

TEMPLATE 1 – GAP ANALYSIS - PROCESS

Case number: 2019RO400569

Name of Organisation under review:

University POLITEHNICA of Bucharest

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PROCESS

The HRS4R process must engage all management departments directly or indirectly responsible for researchers' HR-issues. ¹ These will typically include the Vice-Rector for Research, the Head of Personnel, and other administrative staff members. In addition, the HRS4R strategy must consult its stakeholders and involve a representative community of researchers ranging from R1 to R4², as well as appoint a Committee overseeing the process and a Working Group responsible for implementing the process.

Please provide the name, the position and the management line/department of the persons who are directly or indirectly engaged in the HRS4R process in your organisation:

Name	Position	Management line/ Department
Tudor Prisecaru	Vice-rector for Scientific Research	Administration Committee of the Executive Board
Valentin Năvrăpescu	Vice-rector for Finance and Resource Management	Administration Committee of the Executive Board
Horia Iovu	Director	Council for Doctoral Studies
Gheorghe Dinu	Director	Department of Information Technology and Human Resources
Iulian Ripoșan	Chancellor	Executive Board of UPB Senate
Andreea Hodrea	Head of Office	Legal Office
Dorina Adamescu	Chief Financial Officer	Department of Financial Services
Luciana Mihai	Director	Department of International Relations

Marin Alexandru	Head of Office	Office of Innovation & Technological Transfer
Sanda Osiceanu	Head of Office	Office of Project Implementation, Supervision and Costs
Mihai Carabaş	Chief Data Protection Officer	Quality and Data Protection Office
Geanina Alexe	Director	Department of European Funds
Cristina Albu	Director	UPB Central Library

Abbreviation list:

Administrative Advisory Committee – AAC

[European Charter for Researchers](#) and the [Code of Conduct for the Recruitment of Researchers](#) - C&C

University POLITEHNICA of Bucharest - UPB

Working Group - WG

Your organisation must consult its stakeholders and involve a representative community of researchers ranging from R1 to R4³, as well as appoint a Committee overseeing the process and a Working Group responsible for the implementation of the HRS4R process.

The term 'Human Resources' is used in the largest possible sense, to include all researchers (Frascati definition: Proposed Standard Practice for Surveys on Research and Experimental Development, Frascati Manual, OECD, 2002) disregarding the profile, career ,level', type of contract etc. etc.

For a description of R1-R4, see

<https://euraxess.ec.europa.eu/europe/career-development/training-researchers/research-profiles-descriptors>

Provide information on how the above groups were involved in the GAP-analysis:

*Stakeholder group	*Consultation format	Outcomes
Expert Working Group (WG) and Administrative Advisory Committee (AAC)	Face - to - face meeting	The Administrative Advisory Committee (AAC) is represented by the Administrative Departments of UPB, directly or indirectly involved in the field of human resources. AAC representatives were appointed members of the WG and each member was in charge of analyzing the initial C&C stages and the compliance with OTM-R policy. The academic community provided feedback through an online survey. The WG activity has been supported by a UPB project (CRSCDI) aiming to increase the institutional capacity by developing specific actions to obtain the HR Excellence in Research Award. The first stage entailed an initial analysis of the 40 principles and OTM-R policy conducted by the WG to assess their current implementation status in UPB. This analysis consequently brought forth the main intervention areas. WG drafted the first document presenting the gaps.

<p>Experts working group and Administrative Advisory Representatives</p>	<p>Online meetings and e-mails</p>	<p>In addition to face-to-face activities, WG and AAC reunited several times in online working sessions and had permanent communication via e-mail. A collaborative online working environment was developed to support the work of the two groups. The outcome of those working sessions was added to the first version of the gap analysis. Furthermore, the document offered details on how the gaps could be addressed.</p>
<p>Academic and research staff Working Group</p>	<p>Workshops</p>	<p>The academic and research staff working group, consisting of 60 scientific experts appointed by each faculty, was trained by the WG during scheduled meetings concerning HRS4R phases and the related responsibilities. The representatives of this group were nominated as members of the CRESCDI project team. Their main goal is to disseminate and obtain feedback from the scientific community (within various departments of the faculty they represent). Moreover, they will be acting as agents responsible for applying the means of consultation of the academic community.</p>
<p>Academic and research staff Working Group</p>	<p>Online survey and face-to-face interviews</p>	<p>The consultation of the academic community was based on a hybrid methodology, blending quantitative and qualitative methods: a self-administered online questionnaire, semi-structured interviews, and focus groups. The survey was designed to investigate whether, and to what extent, the principles stated by the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers (C&C) are used in our University. An invitation e-mail was sent to all UPB's academic staff (both research and teaching staff), inviting them to express their opinions on the implementation of C&C principles anonymously. The final sample included 792 respondents (59% response rate). Data were collected between April 14th – May 22nd, 2019.</p> <p>The questionnaire was divided into the following four sections, which are consistent with the C&C:</p> <ul style="list-style-type: none"> • Recruitment and Selection • Working Conditions and Social Security • Training and Professional Development • Ethical and Professional Aspects <p>Each item addressing the above categories was reported on a 5-point Likert scale ranging from <i>completely disagree</i> to <i>completely agree</i>. The questionnaire also included socio-demographic items, namely: gender, age, seniority, academic title, and field of research. These data were used to compare the opinions and needs of different segments of respondents. The resulting sample shows a gender-balanced distribution (see Table 1).</p>

Table 1. Sample distribution by gender (N=792)

Gender	Percentage
Male	56.43%
Female	43.57%

Likewise, a satisfactory distribution of respondents by age was obtained (see Table 2).

Table 2. Sample distribution by age (N=792)

Age segment	Percentage
≤30 y.o.	5.0%
31-40 y.o.	32.9%
41-50 y.o.	30.0%
51-60 y.o.	21.4%
≥61 y.o.	10.7%

Regarding the professional categories participating in the research, R2 researchers are the most well-represented (Table 3).

Table 3. Sample distribution by career level (N=792)

Category	Percentage
R1 Researchers	10.00%
R2 Researchers	41.43%
R3 Researchers	22.86%
R4 Researchers	25.71%

In addition to the survey, semi-structured interviews and focus groups were conducted – see Table 4, attended by representatives of the entire UPB academic community, including undergraduate, master's, and Ph.D. students (Table 5).

Table 4. Sample distribution by research field

Field of research	No. of interviews
Chemistry, Chemical Engineering, Materials Engineering	7 interviews
Electrical Engineering; Power Engineering; Electronics, Telecommunications & Information Technology, Computer Science; Systems Engineering	6 interviews

Mechanical Engineering; Industrial Engineering; Aerospace Engineering; Transport Engineering	6 interviews
Economics, Social & Humanistic sciences;	4 interviews
Student representatives	1 focus group
PhD students	2 focus groups

Table 3. Sample distribution by career level

Level of career	No. of participants
Bachelor and Master's students	6
R1	13
R2	8
R2	8
R3	6
R4	7

Research findings

Recruitment and selection

The openness and transparency of the recruitment and selection process were positively appreciated by more than 65% of the respondents. Complementarily, 57.1% of the staff recognized the recruitment process to be effective. No significant differences were computed between male and female subjects. There were no statistically significant differences between the opinions expressed by men and women. The results suggested a need for improvement in the international advertisement of the available positions (36% of the sample reported as adequate the worldwide communication of the open positions). Thus, all job advertisements need to be published in both Romanian and English languages. The interviewees approved the proposal to post the vacancies on [Euraxess](#), but are skeptical about the attractiveness of these positions for international researchers. The research pointed out that the evaluation of the candidates also needs to consider qualitative criteria (e.g., teamwork), not just quantitative ones.

Working conditions and social protection

The majority of the surveyed researchers (81.4%) suggested that researchers are aware of and benefit from the fundamental social security rights. Half of the respondents (51.3%) agreed that working conditions are suitable for all career levels (irrespective of the type of contract). R1 and R2 researchers tended to identify an uneven

	<p>distribution of resources and access to research infrastructures, suggesting the presence of a gap.</p> <p>Even though UPB possesses excellent research infrastructure, only 30% of respondents indicated that all researchers know about the existing infrastructure.</p> <p>37.4% of the participants agreed that their departments provide them with a stimulating working environment, adequate equipment, and cooperation opportunities through research networks (mostly R3 and R4 researchers).</p> <p>The participants in the interviews and focus groups have suggested that additional actions need to be taken to widen the access to research infrastructures. The respondents mentioned: auxiliary personnel, continuous training on the use of research infrastructures; internal procedures regulating the access to infrastructures; a budget for maintenance costs, and more spaces for research activities.</p> <p>47.1% of the participants suggested a need for improvement of the communication and information dissemination processes within the university. For instance, only 37.1% of interviewed staff reported as adequate the dissemination and support on various funding mechanisms.</p> <p>Almost half of the respondents (44.4%) indicated that the Office of Technological Transfer and Innovation actively supports the cooperation between academia and industry and the supply of new technologies based on R&D results.</p> <p>The interviewees pointed out the need to develop a policy on innovation, knowledge transfer, and outreach. All schools and departments need to commit to implementing this policy. The general perception is that the departments should be responsible for identifying research needs and priorities. Moreover, some of the participants indicated that research results valorization has to be grounded on a well-defined strategy because it involves financial, time, and human resources.</p> <p>The initiative for a unitary mechanism of project/program management is necessary and welcome, leading to the overcoming of administrative challenges.</p> <p>The respondents suggest that information sessions on Open Science and Open Access policy are required to raise awareness and boost their knowledge on the subject.</p> <p>In the absence of a firm belief that Open Data, Open Science initiatives can be beneficial in the long run, creating the infrastructure needed for Open Data could be of little interest to researchers. Moreover, training on the use of these tools is essential.</p>
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Training and Professional Development

The career plan is considered to be an essential professional development tool. The participants in the consultations supported the idea that it should be developed together with the department director and monitored accordingly. The proposal to organize mentoring activities for young researchers is widely accepted, and researchers at R1 and R2 level identify a real need to benefit from such activities.

The involvement of the department directors and other specialized institutional structures is necessary to ensure the efficiency of these activities. In addition, a revision of job descriptions was suggested.

35.7% of the researchers stated that UPB offers academic staff opportunities for training and continuing education appropriate to the teaching activities, stressing that there is room for improvement. All interviewees considered the training courses useful, irrespective of the delivery means (face-to-face, online, or blended learning). Courses that improve the didactic and transversal competences were mentioned. The development of a professional training program in the field of intellectual property protection and capitalization for the academic and research staff is considered a natural, necessary, and beneficial approach since most of the information is unstructured, and some teachers are required to have a patent for promotion. The suggested extent of attendance at continuous training and development activities varies between 6 months and two years.

International mobility has an essential contribution to career development. 53.6% of the researchers (mostly R3 and R4) mentioned that UPB duly supports international mobility and academic exchanges. The promotion of other types of mobility is suggested (additional to Erasmus), underlining mobility between university and industry. The purpose of these mobilities can be documentation (short-term mobility for the elaboration of scientific articles or project proposals) or research and training. Most of the respondents (85.7%) consider that the evaluation of the academic performance is carried out effectively, and it is a constant and periodic activity.

Ethical and Professional Aspects

44.7% of researchers consider that the university's committee for ethics and academic integrity adequately handles potential claims.

61.6% of the participants agreed that the UPB offers clear policies and procedures for good research practices (including research ethics and academic integrity) to the university staff.

Particular importance is required for the dissemination of the [Code of Ethics](#), either through informative actions at the department level

		<p>or through a direct electronic notification to all employees. This document must be easily accessible on the UPB website. An essential role of the ethics committee is to provide recommendations regarding research ethics. Hence, it is recommended to establish a procedure for contacting the ethics committee, and its contact details must be visible.</p> <p>Conclusions and areas of intervention</p> <p>The results of the consultations indicated the following intervention areas in order to increase the alignment with the C&C principles.</p> <p>Therefore, UPB shall:</p> <ul style="list-style-type: none"> • promote internationally vacant academic positions; • improve internal communication and information dissemination processes; • ensure that all researchers benefit from adequate research infrastructure likely to support their research activity; • strengthen the support offered to researchers, in order to develop better rapport between the academic community and industry; • stimulate support services, especially for early-career researchers; • create institutional mechanisms and strategies to encourage effective training activities and support the development of teaching and research careers; • promote international mobility as a means of career development.
Academic and research staff	Workshops	<p>The elaborated documents (Gap Analysis, HRS4R Strategy, Action Plan) were published on the project website and were presented at each faculty in workshops organized with the participation and support of the members of the group of scientific experts (belonging to the respective faculty). The interactive workshops hosted by members of the working group were delivered to representatives of the scientific community have summarized the steps taken to carry out the gap analysis, the strategy, and the action plan.</p> <p>The results of the consultations conducted through online surveys and face-to-face semi-structured interviews were presented. Participants were invited to express their ideas and make recommendations for each category of actions mentioned in the action plan. The meetings were chaired by the Vice-Rector responsible for research, who requested answers to the following questions:</p> <ul style="list-style-type: none"> • What is your opinion on the university's approach to

		<p>applying the HRS4R strategy?</p> <ul style="list-style-type: none"> • How do you think the undertaking of the university and your own will improve by implementing this strategy? • How do you appreciate the activities proposed to fulfill the C&C principles? • How could you get involved in the HRS4R process? <p>Given the results obtained through the online survey, interviews, focus groups, and workshops, the gap analysis, and the initially proposed action plan were revised, and all the documents for the diploma package were systematized. The final versions of the documents were also published on the project website.</p>
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Please describe how was appointed the Committee overseeing the process:

Application of HRS4R Strategy at UPB is promoted through the CRESCDI project (2018-2020) to enhance institutional performance through specific actions for the development and implementation of HRS4R. The director of the project is the Vice-rector for research. Effective implementation of HRS4R will be coordinated by the person in charge of obtaining the HR Excellence in Research Award (director Dana Gheorghe).

A committee will oversee the implementation of the HRS4R strategy. This committee comprises representatives of different UPB departments directly involved in the development and implementation of HRS4R Strategy (Department of Financial Services, Department of Information Technology and Human Resources, Office for Innovation & Technological Transfer, Department of International Relations, Department for Research management, Office for Quality and Data Protection, Office for Quality Assurance, and representatives of the academic staff).

Please describe how was appointed the Working Group responsible for the implementation of the HRS4R:

Free text 200 words maximum
<p>The experts' working group was nominated for the CRESCDI project and consisted of representatives of some operational areas within UPB, directly engaged in the development and implementation of HRS4R Strategy. The coordinator of the working group is the Vice-rector for scientific research. The person overseeing the implementation of the WG's activities is Dana Gheorghe. The working group is made of: Tudor Prisecaru, Dana Gheorghe, Ciprian Dobre, Marin Alexandru, Andreea Hodrea, Ovidiu Conea, Loredana Manasia, Ana Voichita Tebeanu, Luciana Mihai, Sanda Maiduc, Gabriel Dima, Laura Boanță, Alina Borcos, Mihaela Toma, Oana Daniela Bugan, Andrei Pârvan, Alin-Marius Matei.</p> <p>The group of academic and research staff is represented by teaching and research staff (R1-R4), directors of doctoral schools, postdoctoral researchers, and Ph.D. students; IT representatives. They represent all 15 UPB faculties and ensure a fair gender balance. Two representatives at each career level (R1-R4) were selected based on an open call for applications. The application consisted of a self-assessment (based on the criteria members of the WG need to meet) and an overview of activities each candidate intends to perform.</p> <p>The group of academic staff, the working group, and the representatives of the academic staff of UPB will liaise, thus using appropriate methods to carry out activities specific to each group.</p>

Taking into account that implementing the HRS4R implies not only obtaining consensus at the institution level but also the possibility of concrete interventions, upon forming **the two working groups, the following main criteria were considered:**

1. **involvement of the university leaders in this process.** The Management Board must formally approve the C&C, participate in the gap analysis, the development of the HRS4R Strategy project, and the Action Plan. A university leader (for example, the Vice-Rector for Scientific Research) will oversee the entire process to signal the importance of this approach to the organization and to ensure that the action will be successful.
2. **knowledge of the institutional strategic plan and all the initiatives and regulations (procedures) in the field of human resources policies,** so that the mechanism of the HRS4R Strategy is fully integrated. The HRS4R Strategy should refer to other existing strategies and contribute to the strengthening of research within UPB. If a management structure dedicated to the human resources strategy for research is put into operation, it should work in synergy with the management structures of other institutional processes and reflect the principles of the Charter and the Code.
3. **early the involvement of researchers (academic staff) from all career stages (R1-R4, according to European research profiles descriptors).** Anticipating the impact of the planned actions, from the researchers' perspective, is very important when developing the Action Plan. It is essential to engage as many experts as possible, endowed with a good knowledge of the problem, and willing to actively participate in such a process, to assume the responsibility of one / of various actions in the Action Plan and to propose feasible solutions for the reported queries.
4. **the availability of working group members to inform on and analyze the HRS4R action plans of other institutions,** available on their websites, to learn from the experiences and best practices applied by other entities.
5. **capacity to analyze a proposed action in the Action Plan by demonstrating the impact of the respective action, mostly applicable in its revision stage(s), to maintain the award granted.** It can be achieved by internal self-evaluation of the plan actions, of the key performance indicators, to ensure the implementation and quality progress and the adoption of new measures and actions.
6. **knowledge of national legislation and institutional regulations relevant to research and education,** with emphasis on human resources.

Management of the faculties and administrative departments have appointed representatives in compliance with the above criteria.