



CAMPUS
DE EXCELENCIA
INTERNACIONAL

Universidad Politécnica de Madrid

TEMPLATE 2: HR STRATEGY

Action Plan

May 2018

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ABBREVIATIONS

- ICE: Institute of Education Sciences
- OTRI: Office for Transfer of Research Results
- OTT: Office for Tech Transfer
- R1, R2, R3, R4: EU R-Scale
 - R1 - First Stage Researcher (Up to the point of PhD)
 - R2 - Recognised Researcher (PhD holders or equivalent who are not yet fully independent)
 - R3 - Established Researcher (Researchers who have developed a level of independence)
 - R4 - Leading Researcher (Researchers leading their research area or field)
- UPM: Universidad Politécnica de Madrid
- VR AE: Vice Rectorate of Economic Affairs
- VR CE: Vice Rectorate for Quality and Efficiency
- VR RID: Vice Rectorate of Research, Innovation and Doctoral studies
- VR EAI: Vice Rectorate of Students and University Extension
- VR IAS: Vice Rectorate for Internationalization and Academic Strategy
- OPE: Office for European Projects
- TS: Technical Secretariat

CONTACT DETAILS

Name of Organisation under review: Universidad Politécnica de Madrid

Organisation's contact details: Prof. Dr. Asunción Gómez-Pérez
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1. ORGANISATIONAL INFORMATION

TABLE 1 ORGANISATIONAL INFORMATION

STAFF & STUDENTS	FTE
Total researchers = staff, fellowship holders, bursary holders, PhD students involved in research (both full-time or part-time)	4.359
Of whom are international (i.e. foreign nationality)	1.829
Of whom are externally funded (i.e. for whom the organisation is a host organisation)	486
Of whom are women	1.291
Of whom are stage R3 or R4 (researchers with a large degree of autonomy, typically holding the status of Principal Investigator or Professor)	1.681
Of whom are stage R2 (in most organisations corresponding with postdoctoral level)	312
Of whom are stage R1 (in most organisations corresponding with doctoral level)	2.366
Total number of students (if relevant)	40.121
Total number of staff members (including management, administrative, teaching and research staff)	6.254
RESEARCH FUNDING	€
Total annual organisational budget	349.494.813€ (2018) 346.070.982€ (2016)
Annual organisational direct government funding (designated for research)	146.233.144 € (2016)
Annual competitive government-sourced funding (designated for research obtained in competition with other organisations, including EU funding)	40.047.791 € (2016)
Annual funding from private, non-governmental sources, designated for research	24.832.815 € (2016)
ORGANISATIONAL PROFILE	
<p>Universidad Politécnica de Madrid (UPM) is the largest Spanish engineering and technological university, with two recognitions as being a “Campus of International Excellence.”</p> <p>More than 4,300 researchers carry out their activities at the UPM, divided among 203 Research Groups, 19 Research Centres or Institutes, and 55 Laboratories.</p> <p>UPM was the top participant among Spanish universities in the 7th European Framework Programme, with 290 projects. In H2020, UPM keeps up its active participation thanks to its highly innovative profile. UPM researchers possess long and extensive experience in participation in other EU-funded programmes such as the European Space Agency, European Defence Agency, Eureka, Cost, etc.</p> <p>UPM signs around 600 contracts with private businesses annually, which support and back its research and technology development in all Engineering fields, Aeronautics, Agronomy, Architecture, Energy, Forestry, Industrial, Mining, Naval and Informatics and Telecommunication.</p> <p>Moreover, every year UPM applies for around 40 patents and receives a similar number of concessions. ActúaUPM is an internal programme that has generated more than 200 technological companies in the last 10 years, 80% of which still exist.</p> <p>Education:</p> <p>4 Campuses, 2 of which are recognised as a “Campus of International Excellence;”</p> <p>52 bachelor’s degrees offered;</p> <p>69 Dual Degree agreements offered;</p>	

83 Master Degree qualifications offered, two of which under the Erasmus Mundus Programme;
45 Doctoral programmes, one of which under the Erasmus Mundus Programme.

Research (data from 2016):

773 PhD theses defended;

2.458 Research papers published in indexed journals;

537 Patent families in effect;

5 New spin-off companies;

96 Spin-off companies created in the last 25 years that were still operative in 2016;

9,75% licenced patents.

2. NARRATIVE

The next panel synthesizes the diagnostic, identifying the main strengths and weaknesses, and the degree to which the 40 C&C principles have been implemented.

TABLE 2 SWOT ANALYSIS

STRENGTHS	WEAKNESSES
Ethical and Professional Aspects	
<p>Research Freedom. Research freedom is endorsed by Article 1.2 of UPM's Statute.</p> <p>Dissemination and outreach. UPM is the Spanish university with the highest international projection in the press media. Also, twenty museums and university collections were placed at different centres associated with UPM.</p> <p>Ethics. Research projects that include ethical issues in their progress, such as the management of biological samples of human origin and data protection, or animal testing, should be approved by UPM's research activities Ethical Committee.</p> <p>Discrimination. UPM is cosmopolitan, and no discrimination cases have ever been recorded.</p> <p>IP. UPM has a norm covering intellectual and industrial property, and a special unit at the OTRI supporting IP issues.</p> <p>IT. UPM's digital archive hosts the scientific and academic documentation in a digital format. The sensitive data of UPM's projects, as well as their backups, were encrypted.</p> <p>Projects support. The OTT and the Vice Rectorate of Research, Innovation and Doctoral studies support researchers in the application, financial management and justification of the projects granted in competitive calls.</p> <p>Evaluation. Teaching activity by R3 and R4 researchers are evaluated by DOCENTIA programme. UPM accredit R3 and R4 researchers with a "quinquenio". These researchers can also voluntarily present their curriculum every six-year term to be evaluated by the National Research Activity Evaluation Commission, (CNEAI "sexenio"). R1 and R2 researchers hired by official calls must justify their research activity to the funding institutions annually.</p>	<p>Dissemination. The dissemination of research results is not included in the research staff's evaluation criteria. Researchers focus their efforts and time on other more valued activities. Little assistance is provided to prepare dissemination activities. No support is provided to the Scientific Culture Unit, for example, to translate its developed content to other languages, or to develop new content using audio-visual technologies.</p> <p>Evaluation. There were no procedures for evaluating teaching activity of R2 researchers whose contracts were provided by official competitive calls: Marie Curie Ramon y Cajal or Juan de la Cierva. There were no direct procedures to evaluate the research activity of R1 and R2 researchers hired within research projects.</p>
Recruitment and Selection	
<p>Professional recognition. The right of professional recognition is reflected in the national legislation (Law of Science), in collective agreements and the</p>	<p>Foreign researchers. The services for welcoming and assisting foreign researchers could be improved.</p> <p>Job offers. There is not a unified website that</p>

<p>University statutes.</p> <p>Recruitment. Recruitment of R3 and R4 researchers is dependent on the Ministry of Education's needs and governed by the corresponding legislation. The norms with regards to the recruitment of R2 researchers as Teaching Assistants, Assistant Professors and Lecturers are comprehensive and approved by the Spanish Ministry of Education. Recruitment of R1 and R2 researchers in competitive calls is governed by the funding organisms.</p> <p>Seniority. Seniority is considered a positive criterion in all the competitive calls.</p>	<p>collects all of UPM's job offers; the job offers that are published are done so in Spanish, except those which are required to be published on international pages, e.g. Marie Curie.</p> <p>Recruitment. There is not a defined procedure for the recruitment of R1 and R2 research staff hired within research projects. The work prospects for R2 research staff hired within research projects are difficult. There is a regulation currently in place that should be updated; applications and forms should be updated and translated into English.</p>
<p>Working Conditions and Social Security</p>	
<p>Mobility and internationalization. Mobility is considered a positive criterion in all the competitive calls.</p> <p>Gender. UPM proposes a gender equality unit that is responsible for writing gender equality policies and has also written the Gender Equality Plan.</p> <p>Training. UPM's Education Sciences Institute (ICE) organizes transversal skill courses. UPM has an educational innovation web portal, and ICE provides courses about teaching and educational innovation.</p> <p>Careers. UPM has a centre for information and career services, dependent on the Student Vice Rectorate. It centralises career services, job searches and entrepreneurship initiatives.</p> <p>Salaries. The salaries of public employees are assigned in accordance with the unified salary scales established by the regional governments. The salaries of the R1 and R2 researchers hired within research projects are established by the "Norm for the staff hired within research projects".</p> <p>Health and security in the workspace. UPM has a risk prevention policy. UPM's health and security committee monitors and guides issues related to workplace health.</p> <p>Complaints. The position of University Ombudsman is in place at UPM in order to address complaints. In addition, UPM has a mailbox for complaints, suggestions and congratulations, that is managed by the VR CE</p> <p>Representation. The statutes of UPM confer representation of different professional profiles in the boards of University.</p>	<p>Infrastructures. There is not a written catalogue of UPM's in use infrastructures. Specific cases of obsolescence or inconvenient adaptation of some research infrastructures have been recorded.</p> <p>Mobility. There is a lack of knowledge about the protocols regarding medical assistance in international mobility actions.</p> <p>Salaries. Present economic conditions are not favourable for raising salaries of public employees.</p> <p>Professional strategy and career advice. UPM does not have procedures in place to help researchers set up a professional development plan. There is not a career advice strategy for researchers at UPM. In addition, present economic conditions are not favourable to consolidate R2 researchers into stable research positions.</p> <p>Mentorship. At UPM, mentorship is informally provided by the Ph.D. supervisor. No mentorship attribution is addressed to other researchers.</p> <p>Complaints. The survey showed that there is a general unawareness about the complaints mechanisms. Also, the University Ombudsman position has not been in place for long.</p> <p>Co-authorship. UPM does not incorporate recommendations about Co-authorship.</p> <p>Teaching. The control of the teaching workload is insufficient.</p>
<p>Training and Development</p>	
<p>Teaching. ICE provides courses for continuous education with a wide range of courses, seminars, workshops, conferences, etc.</p> <p>Doctorate studies. The doctorate norms include the procedures and capacitation to perform the tutorship of a doctoral thesis. And, horizontal PhD activities for all the PhD students involved in the 45 PhD programs.</p>	<p>No gaps were detected.</p>

3. ACTIONS

3.1. ACTIONS ADDRESSING THE IMPLEMENTATION OF C&C - HRS4R GAP ANALYSIS

The detected gaps were grouped into several areas of improvement that were the basis for the subsequent design of the Action Plan. These areas of improvement are:

- 1) **Internationalisation.** To improve the internationalisation of the researchers, UPM will incorporate the following actions:
 - Translate job offers and contracts into English.
 - Create a unified job offer web page.
 - Create a centralised unit for the reception welcome and assistance to foreign researchers.
- 2) **Researchers recruited within research projects.** The present recruitment procedures and evaluation of these researchers show gaps. UPM will incorporate the following actions to improve and solve these gaps:
 - Update the existing norms and write a guide for the recruitment of researchers hired within research projects (managed by the OTT).
 - Write a manual for good recruitment practices.
 - Establish procedures for the official evaluation of R1 and R2 researchers hired within research projects.
- 3) **Information access.** There is not a centralised repository of information about university activities, facilities, regulations and other issues, and this information is not provided to the newcomers. To overcome this situation, UPM will:
 - Publish a catalogue of scientific infrastructures.
 - Elaborate a welcome manual for researchers.
 - Write an official UPM Manual of Good Research Practices.
- 4) **Training and career development of researchers.** UPM wishes to improve training and professional development of researchers. To improve the present situation, UPM plans to:
 - Improve the diffusion and announcements of UPM's training offers and direct these offers to all research profiles.
 - Launch a pilot mentorship programme.
 - Include ethical issues in the cross-disciplinary education of the R1 researchers.
 - Offer support for professional career development.
 - Launch a call for the incorporation and retention of talented researchers.
- 5) **Other issues under the organisational umbrella:**
 - Improve the system to control and monitor the teaching activities and load.
 - Approve a new programme DOCENTIA to include a better set of criteria and procedures (for R3 also)

- Create UPM's price for scientific dissemination of science for society.
- Analyse the participation of women in research, innovation and doctorate.
- Implementation of the HRS4R by increased awareness and follow-up.

The HRS4R processes have helped to identify and prioritise actions focused on the underdeveloped areas, according to the consolidation of the European research environment for improving management and development of research talent.

Table 5 in the Annex shows the correlation between the Gap Analysis and actions proposed.

Table 6 in the Annex shows a summary of the diagnosis of the criteria and the number of actions designed for their implementation.

The table in the subsequent section presents a proposal of the actions to be developed by UPM to fill the gaps encountered in the analysis of the current implementation of the C&C criteria. The table includes: i) a short description of the action, ii) the chronogram and the estimated implementation time, iii) the person in charge (in bold) and the supporting team (in parentheses), and iv) the performance indicators to monitor its application.

The persons that will lead the implementation of these actions are:

- Vice Rector Dr. Asunción de María Gómez-Pérez, **VR RID**, Vice Rectorate of Research, Innovation and Doctoral studies.
- Vice Rector Dr. Alberto Garrido Colmenero, **VR CE**, Vice Rectorate of Quality and Efficiency
- Vice Rector Dr. Antonio Hidalgo Nuchera, **VR AE**, Economic Affairs
- Vice Rector Dr. Miguel Ángel Gómez Tierno, **VR EAI**, Vice Rectorate of Students and University Extension
- Rector Dr. José M. Atienza, **VR IAS** Vice Rectorate for Internationalization and Academic Strategy

3.1.1. DESCRIPTION OF THE ACTIONS

TABLE 3 ACTION DESCRIPTION

Principle targeted	Action Title	Description of the action	Indicators / Targets	VR responsible	Timing
All	A1. HRS4R Kick-off, awareness and follow-up.	<p>Kick-off: Steering Committee of HRS4R (2-4 members): Decision-making body in charge of strengthening awareness, commitment and implementation of the Charter & Code criteria.</p> <ul style="list-style-type: none"> – Implementation of Working Group of HRS4R (6-8 members): Creation and implementation of a working group with the task of defining and implementing the majority of the actions, made up of people in charge of each topic, representatives of the different specific areas and services, and R1 to R4 researchers. – Implementation of Working Group OTM-R system (2-4 members): Creation and implementation of a working group with the task of reviewing and defining the processes for selecting and recruiting researchers, for the progressive adaptation to the OTM-R system. The group will consist of representatives of all services with competence in selection and recruitment of researchers. – Awareness: The goal is to attain an increasing application of the C&C criteria in the research community and in everyday research practices. – Organize a specific OTMR seminar for HHRR managers, researchers responsible of recruiting processes, HRS4R implementation Working Group's members, etc. The seminar will be imparted by HRS4R-OTMR national experts and technical or research staff involved in the implementation of HRS4R from other universities. – Include the actions defined in this Action Plan in the Research Strategic Plan of the UPM (if possible). – Prepare online multilingual material explaining the advantages of the application of the C&C principles and updates of the HRS4R website, distribute it among all the researchers and incorporate this information into the welcome manual for researchers and online. – Schedule periodical briefings in various departments to influence the dissemination of the C&C key lessons to research staff. – Schedule periodical briefings with the institution's management committees 	<ul style="list-style-type: none"> – WG HRS4R constituted – WG OTMR constituted – Surveys to address the awareness (Quality Observatory) 	<ul style="list-style-type: none"> – HRS4R responsible VR (Quality Research, Innovation and Doctoral studies) 	2019-2023

and boards to introduce the OTM-R and C&C key lessons to the administration staff.

- Incorporate new researchers that wish to join the Implementation Working Group (IWG) and to become “Delegates for HRS4R” for the different campuses.
- A special OTM-R seminar will be organised for all the Human Resources staff, the directors of the research institutes, and all of UPM’s staff with responsibilities in this process.
- **Follow-up and Support:** The Technical Secretariat will coordinate all the implementation process, connecting the Specific Working Teams with the IWG. The Secretariat will oversee reporting to the IWG, give support for the preparation of deliverables, and **ensure that all documents are delivered in an online version in Spanish and English.** The TS will also be responsible for a dynamic workflow articulated along the plan: a cloud tool for easy access to information, regular meetings, ad-hoc subcommittees with key people for specific matters depending on the evolution of the process, quality control and international benchmark.
- It will coordinate the deployment of the HRS4R Action Plan, control the quality of deliverables, follow up on indicators and elaborate reports for internal and external evaluation. Additionally, it will evolve, in a coordinated fashion, the communication plan, and the continuous evaluation process.
- The Vice Rectorate for Quality and Efficiency will be responsible for the quality of the implementation of C&C and mainly for OTM-R practices.

2,3, 6, 7, 31, 32 A2. Write the UPM’s manual of good research practices.

- Write UPM’s **manual of good research practices** including the following topics:
 - Researchers’ ethical principles
 - Professional responsibility
 - Accountability
 - Intellectual property
 - Co-authorship, co-direction normative, etc.
- Include ethical issues and cross-disciplinary education in the R1 researchers training. This information could be accessed via **seminars or face-to-face or digital courses.** Learning material should be written (Spanish and English online version), and instructors or digital platforms should be trained or implemented.
- This manual will be accessible in Spanish and English, will be available for

- Multiple-choice test to evaluate the knowledge of the topic included in the manual of good research practices.
- Evaluation of the ethical contents of the cross-disciplinary education course of R1

– VR RID

Created on 2019 (Q1, Q2), reviewed on 2021 (Q1) and 2023 (Q1)

		download from the researchers' webpage, and will be publicly presented in the technical schools and research centres; this manual will be provided to the newcomers together with the welcome manual.			
7, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21	A3. Write a manual in good recruitment practices.	<ul style="list-style-type: none"> – Write a short manual in good recruitment practices for researchers that manage research projects and recruit other researchers, including OTM-R recommendations (Spanish and English online version). – Biennial self-assessment of compliance with the OTMR process, surveying new recruited researchers and human resources managers. Write a report summarizing the results and providing recommendations. 	<ul style="list-style-type: none"> – Multiple-choice test about the information included in the manual concerning recruitment practices. – OTMR report 	– VR AE	Created on 2019 (Q1, Q2), reviewed on 2021 (Q1) and 2023 (Q1)
11, 33	A4. Improve the control and evaluation systems of teaching activity.	<ul style="list-style-type: none"> – Improve the control system for teaching activities for R3 and R4 researchers. – Include all R2 researchers whose contracts include teaching activities in the new DOCENTIA teaching activity evaluation system. 	<ul style="list-style-type: none"> – Teaching control software operative inclusion 	– VR CE	2019 (Q1-Q4)
10	A5. Analyse the participation of women in research, innovation and doctoral studies.	<ul style="list-style-type: none"> – Analyse the participation of women in research, innovation and doctorate by R1-R4 profile, every two years using surveys, interviews and working focus groups. Recommendations will be given after the analysis, including the writing of an action plan if needed. – Based on the results, review the Gender Plan, the functions of the Gender Unit and the Gender Observatory. 	<ul style="list-style-type: none"> – Report of the results of the analysis. 	– VR RID	2019 (Q1, Q2), 2021 (Q1) and 2023 (Q1)

11	A6. Establish procedures for the official evaluation of R1 and R2 researchers hired within research projects.	<ul style="list-style-type: none"> – Define and write guidelines for the evaluation of R1 and R2 researchers in research: Elaboration of a document certifying the positive evaluation of the research performed by R1 and R2 researchers hired within research projects. For example, a certificate of annual or biennial evaluation, or a document at the end of the project. – Biennial self-assessment of compliance with the guidelines for the evaluation of R1 and R2 researchers process: survey and report of results and recommendations. 	<ul style="list-style-type: none"> – Guidelines or official procedures for the evaluation of R1 and R2. 	<ul style="list-style-type: none"> – VR AE – VR-RID 	Created on 2019 (Q3, Q4), reviewed on 2021 (Q4) and 2023 (Q4)
12, 13	A7. Create the Central Unit for the Reception of foreign researchers.	<ul style="list-style-type: none"> – Creation of the Central Unit for the Reception for foreign researchers. A centralised service will be implemented for the reception and mentoring of new foreign researchers, strengthening the activity of the Euraxess Centre. It could include services for: Visa, residence permit, working in Spain; University guest houses and accommodations for visiting scientists and scholars; and for doctoral students, information about schools, kindergartens and day-care benefits; etc. – Creation of a web page for the foreign researchers summarising this information. 	<ul style="list-style-type: none"> – Central Unit for the Reception foreign researchers. – Website published. 	<ul style="list-style-type: none"> – VR EAI – VR-IAS 	2020 (Q1-Q3)
5,10,12,13, 15, 24, 26	A8. Translate job offers and contracts to English.	<ul style="list-style-type: none"> – The OTM-R working group will supervise the English translation of all the job offers published in Spanish and the posting of both versions on job offer platforms. All the contracts will be also translated into English, with special attention given to the contracts for researchers hired within research projects. Other documents will also be translated to English, such as the UPM good research practices manual, welcome manual etc. 	<ul style="list-style-type: none"> – Contracts and job offers written in English. 	<ul style="list-style-type: none"> – VR AE 	2019 (Q3,Q4)
3, 5, 9, 31, 36, 38, 40	A9. Improve the diffusion of UPM's training offers and address the training offer to all research profiles.	<ul style="list-style-type: none"> – Reinforce the diffusion of the training offers, especially for R1 and R2 researchers of ICE, OTRI and OPE, in cross-disciplinary training and teaching. http://www.upm.es/Estudiantes/Estudios_Titulaciones/Estudios_Doctorado/Actividades_formativas_Doctorado. – Also reinforce the dissemination of the training courses webpage (https://eventos.upm.es/). – Centralise all the public engagement activities on one website and make it easily accessible. – Include a list of the calls of the self-funded research programme. 	<ul style="list-style-type: none"> – New training contents offer. – Public engagement website published. – Self-funded research programme list published. 	<ul style="list-style-type: none"> – VR RID 	2020 (Q1, Q2)

23	A10. Publish a catalogue of scientific infrastructures.	<ul style="list-style-type: none"> – Elaborate a catalogue including all the scientific and technological equipment available at the departments, institutes and research centres, highlighting the available singular scientific and technological institutes (ESFRI) The catalogue could also include other available scientific services, outside of UPM, that could be accessed by the UPM researchers. 	<ul style="list-style-type: none"> – Scientific infrastructures catalogue published. 	– VR RID	2020 (Q1, Q2)
28, 30	A11. Launch a pilot mentorship programme.	<ul style="list-style-type: none"> – Design a pilot programme of mentors for researchers, starting with the selection and training of a network of mentors aimed to develop the potential of young researchers, by transfer of knowledge and learning through the experiences of seniority. The mentor will help and guide the mentee to develop their research career, as well as other aspects in his personal and professional life. This network will be made up of senior researchers and professionals outside UPM, such as executives, businessmen, etc. 	<ul style="list-style-type: none"> – Evaluation of the alumni of the mentorship service. – Total number of mentors – Total number of young researchers mentees 	– VR RID	2019 (Q1-Q4) and 2020 (Q1, Q2)
12, 13, 14, 15, 16, 17, 18, 19, 20, 21	A12. Update the existing norms and write a guide for the recruitment of researchers hired within research projects (managed by the OTT).	<ul style="list-style-type: none"> – Update the recruiting norms for the hiring of researchers within research projects: a) include dissemination as a positive criterion; b) include a merits valorisation scale; c) include the current guidelines concerning disadvantaged groups. – Develop a recruitment OTM-R guide for the researchers recruited within projects, including the OTM-R and C&C recommendations: a) information about job conditions, labour rights and professional development prospects; b) information about the communication of the resolution of the call to the researchers; c) a clear description concerning the objectives and timetable of the post-doctoral appointments; d) recommendation of using personal interviews along the selection process. – Organize a specific seminar aimed at HHRR managers, researchers responsible of recruiting processes, HRS4R implementation Working Group's members, etc. to present the updated norms and Recruitment Guide. 	<ul style="list-style-type: none"> – Updated norm – Recruitment guide approved. 	– VR AE	2019 (Q3, Q4)
9	A13. Create the UPM's Prize for scientific dissemination.	<ul style="list-style-type: none"> – Design the essentials of the contest and call on a yearly basis: a prize for scientific dissemination for the 4 categories of different scientific profiles (R1, R2, and R3-R4). – In addition, this action could be reinforced by including the contest in the "investigator's portal" intranet, an application to enable researchers to contact the Scientific Culture Unit directly, regarding the new results of their personal research that should be disseminated to society. 	<ul style="list-style-type: none"> – Prize call disseminated, and prize awarded. 	– VR RID	2020 (Q1, Q2)

28, 30	A14. Offer support for professional career development.	<ul style="list-style-type: none"> – Design a map of professional research career options, inside and outside UPM, highlighting especially the influence and possibilities of international or industry opportunities in professional development. Specific R1 career advice will mainly include an analysis of destinations and positions outside the UPM, including the industrial sector (intersectoral). – Design training activities for professional development and include them at the cross-disciplinary training in the 3rd and 4th years of doctorate. – Foster and coordinate the activities, providing a higher visibility to the official agreements established with industry, business associations, business chairs, etc. 	<ul style="list-style-type: none"> – Publication of the map of professional career options. – Users' evaluation. 	– VR RID	2019-2023
13	A15. Create a unified job offer website.	<ul style="list-style-type: none"> – Create a unified and centralised job offer website, specially to group together the calls for the recruitment of researchers hired within a certain project. The website will manage the recruitment processes in a centralised fashion, in accordance with the OTM-R recommendations, and will include a job alert service. 	<ul style="list-style-type: none"> – Job offer website operative. – % of job offers published on line 	– VR AE	2020 (Q1, Q2)
26, 25	A16. Launch a call for the incorporation and retention of talented researchers.	<ul style="list-style-type: none"> – Define the procedures to generate a call to incentivise the incorporation and retention of talent. The consolidation of five R2 positions, recruited by competitive calls. – In addition, to offer a more competitive job offer, efforts will be made to supplement the current salary of R2 researchers hired by competitive calls. 	<ul style="list-style-type: none"> – Consolidate positions. – Nº of researchers recruited. 	– VR RID	2019 (Q1), 2020 (Q1), 2021 (Q1), 2022 (Q1), 2023 (Q1)

<p>1,2, 3, 4, 5, 6, 7, 8, 10, 11, 13, 23, 24, 27, 28, 29, 31, 33, 34, 35, 36, 37, 38, 39, 40.</p>	<p>A17. Elaborate a welcome manual for researchers.</p>	<p>– Elaborate a welcome manual that would collect the most relevant aspects that new UPM researchers should know. It would also be disseminated among current UPM researchers. The manual should include issues like:</p> <ul style="list-style-type: none"> ▪ Recruiting, performance assessment, and HRS4R strategy ▪ Participation of the different professional profiles in the governing and decision-making bodies of UPM ▪ Complaints mechanism and functions of the University Ombudsmen ▪ Ethical aspects ▪ Anti-plagiarism software ▪ Intellectual properties guidelines ▪ Co-authorship, co-direction normative, etc. ▪ Professional attitude and description of the existing support systems for project management ▪ Good supervision practices at the UPM ▪ Security and risk prevention issues; workplace health, also including insurance procedures for international mobility ▪ Personal and professional life balance measures, non-discrimination and gender policies ▪ Mobility calls ▪ Centralised repository of training activities generated at UPM 	<p>– Published manual.</p>	<p>– VR RID</p>	<p>2019 (Q3)</p>
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3.1.2. GANTT DIAGRAM

The schedule is set to start activities on Q1 2019. Some actions are proposed with an evolutionary approach, to have partial versions that integrates results from other actions.

TABLE 4 GANTT DIAGRAM

Actions / Sub-actions	2019				2020				2021				2022				2023			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
A1. HRS4R Kick-off, awareness and follow-up.	[Grey bar]																			
Kick-off	[Grey bar]																			
A4. Improve the control and evaluation systems of teaching activity.	[Grey bar]																			
Design the systems	[Grey]	[Grey]																		
Validate and launch			[Grey]	[Grey]																
A16. Launch a call for the incorporation and retention of talented researchers.	[Grey]				[Grey]				[Grey]				[Grey]				[Grey]			
A11. Launch a pilot mentorship programme.	[Grey bar]																			
Design content	[Grey]	[Grey]	[Grey]	[Grey]																
Launch pilot			[Grey]	[Grey]																
Evaluate pilot					[Grey]	[Grey]														
A6. Establish procedures for the official evaluation of R1 and R2 researchers hired...	[Grey bar]																			
Design procedure			[Grey]	[Grey]																
Validate and launch procedure			[Grey]	[Grey]																
A8. Translate job offers and contracts to English.			[Grey]	[Grey]																
A10. Publish a catalogue of scientific infrastructures.					[Grey]	[Grey]														
A12. Update the existing recommendations and write a guide for the recruitment ...	[Grey bar]																			
Update and write a guide			[Grey]	[Grey]																
Publish and present the guide to all research contractors				[Grey]																
A13. Create the UPM's Prize for scientific dissemination.	[Grey bar]																			
Design the prize					[Grey]	[Grey]														
A14. Offer support for professional career development.	[Grey bar]																			
Design the service	[Grey]	[Grey]																		
Launch the service	[Grey]	[Grey]	[Grey]	[Grey]																
A15. Create a unified job offer website.					[Grey]	[Grey]														
A9. Improve the diffusion of UPM's training offers and address the training offer ...					[Grey]	[Grey]														
A2. Write the UPM's manual of good research practices.	[Grey]	[Grey]																		
A3. Write a manual in good recruitment practices.	[Grey]	[Grey]																		
A5. Analyse the participation of women in research, innovation and doctorate.	[Grey]	[Grey]																		
A17. Elaborate a welcome manual for researchers.			[Grey]																	
A7. Create the Central Unit for the Reception of foreign researchers.					[Grey]	[Grey]	[Grey]	[Grey]												

3.2. ACTIONS ADDRESSING THE IMPLEMENTATION OF OPEN, TRANSPARENT, AND MERIT-BASED RECRUITMENT PRINCIPLES

The main actions that will be implemented to address the OTM-R principles are:

- The creation and implementation of an OTM-R working group with the task of defining and reviewing the processes for selecting and recruiting researchers, for the progressive adaptation to the OTM-R system.
- **The goal of the awareness actions of the OTM-R is to attain** an increasing involvement of the OTM-R and C&C criteria in the research community. The OTM-R working group will supervise the **English translation** of all the job offers published in Spanish and the posting of both versions on job offer platforms.
- Write a short **manual in good recruitment practices** for researchers that manage research projects and recruit other researchers, including OTM-R recommendations.
- **Update the recruiting guidelines for the hiring of researchers within research projects:** a) include dissemination as a positive criterion; b) include a merits valorisation scale; c) include the current regulations concerning disadvantaged groups.
- **Develop a recruitment OTM-R guide** for the researchers recruited within projects, that includes the OTM-R and C&C recommendations: a) information about job conditions and labour rights, also including professional development prospects; b) information about how the resolution of the call is to be communicated to the researchers; c) a clear description concerning the objectives and timetable of the post-doctoral appointments; d) recommendation of using personal interviews along the selection process.
- Create a **unified and centralised job offer website**, especially to group the calls for the recruitment of researchers hired within a research project. The website will manage the recruitment processes in a centralised fashion, in accordance with the OTM-R recommendations, and will include a job alert service.
- Define the procedures to generate a **call to incentivise the incorporation and retention of talent**, following OTM-R criteria.

These new approaches will develop a key role in the development of the OTM-R policy.

The second group of actions are those related to training and dissemination of the OTM-R principles to the staff members implicated in the recruiting process, both researchers and administrative staff. In the case that further training is demanded, seminars will be addressed to PI's and other members of the selection committees. The need to promote specific training in recruiting, especially for interviews, will be evaluated. The "UPM **Recruitment OTM-R Guide**" will set clear and explicit rules and procedures for the recruitment of all researcher positions.

The third main action will be the continuous follow-up of the recruitment processes, assuring that all the staff members involved in recruiting processes, from selection to recruiting, integrate the OTM-R practices described in the "**Recruitment OTM-R guide**".

A special OTM-R seminar will be organised for all the Human Resources staff, the directors of the research institutes, and all UPM's staff interested in this process.

The quality control system for UPM's OTM-R policy will internally check the whole recruitment process, to be administered by the HR department or designated staff, and will also have a periodical, external review by an independent observer (a national expert in HRS4R). To monitor

and assess the extent to which the OTM-R system is being implemented, UPM will also adopt standards and reporting templates for internal reporting of all phases of a recruitment process.

UPM does not have a recruitment strategy to implement the principles of Open, Transparent and Merit-Based Recruitment, therefore no web link is available.

4. IMPLEMENTATION

4.1 IMPLEMENTATION AND CONTROL BOARDS

The design of this plan has enabled the development of a model of governance, coordination mechanisms and monitoring tools that will accelerate the adoption of new policies and practices of human resources management in research, which in turn will enable UPM to be in line with its European references.

For the above reasons, and regardless of the duration of the evaluation process to obtain the seal, the implementation of the plan will begin in the Q3 2018.

The implementation process will be performed through four different levels of responsibility:

1. **Steering Committee on HRS4R (SC)** will be the maximum office and will oversee the implementation process on a regular basis. It will be composed of the four Vice Rectors responsible for coordinating the implementation and the follow-up of the HRS4R-derived measures. It will also communicate the advances to UPM's Board of Directors.
2. **Implementation Working Group (IWG)** will be composed of 6-8 members of the Working Group and will invite other research and administrative staff members to participate. It will coordinate the deployment of the HRS4R Action Plan and will also control quality and follow up on indicators.
3. **Implementation OTM-R Working Group (OTM-R IWG)** will be composed of 3-4 Human Resources staff members responsible, and other administrative staff members will be invited to participate. It will coordinate the deployment of the specific OTM-R-related actions from the HRS4R Action Plan and will also control quality and follow up on indicators.
- **Technical Secretariat (TS)**, reporting to the Steering Committee will give support to the IWT and OTM-R IWG for the preparation of deliverables, and will support the SC to follow up on indicators. The TS will also be responsible for a dynamic workflow articulated during the course of the plan: a cloud tool of easy access to information, regular meetings, ad-hoc subcommittees with key people for specific matters depending on the evolution of the process, quality control and international benchmark.

4.2 TO INVOLVE THE RESEARCH COMMUNITY IN THE IMPLEMENTATION PROCESS

As seen above, the research community (R1-R4) will be a part of the IWG. They will be involved in the design of the actions, the pilot deployment testing and the periodical surveys developed by the Vice Rectorate of Quality and Efficiency.

4.3 TO ENSURE THAT ACTIONS WILL BE IMPLEMENTED AND ARE ALIGNED WITH UPM'S POLICIES.

As the first action, there will be a **declaration of UPM**, signed by the Governing Board.

The strategic framework for the implementation of the HR Action Plan is **UPM's Strategic Plan**. UPM will add an additional chapter or revision of the current strategic plan to include the HRS4R action plan.

The commitment of UPM includes a **budgetary allocation**, aimed at hiring/designating specialized personnel for the Technical Secretariat to provide methodological support in the design and implementation of the actions.

The previously detailed indicators will be included in **UPM's scorecard** and will be verified quarterly to find evidence of any alignment with the HRS4R with organisational policies.

A **communication plan** will be designed with the objective of raising awareness in the university community about the C & C and OTM - R criteria and, also, to report on progress in implementation. The communication plan will include updating of the web contents, creation of content for UPM's regular communications, etc.

The IWG shall also be responsible for verifying that UPM policies regarding different areas are **coherent** with the HRS4R and the actions developed within this Action Plan.

Additionally, there is a **strong commitment to quality seals** accreditations like HRA, and there is a specific Vice Rectorate for quality issues.

4.4 TO MONITOR THE PROGRESS

The monitoring and the follow-up of the plan will be continuous, being one of the main functions of the Technical Secretariat.

The following specific mechanisms will be provided:

1. The **indicators** will be included in UPM's scorecard and will be verified quarterly to find any evidence of alignment with the HRS4R in our organisational policies.
2. **Reporting** to the Board of Directors on a quarterly basis.
3. **Reporting** and holding monthly meetings with the Steering Committee.
4. Quality control performed by an **external reviewer** and international expert on HRS4R issues.
5. **Internal audit** performed by the Vice Rectorate for Quality and Efficiency.

4.5 TO PREPARE THE INTERNAL AND EXTERNAL REVIEW

The internal evaluation will be performed by the IWG through the following actions:

1. the revision of the advancement of the project after the compromises reflected in the Action Plan,
2. the revision of the indicator progress reports,
3. the reports of activities,
4. the fulfilment of road maps for each action.

With this data, a progress report will be elaborated 12 months after the activity was initiated, and reported to the SC. A final report will be elaborated after 24 months, as it has been defined in the new procedure. For this final report, templates available in EURAXESS will be used.

5. ANNEX

5.1 CORRELATION BETWEEN GAP ANALYSIS AND ACTION PLAN

TABLE 5 CORRELATIONS ACTION PLAN & GAP ANALYSIS

Actions in ACTION PLAN		Gap Analysis
A1. HRS4R Kick-off, awareness and follow-up.	Kick-off and follow-up support	
A2. Include ethical issues in the cross-disciplinary education of the R1 researchers.	This information could be accessed via seminars or face-to-face or digital courses. For this action, learning material should be written (Spanish and English online version), and instructors or digital platforms should be trained or implemented.	21. Organise courses of ethics, dissemination methods and abilities, and include them in the R1 and R2 course offering. Set training activities related to professional career in the doctorate programmes in the third and fourth year.
A3 Write and approve the UPM's manual of good research practices.	Write the UPM's manual of good research practices including the following topics: Researchers' ethical principles, Professional responsibility, Accountability, Intellectual property, Co-authorship, co-direction normative, etc. This manual will be accessible in Spanish and English, available to be downloaded from the researcher's webpage, and will be publicly presented in the technical schools and research centres. It will be provided to the newcomers together with the welcome manual.	29. Write a code of good research practices. 31. Write recommendations about co-authorship/joint supervision, including recommendations for the performance of the PhD thesis for researchers recruited within research projects.
A4. Write a manual in good recruitment practices.	Write a short manual in good recruitment practices for researchers that manage research projects and recruit other researchers, including OTM-R recommendations (Spanish and English online version).	28. Update the guidelines and create a recruitment procedure for the R1 and R2 research staff hired within research projects, applying initiatives for disadvantaged candidates as much as possible.
A5. Improve the control and evaluation systems of teaching activity.	Approve the new Model for teaching evaluation DOCENTIA, under which R3 researchers' teaching activity will be evaluated; and Approve the new Model for Measuring and Controlling the Activity of all teaching personnel (Faculty), including R3 researchers	15. Facilitate procedures to evaluate the lessons of the R2 researchers, whose contracts were provided by official competitive calls: Marie Curie Ramon y Cajal or Juan de la Cierva, in the DOCENTIA programme. 18. Include Marie Curie and Spanish official Post-docs (e.g. Ramon y Cajal, Juan de la Cierva, Talent, Beatriz Galindo, and other programme holders) (in the DOCENTIA programme). 25. Set up an evaluation model for teaching workload that could show, with transparency, the traceability and real teaching activity of researchers,

		including the activities specified in their contract.
A6. Establish procedures for the official evaluation of R1 and R2 researchers hired within research projects.	Define and write a guideline for the evaluation of R1 and R2 researchers in research. Create an official document certifying the positive evaluation of the research performed by R1 and R2 researchers hired within research projects. For example, a certificate of annual or bi-annual evaluation, or a document at the end of the project	7. Define an evaluation procedure for the R1 and R2 researchers hired within research projects, providing them with an accreditation document when given a positive evaluation. 22. R1 and R2 (OTT) researchers should be evaluated by their supervisors.
A7. Create the Central Unit for the Reception for foreign researchers.	Creation of the Central Unit for the Reception for foreign researchers. A centralised service will be implemented for the reception and mentoring of new foreign researchers, strengthening the activity of the Euraxess Centre. It could include services for: Visa, residence permit, working in Spain; University guest houses and accommodations for visiting scientists and scholars; and for doctoral students, information about schools, kindergartens and day-care benefits; etc. Creation of a web page for the foreign researchers summarising this information.	5. Create a centralised unit for the welcoming and continuous assistance of the foreign researchers. 13. Design a website to include comprehensive information for foreign researchers.
A8. Translate job offers and contracts to English.	The OTM-R working group will supervise the English translation of all the job offers published in Spanish and the posting of both versions in job offering platforms. All the contracts will be also translated into English, with special attention given to the contracts for researchers hired within research projects. Additionally, other documents will be translated to English, such as the UPM manual of good research practices, welcome manual etc.	16. Fund a centralised unit for the welcoming and continuous assistance of the foreign researchers.
A9. Improve the diffusion of UPM's training offers and address the training offer to all research profiles.	Reinforce the diffusion of the training offers, especially for R1 and R2 researchers from ICE, OTRI and OPE in cross-disciplinary training and teaching. http://www.upm.es/Estudiantes/Estudios_Titulaciones/Estudios_Doctorado/Actividades_formativas_Doctorado . Also, reinforce the dissemination of the training courses webpage. (https://eventos.upm.es/). Centralise all the public engagement activities on a website and make it easily accessible. Include a list of the call of self-funded research programmes.	2. Centralise the catalogue of public engagement activities on a website. 17. Improve the publicity of the internal courses provided by ICE, OTRI, OPE and Scientific Culture Unit of the Vice Chairmen of Research, Innovation and Doctoral studies, and increase the diffusion of the events enrolment websites.
A10. Publish a catalogue of scientific infrastructures.	Elaborate a catalogue that comprises all the scientific and technological equipment available in the various departments, institutes and research centres, highlighting the available singular scientific and technological Institutions (ESFRI) The catalogue could also include other available scientific services outside UPM that could be accessed by the UPM researchers.	3. Collect information and set up a comprehensive catalogue of UPM's infrastructures.

<p>A11. Launch a pilot mentorship programme.</p>	<p>Design a pilot programme of mentors for researchers, starting with the selection and training of a network of mentors aimed to develop the potential of young researchers, by transfer of knowledge and learning through the experiences of seniority. The mentor will help and guide the mentee to develop their research career, as well as other aspects in his personal and professional life. This network will be made up of senior researchers and professionals outside UPM, such as executives, businessmen, etc.</p>	<p>23. Set up a piloting mentorship plan.</p>
<p>A12. Update the existing norms and write a guide for the recruitment of researchers hired within research projects (managed by the OTT).</p>	<p>Update the recruiting norms for the hiring of researchers within research projects: a) include dissemination as a positive criterion; b) include a merits valorisation scale; c) including the current guidelines concerning disadvantaged groups. Develop a recruitment OTM-R guide for the researchers recruited within projects, including the OTM-R and C&C recommendations: a) information about job conditions, labour rights, and professional development prospects; b) information about the communication of the resolution of the call to the researchers; c) a clear description concerning the objectives and timetable of the post-doctoral appointments; d) recommendation of using personal interviews along the selection process.</p>	<p>6. Define a recruitment procedure for the R1 and R2 research staff hired within research projects that will recommend the performance of interviews, information about labour rights and the possible prospects of professional development; resolution of the calls to the candidates; communication of the resolution of the calls to the candidates; merit scales considered; mobility of the candidate as a positive criterion for the selection; merit scales considered; maximum length and the objectives of the appointments. 19. Include scientific dissemination activities as a positive criterion for the selection of the R1 and R2 research staff hired within research projects.</p>
<p>A13. Create the UPM's Prize for scientific dissemination.</p>	<p>Design the essentials of the contest and call on a yearly basis: a prize for scientific dissemination for the 4 categories of different scientific profiles (R1, R2 and R3-R4). In addition, this action could be reinforced by including the contest in the "investigator's portal" intranet, an application to enable researchers to contact the Scientific Culture Unit directly, regarding the new research results of their personal research that should be disseminated to society.</p>	<p>14. Establish a scientific dissemination prize.</p>
<p>A14. Offer support for professional career development.</p>	<p>Design a map of professional research career options, inside and outside UPM, highlighting especially the influence and possibilities of international or industry opportunities in professional development. Design training activities for professional development and include them at the cross-disciplinary training in the 3rd and 4th years of doctorate. Foster and coordinate the activities, providing a higher visibility to the official agreements established with industry, business associations, business chairs etc.</p>	<p>27. Strengthen/communicate/coordinate the training activities related to professional career in the third and fourth year of the doctorate programme. 12. Design a conceptual map of the researcher's professional career. 26. Set up an official, visible cooperation in career advice with business associations, company-funded chairs etc.</p>
<p>A15. Create a unified job offer website.</p>	<p>Create a unified and centralised job offer website, especially to group the calls for the recruitment of researchers hired within a research project. The website will manage the recruitment processes in a centralised fashion, in accordance with</p>	<p>24. Set up a unified job offer portal website that will be able to send job offers to a defined mailing list and provide a direct communication system to inform the candidate about their selection process and evaluation results.</p>

	the OTM-R recommendations, and will include a job alert service.	30. Write all the job offers and contracts both in English and Spanish.
A16. Launch a call for the incorporation and retention of talented researchers.	<p>Define the procedures to generate a call to incentivise the incorporation and retention of talent. The consolidation of five R2 positions, recruited by competitive calls.</p> <p>In addition, to offer a more competitive job offer, efforts will be done to supplement the current salary of R2 researchers hired by competitive calls.</p>	<p>9. Design a call in UPM's self-funded programme for providing a salary supplement to R2 researchers recruited by the Ramón y Cajal Call.</p> <p>10. Design a call in UPM's self-funded programme for the consolidation of R2 researchers hired by competitive, official calls.</p> <p>11. Design a call in UPM's self-funded programme for the incorporation and talent retention</p>
A17. Elaborate a welcome manual for researchers.	<p>Write a welcome manual that would collect the most relevant aspects that new UPM researchers should know. It would also be disseminated among current UPM researchers.</p>	<p>20. Incorporate information in the welcome manual for researchers about the following: complaint mechanisms and university ombudsman provided by UPM, ethical issues, good supervision practices, ICE and the educational innovation activities provided, mobility, project management support, professional attitude, professional careers, risk prevention associated with international mobility, security and workplace health, anti-plagiarism software, IP norms and rights, different professional profiles in the decision-making bodies, training activities of transversal skills for the doctorate students, evaluation policies, gender equality policies in the welcome manual for researchers, recruitment in the welcome manual for researchers, work-life balance, co-authorship/joint supervision topics,</p>

5.2 SUMMARY OF THE DIAGNOSIS OF THE CRITERIA AND THE NUMBER OF ACTIONS DESIGNED FOR THEIR IMPLEMENTATION.

TABLE 6 SUMMARY OF THE DIAGNOSIS OF THE CRITERIA AND THE NUMBER OF ACTIONS DESIGNED FOR THEIR IMPLEMENTATION

	Implementation consolidated results	Relevance consolidated results	Not aware about the level of implementation	Working Group diagnosis	Actions that improve the implementation of the criteria	
					Code	Number
01. Research freedom	93,56	89,68	16,07	Fully implemented	A1, A17	2
02. Ethical principles	95,19	91,32	21,58	Fully implemented	A1, A2, A3, A17	4
03. Professional responsibility	92,54	93,30	16,22	Fully implemented	A1, A3, A9, A17	4
04. Professional attitude	89,91	82,14	15,92	Fully implemented	A1, A17	2
05. Contractual and legal obligations	89,14	81,75	15,92	Fully implemented	A1, A8, A9, A17	4
06. Accountability	93,72	87,95	13,84	Fully implemented	A1, A3, A17	3
07. Good practice in research	83,55	86,86	18,30	Fully implemented	A1, A3, A4, A17	4
08. Dissemination, exploitation of results	90,73	89,09	11,16	Fully implemented	A1, A17	2
09. Public engagement	78,79	82,99	15,33	Almost but not fully implemented	A1, A9, A13	3
10. Non-discrimination	92,25	94,20	13,54	Almost but not fully implemented	A1, A8, A17	3
11. Evaluation/appraisal systems	76,52	83,58	18,45	Almost but not fully implemented	A1, A6, A17	3
12. Recruitment	75,07	84,38	30,36	Almost but not fully implemented	A1, A4, A7, A8, A12	5
13. Recruitment (Code)	76,29	84,33	20,09	Almost but not fully implemented	A1, A4, A7, A8, A12, A17	6
14. Selection (Code)	74,26	80,06	26,19	Almost but not fully implemented	A1, A4, A12	3
15. Transparency (Code)	77,29	84,57	21,58	Almost but not fully implemented	A1, A4, A8, A12	4
16. Judging merit (Code)	76,63	88,39	23,81	Almost but not fully implemented	A1, A4, A12, A15	4
17. Variations in the chronological order of CVs (Code)	73,19	77,98	37,65	Almost but not fully implemented	A1, A4, A12	3
18. Recognition of mobility experience (Code)	85,63	78,47	17,86	Almost but not fully	A1, A4, A12	3

				implemented		
19. Recognition of qualifications (Code)	84,70	74,01	38,10	Almost but not fully implemented	A1, A4, A12	3
20. Seniority (Code)	81,83	76,88	35,57	Fully implemented	A1, A4	2
21. Postdoctoral appointments (Code)	74,56	80,01	38,39	Almost but not fully implemented	A1, A4, A12	3
22. Recognition of the profession	76,41	85,42	20,09	Fully implemented	A1	1
23. Research environment	72,63	89,34	13,54	Almost but not fully implemented	A1, A10, A17	3
24. Working conditions	79,37	89,24	16,07	Fully implemented	A1, A8, A17	3
25. Stability and permanence of employment	54,47	91,47	19,49	Insufficiently implemented	A1, A16	2
26. Funding and salaries	58,10	93,35	16,67	Insufficiently implemented	A1, A8, A16,	3
27. Gender balance	79,67	75,50	22,17	Fully implemented	A1, A17	2
28. Career development	56,73	82,09	25,60	Insufficiently implemented	A1, A11, A14, A17	4
29. Value of mobility	74,63	76,49	26,49	Fully implemented	A1, A17	2
30. Access to career advice	62,94	71,73	36,16	Partially implemented	A1, A11, A14	3
31. Intellectual Property Rights	91,31	83,38	26,93	Fully implemented	A1, A3, A9, A17	4
32. Co-authorship	84,29	85,66	19,49	Almost but not fully implemented	A1, A3	2
33. Teaching	62,38	88,64	14,29	Partially implemented	A1, A5, A9, A17	4
34. Complaints/ appeals	68,38	79,37	50,89	Partially implemented	A1, A17	2
35. Participation in decision-making bodies	85,37	79,12	29,46	Fully implemented	A1, A17	2
36. Relation with supervisors	85,49	82,04	17,26	Fully implemented	A1, A9, A17	3
37. Supervision and managerial duties	83,21	84,97	17,56	Fully implemented	A1, A9, A17	3
38. Continuing Professional Development	86,75	84,72	12,05	Fully implemented	A1, A9, A17	3
39. Access to research training and continuous development	80,09	81,89	25,74	Fully implemented	A1, A9, A17	3
40. Supervision	79,84	81,94	23,21	Fully implemented	A1, A9, A17	3