC, WG |
| 04/02/2019 | Revision of the updated AP and GAP | SC, WG |

2 PART 2: SUMMARY OF THE ONLINE SURVEY RESULTS

1.4 Online survey procedure

The online survey was conducted with the aim to verify the formulated hypothesis and to include the largest possible range of employees. The minimum expected return on the online questionnaire was assessed at 20 % of the employees.

The Working Group for HRS4R prepared an online questionnaire consisting of 44 main statements from the European Charter for Researchers and the Code of Conduct for the recruitment of Researchers, divided into 4 parts:

- Ethical and professional aspects,
- Recruitment,
- Working conditions,
- Training and Development.

Questionnaire respondents were asked to mark their level of agreement with a particular statement by selecting one of the options - Strongly agree, Agree, Disagree, Strongly disagree. At the end of each section, there was also an opportunity to add some comments, notes or specifications to the topic. If

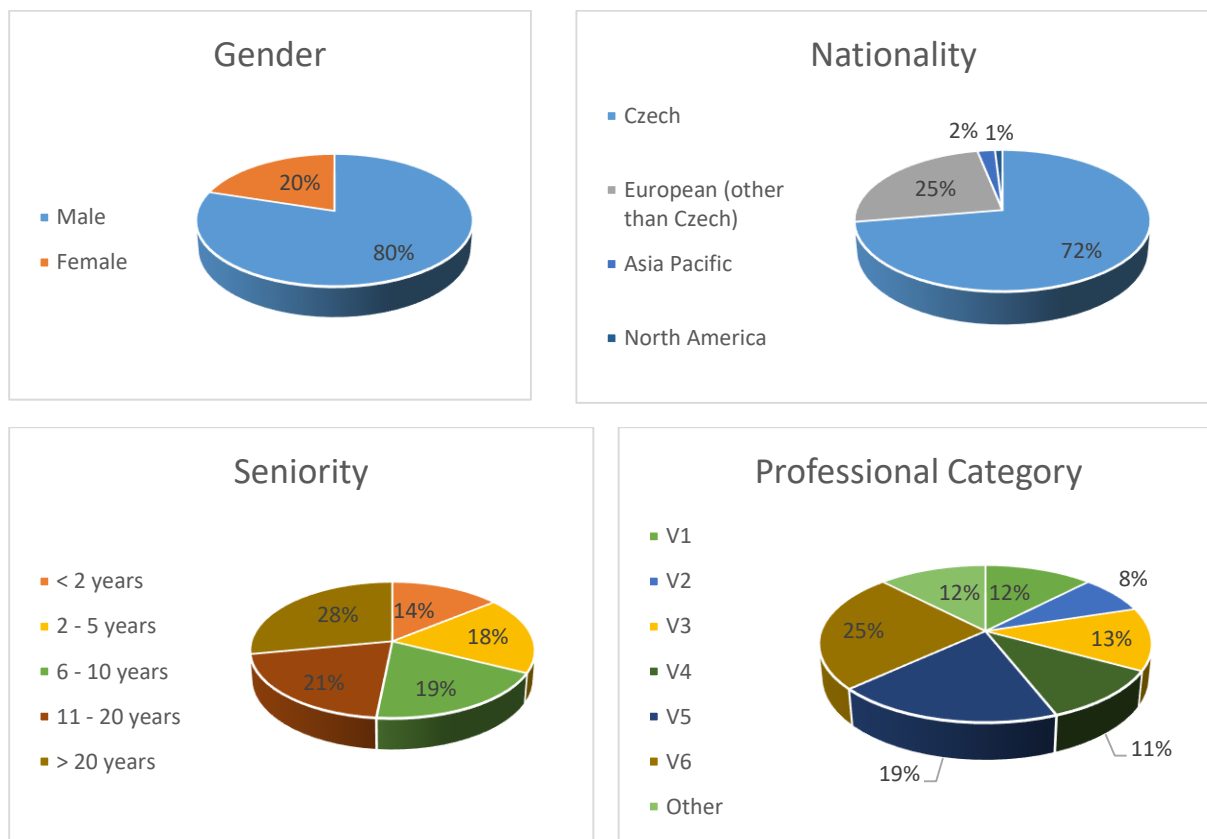


the respondents were not sure which option to select or if they felt that they did not have enough information to answer, they were asked to select the most suitable answer based on their subjective feeling and add a comment explaining where and why they had difficulties making their decision. This approach excluded an “I don’t know” option from the questionnaire in order to get a relevant comment about the topic. This resulted in 87 comments that were really helpful in the identification of the most complicated points and topics, so the Working Group for HRS4R was able to analyse the results with better understanding.

1.5 Summary of respondents based on various aspects

All employees were invited to participate in the online questionnaire through the internal messaging system by the Director of the Institute. Anonymous opinions were collected from April 26th till June 3rd, 2018 with the total number of responses stopping at 318 (which represents 24 % of all the employees).

The graphs below show personal and sociological aspect of the respondents. They also show us, that the participation in the survey was proportionally balanced in terms of gender and nationality. We can also observe, that the rate of participation was higher among senior staff.



1.6 Detailed overview of the results of the questionnaire

The gap identification is based on positive or negative levels of agreement with each statement. If more than 85 % of answers are positive (Agree + Strongly agree), Gap is not identified and no action required. If 15-20 % of answers are negative (Disagree + Strongly disagree) a “small gap” is identified – a topic we should focus on slightly during the following steps of the internal analysis. If a certain topic received more than 20 % of negative answers, it is identified as a gap and further action is required during the following steps of the internal analysis.



1.6.1 Research freedom

Statement:

At FZU researchers enjoy freedom of thought and expression, and freedom to identify methods by which problems are solved.

Conclusion:

Gap is not identified, there is no action required.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 50 % |
| Agree | 45 % |
| Disagree | 3 % |
| Strongly disagree | 2 % |

1.6.2 Ethical principles

Statement:

Researchers are aware of ethical practices and fundamental ethical principles appropriate to their discipline(s).

Conclusion:

Gap is not identified, there is no action required.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 33 % |
| Agree | 59 % |
| Disagree | 6 % |
| Strongly disagree | 2 % |

1.6.3 Professional responsibility

Statement:

Researchers make every effort to ensure that their research is relevant to society and does not duplicate research previously carried out elsewhere.

Conclusion:

Gap is not identified, there is no action required.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 29 % |
| Agree | 60 % |
| Disagree | 10 % |
| Strongly disagree | 1 % |

1.6.4 Professional attitude

Statement:

Researchers are familiar with the strategic goals governing their research area and funding mechanisms.

Conclusion:

Gap is not identified, there is no action required.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 18 % |
| Agree | 71 % |
| Disagree | 10 % |
| Strongly disagree | 1 % |

1.6.5 Contractual and legal obligations

Statement:

Researchers are familiar with the national, sectoral or institutional regulations governing working conditions, including Intellectual Property Rights regulations, and the requirements of funders.

Conclusion:

Gap is identified and further action is required.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 12 % |
| Agree | 67 % |
| Disagree | 20 % |
| Strongly disagree | 1 % |

1.6.6 Accountability

Statement:

FZU develops awareness among researchers that they are accountable towards their employers, funders, related public or private bodies as well as towards the society as a whole.

Conclusion:

Gap is not identified, there is no action required.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 13 % |
| Agree | 73 % |
| Disagree | 13 % |
| Strongly disagree | 1 % |



1.6.7 Good practice in research

Statement:

Researchers abide by safe working practices, take the necessary health and safety precautions and precautions related to IT disaster prevention, and they also meet legal requirements regarding data and confidentiality protection.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 26 % |
| Agree | 64 % |
| Disagree | 8 % |
| Strongly disagree | 2 % |

Conclusion:

Gap is not identified, there is no action required.

1.6.8 Dissemination, exploitation of results

Statement:

Researchers ensure that the results of their research are disseminated and exploited, e.g. communicated to the public, commercialised or transferred into other research settings.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 21 % |
| Agree | 69 % |
| Disagree | 9 % |
| Strongly disagree | 1 % |

Conclusion:

Gap is not identified, there is no action required.

1.6.9 Public engagement

Statement:

Researchers ensure that research activities are made known to society at large in such a way that they can be understood by non-specialists.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 15 % |
| Agree | 65 % |
| Disagree | 19 % |
| Strongly disagree | 1 % |

Conclusion:

“Small gap” identification – a topic we should focus on during the following steps of the internal analysis.

1.6.10 Non-discrimination

Statement:

FZU does not discriminate researchers on the basis of gender, age, ethnic, national or social origin, religion, sexual orientation, language, disability, political opinion etc.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 52 % |
| Agree | 42 % |
| Disagree | 4 % |
| Strongly disagree | 2 % |

Conclusion:

Gap is not identified, there is no action required.

1.6.11 Evaluation/ appraisal systems

Statement:

There is a transparent appraisal system and periodic evaluation for assessing researchers’ performance.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 11 % |
| Agree | 58 % |
| Disagree | 26 % |
| Strongly disagree | 5 % |

Conclusion:

Gap is identified and further action is required.

1.6.12 Recruitment

Statement:

FZU recruitment procedures are open, efficient, transparent, supportive and internationally comparable.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 12 % |
| Agree | 62 % |
| Disagree | 20 % |
| Strongly disagree | 6 % |

Conclusion:

Gap is identified and further action is required.

1.6.13 Recruitment (Code)

Statement:

FZU HR advertisements are written clearly and give a broad description of the knowledge and competencies required (they are not so specialised as to discourage suitable applicants).

Conclusion:

“Small gap” identification – a topic we should focus on during the following steps of the internal analysis.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 11 % |
| Agree | 73 % |
| Disagree | 12 % |
| Strongly disagree | 4 % |

1.6.14 Selection (Code)

Statement (a):

Selection committees are set up especially for each selection procedure, bring together diverse expertise and competences, include members from different disciplines with relevant experience.

Statement (b):

FZU selection procedures are tailored to each open job position -- it means that special selection practises are used according to the current needs.

Conclusion:

“Small gap” identification – a topic we should focus on during the next steps of the internal analysis.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 10 % |
| Agree | 71 % |
| Disagree | 15 % |
| Strongly disagree | 4 % |

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 12 % |
| Agree | 74 % |
| Disagree | 12 % |
| Strongly disagree | 2 % |

1.6.15 Transparency (Code)

Statement (a):

FZU informs all potential candidates about the selection procedure, its steps, criteria and the number of available positions.

Statement (b):

All candidates are informed about the results of the recruitment process.

Conclusion:

“Small gap” identification – a topic we should focus on during the next steps of the internal analysis.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 11 % |
| Agree | 70 % |
| Disagree | 15 % |
| Strongly disagree | 4 % |

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 14 % |
| Agree | 74 % |
| Disagree | 10 % |
| Strongly disagree | 2 % |

1.6.16 Judging merit (Code)

Statement (a):

The main indicators for the selection procedure are experience and competences of our candidates.

Statement (b):

Experience is judged qualitatively - according to criteria such as teaching, supervision, teamwork, management experience etc. And quantitatively - as the number of publications, contributions to patents, development or inventions.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 14 % |
| Agree | 75 % |
| Disagree | 8 % |
| Strongly disagree | 3 % |

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 13 % |
| Agree | 74 % |
| Disagree | 10 % |
| Strongly disagree | 3 % |



Conclusion:

Gap is not identified, there is no action required.

1.6.17 Variations in the chronological order of CVs (Code)

Statement:

FZU doesn't penalise career breaks or variations in the chronological order of CVs and accepts evidence-based CVs reflecting a representative array of achievements and qualifications to the post.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 16 % |
| Agree | 76 % |
| Disagree | 6 % |
| Strongly disagree | 2 % |

Conclusion:

Gap is not identified, there is no action required.

1.6.18 Variations in the chronological order of CVs (Code)

Statement:

FZU recognizes any mobility experience or changes from one discipline or sector to another and considers it a valuable contribution to the professional development of a researcher.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 17 % |
| Agree | 71 % |
| Disagree | 10 % |
| Strongly disagree | 2 % |

Conclusion:

Gap is not identified, there is no action required.

1.6.19 Recognition of qualifications (Code)

Statement (a):

FZU provides assessment and evaluation of academic and professional qualifications and informs all researchers about these procedures and rules.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 14 % |
| Agree | 67 % |
| Disagree | 16 % |
| Strongly disagree | 3 % |

Statement (b):

The qualification evaluation procedure takes into account non-formal qualifications within the context of international and professional mobility.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 11 % |
| Agree | 70 % |
| Disagree | 16 % |
| Strongly disagree | 3 % |

Conclusion:

“Small gap” identification – a topic we should focus on during the following steps of the internal analysis.

1.6.20 Seniority (Code)

Statement:

FZU requires levels of professional qualifications which are in line with the needs of the concrete position.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 17 % |
| Agree | 75 % |
| Disagree | 5 % |
| Strongly disagree | 3 % |

Conclusion:

Gap is not identified, there is no action required.

1.6.21 Postdoctoral appointments (Code)

Statement:

FZU has established and uses clear rules and explicit guidelines for the recruitment of postdoctoral researchers.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 11 % |
| Agree | 61 % |
| Disagree | 23 % |
| Strongly disagree | 5 % |

Conclusion:

Gap is identified and further action is required.



1.6.22 Recognition of the profession

Statement:

Researchers on all career levels are recognised as professionals and they are treated accordingly.

Conclusion:

Gap is not identified, there is no action required.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 22 % |
| Agree | 65 % |
| Disagree | 11 % |
| Strongly disagree | 2 % |

1.6.23 Research environment

Statement:

Research environment offers appropriate equipment, facilities and opportunities with appropriate health and safety conditions.

Conclusion:

Gap is not identified, there is no action required.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 28 % |
| Agree | 58 % |
| Disagree | 12 % |
| Strongly disagree | 2 % |

1.6.24 Working conditions

Statement:

Working conditions provide appropriate flexibility for successful research performance - including allowing both women and men researchers to combine family and work, children and career.

Conclusion:

Gap is not identified, there is no action required.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 39 % |
| Agree | 49 % |
| Disagree | 9 % |
| Strongly disagree | 3 % |

1.6.25 Stability and permanence of employment

Statement:

Performance of researchers is not undermined by instability of employment contracts. Institute provides stability of employment conditions for researchers.

Conclusion:

Gap is identified and further action is required.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 19 % |
| Agree | 53 % |
| Disagree | 20 % |
| Strongly disagree | 8 % |

1.6.26 Funding and salaries

Statement:

Researchers at all career stages enjoy fair and attractive conditions of funding and/or salaries with adequate and equitable social security provisions.

Conclusion:

Gap is identified and further action is required.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 6 % |
| Agree | 42 % |
| Disagree | 39 % |
| Strongly disagree | 13 % |

1.6.27 Gender balance

Statement:

There is a representative gender balance at all levels of staff including the supervisory and managerial level at FZU.

Conclusion:

Gap is identified and further action is required.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 16 % |
| Agree | 52 % |
| Disagree | 27 % |
| Strongly disagree | 5 % |



1.6.28 Career development

Statement:

Each researcher has a specific career development strategy at all the stages of their career and mentors are providing support and guidance for their personal and professional development.

Conclusion:

Gap is identified and further action is required.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 9 % |
| Agree | 52 % |
| Disagree | 32 % |
| Strongly disagree | 7 % |

1.6.29 Value of mobility

Statement:

All types of mobility (geographical, intersectoral, inter- and trans-disciplinary, virtual, between private and public sector) have the value of enhancing scientific knowledge and professional development, so mobility plays an important role in the career development strategy for all researchers.

Conclusion:

Gap is not identified, there is no action required.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 23 % |
| Agree | 66 % |
| Disagree | 10 % |
| Strongly disagree | 1 % |

1.6.30 Access to career advice

Statement:

There is career advice and job placement assistance offered to researchers at all stages of their career in the Institute.

Conclusion:

Gap is identified and further action is required.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 7 % |
| Agree | 44 % |
| Disagree | 42 % |
| Strongly disagree | 7 % |

1.6.31 Intellectual property rights

Statement:

FZU ensures appropriate legal protection of Research and Discovery results (including protection of IPR and copyright) through pertinent policies and practices.

Conclusion:

Gap is not identified, there is no action required.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 16 % |
| Agree | 75 % |
| Disagree | 8 % |
| Strongly disagree | 1 % |

1.6.32 Co-authorship

Statement:

At FZU co-authorship is viewed positively and there are strategies, practices and procedures at place to provide researchers with the necessary framework conditions to ensure their rights are recognised, listed and/or quoted.

Conclusion:

Gap is not identified, there is no action required.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 27 % |
| Agree | 63 % |
| Disagree | 7 % |
| Strongly disagree | 3 % |



1.6.33 Teaching

Statement:

Teaching is an appreciated researcher's obligation for dissemination of knowledge, it is adequately remunerated and taken into account in the evaluation/appraisal systems.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 10 % |
| Agree | 56 % |
| Disagree | 30 % |
| Strongly disagree | 4 % |

Conclusion:

Gap is identified and further action is required.

1.6.34 Complains/ appeals

Statement:

There are appropriate procedures to deal with complaints/appeals of researchers about working environment and professional relationships.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 8 % |
| Agree | 64 % |
| Disagree | 22 % |
| Strongly disagree | 6 % |

Conclusion:

Gap is identified and further action is required.

1.6.35 Participation in decision-making bodies

Statement:

Researchers are represented in the relevant information, consultation and decision-making bodies of the institute to protect their professional interests.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 13 % |
| Agree | 65 % |
| Disagree | 19 % |
| Strongly disagree | 3 % |

Conclusion:

Gap is identified and further action is required.

1.6.36 Relation with supervisors

Statement:

Researchers in their training phase enjoy structured relationship with their supervisors including regular feedback, tracking of work progress and research findings.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 29 % |
| Agree | 59 % |
| Disagree | 10 % |
| Strongly disagree | 2 % |

Conclusion:

Gap is not identified, there is no action required.

1.6.37 Supervision and managerial duties

Statement:

Senior researchers devote particular attention to their multi-faceted role as supervisors, mentors, career advisors, leaders, project coordinators, managers or science communicators by the highest professional standards.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 23 % |
| Agree | 61 % |
| Disagree | 14 % |
| Strongly disagree | 2 % |

Conclusion:

“Small gap” identification – a topic we should focus on during the following steps of the internal analysis.

1.6.38 Continuing professional development

Statement:

Researchers at all career stages continually improve themselves by regularly updating and expanding their skills and competencies by trainings, workshops, conferences, e-learning etc.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 28 % |
| Agree | 61 % |
| Disagree | 10 % |
| Strongly disagree | 1 % |



Conclusion:

Gap is not identified, there is no action required.

1.6.39 Access to research training and continuous development

Statement:

All researchers have the opportunity of professional development and improvement of their competencies, skills and employability.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 32 % |
| Agree | 57 % |
| Disagree | 9 % |
| Strongly disagree | 2 % |

Conclusion:

Gap is not identified, there is no action required.

Supervision

Statement:

Early-stage researchers can refer for the performance of their professional duties to an experienced expert (supervisor) **because some of the principles were evaluated better than a year and a half ago**, who is able to offer the research trainee appropriate support.

| Level of agreement | Percent |
|--------------------|---------|
| Strongly agree | 26 % |
| Agree | 63 % |
| Disagree | 8 % |
| Strongly disagree | 3 % |

Conclusion:

Gap is not identified, there is no action required.

2 PART 3: SUMMARY OF THE IN-DEPTH INTERVIEWS

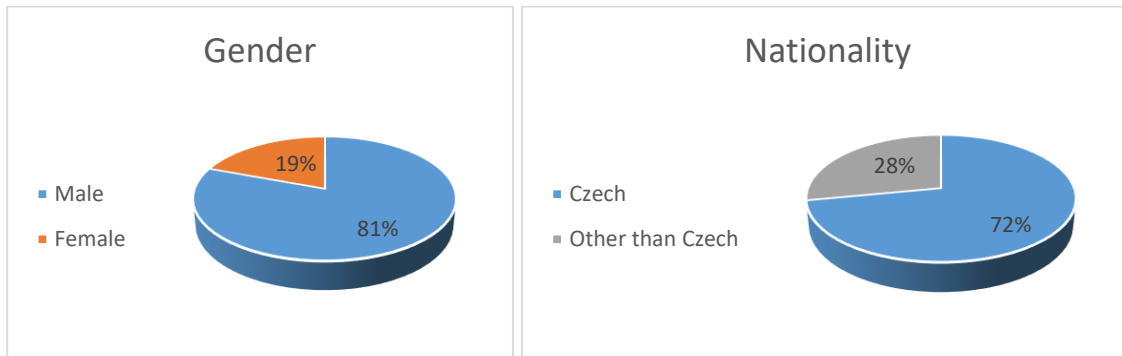
2.1 Survey aim

The in-depth interviews with the employees of the Institute of Physics of the Czech Academy of Sciences, v. v. i. (hereinafter referred to as FZU) took place at the premises Slovanka and Cukrovarnická (hereinafter referred to as FZU Prague premises), ELI-Beamlines and Centrum HiLASE (hereinafter referred to as FZU Prague Dolní Břežany premises). The aim of the survey was to find out how the employees perceive and assess the working conditions at the institute. The qualitative survey has an exploratory character and as such it should lead to deeper understanding of the deficiencies identified in the process of the preparation of the feasibility study of the project “Improving quality of the strategic management in the Institute of Physics of the Czech Academy of Sciences”. The in-depth interviews served as a complement to the questionnaire survey which took place from 26/ 04/ 2018 - 03/ 06/ 2018. We have chosen this approach in order to better understand the nature of the gaps identified in the institute processes.

2.2 Selection of respondents

Respondent sample consisted of randomly selected FZU employees, but the requirement of the balanced representation of scientists of different career levels from R1 to R4 was observed. Also the criteria of the balanced representation of men and women, Czech and foreign employees were taken into account. The final result thus was that interviews were conducted with those FZU employees who, when addressed by us, were interested in discussing the topics in question. The respondents were informed about the theme of the interviews and provided their answers under the assurance of their subsequent anonymity.

2.2.1 Respondent statistics



| Professional Category | | | |
|-----------------------|--------------|----|-------|
| R1 Class | V1-V2 Class | 16 | 28 % |
| R2 Class | V3 Class | 15 | 26 % |
| R3 Class | V4-V5 Class | 14 | 25 % |
| R4 Class | V5*-V6 Class | 12 | 21 % |
| TOTAL | | 57 | 100 % |

*V5 if they lead their own separate research project or team

2.3 Survey execution

The in-depth interviews were conducted from January to June 2018 and each interview took approximately one hour. We have chosen a form of semi-structured interviews the structure of which was determined by a partial (working) questionnaire containing a list of open questions. The questions were based on the 40 principles of the European Charter for Researchers and the Code of Conduct for the Recruitment Researchers. In the interviews, questions regarding the principles which our institute already complies with were omitted - for the reason of narrowing the already large number of questions.

By means of open questions we have tried to understand the respondents' views and not to influence the content of the answers provided. Respondents' answers were written down in the form of notes in hand or into a laptop. Due to the qualitative form of the interviews, individual experience of the respondents and open questions, it is natural that we received answers of various nature, extent and depth. It also means that the respondents primarily commented on topics which they found close to them, where they had a lot of information/knowledge and, on the other hand, did not respond to questions they did not know much about.

2.4 Procedure of the conclusion evaluation

The respondents' answers were first copied by the members of the Working Group for HRS4R to a shared working version of the GAP Analysis. The collected answers were compared at the Working Group for HRS4R meetings (see Part 1: Survey methodology). After thorough reading repeated opinions were identified and put together into common theme units. These units were then transferred into the GAP Analysis according to the following clue which combined two points of view:

- Frequency of repetition (rounded to whole per cent);
- Target group category.



| Opinion evaluation | Number of repetitions | Percentage of repetition |
|---------------------|-----------------------|--------------------------|
| Negligible opinion | 1x - 5x | < 10% |
| Reflected opinion | 6x - 13x | > 10% < 25% |
| Significant opinion | 14x and more | < 25% |

When conducting a qualitative survey, we consider it important to reflect the target group of respondents to a higher extent than when doing a questionnaire survey. In order to maintain the qualitative character of the responses of researchers who are senior, with more experience and deeper knowledge about the institute internal processes, we have divided the individual answers into three categories – see the following table.

The aim of the division is to prevent potential devaluation of less frequent but valuable comments which were made by higher class researchers and could have been evaluated as irrelevant if a mere numeral classification was applied. This enabled us to reflect also those opinions in the GAP Analysis which quantitatively did not comply with the classification of “significant opinion”, e.g. for the reason of low awareness of the topic among researchers of lower levels. The division into the respective categories in no way devalues opinions in Category C.

Category interpretation:

A - prevailing opinion or opinion supported by higher level staff

B - less spread opinion based on a longer period spent at the FZU x prevailing opinion among lower level researchers

C - marginal opinion represented by staff with less experience or shorter period spent at the FZU

| Category of the opinion qualitative classification | | Percentage of repetition | | | |
|----------------------------------------------------|----|--------------------------|---------|---------|-------|
| | | 100%-75% | 75%-50% | 50%-25% | 25%-0 |
| Scientific level | R4 | A | A | A | B |
| | R3 | A | A | B | B |
| | R2 | A | B | C | C |
| | R1 | B | B | C | C |

3 SUMMARY

The survey itself combined quantitative and qualitative research methods, as described in Part 1 “Internal process and methodology of the survey”. This approach proved to be useful and allowed us to combine more perspectives on each of the principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers.

The Working Group had an opportunity to confirm, modify or amend the hypothesis formulated in 2017 at the stage of the feasibility study during the application process for the grant “Improving quality of the strategic management in the Institute of Physics of the Czech Academy of Sciences” co-funded by the European Structural and Investments Fund, Operational Programme Research, Development and Education.

The questionnaire was useful to confirm and identify areas for improvement. The Working Group has identified 7 “small gaps” – topics of minor focus during the following steps of the internal analysis (where negative answers reached the range between 15-20 %), and it has definitely identified 12 gaps



(with more than 20 % negative agreement) which required further action. The majority of the identified gaps validated the weak points of the institute described in the feasibility study. It was also possible to observe some progress the institute has made based on certain actions already undertaken since 2017, because some of the principles were evaluated better than a year and a half ago (at the stage of the feasibility study). But some of the points were surprisingly rated worse than we had expected.

Thanks to the additional comments in the online questionnaire, and the remarks from the in-depth interviews, the Working Group was able to reveal the most problematic issue of each identified gap and also to understand why some of them weren't captured in the feasibility study (e.g.: evaluation/appraisal systems or complaints/ appeals). The results of the analysis were presented to and discussed with the Steering Committee, which confirmed that further steps need to be undertaken. In cooperation with the Institute Board and also with the Steering Committee we formulated final conclusions for the Gap Analysis and an Action Plan was discussed and prepared. Moreover, some additional issues (e.g. internal communication difficulties) were revealed during the analysis, so they were added to the Action Plan as well.