



CAMPUS  
DE EXCELENCIA  
INTERNACIONAL

Universidad Politécnica de Madrid

**TEMPLATE 1: HR STRATEGY**

# Gap Analysis

**Resubmission April 2019**

## CONTENT

1	Contact Details.....	3
2	The Process .....	4
2.1	People involved in the process.....	4
2.2	Calendar of the process .....	6
2.3	Sample, Gap Analysis and Action Plan.....	8
3.	Results.....	9
3.1	Gap Analysis: Charter & Code .....	9
3.2	Gap Analysis: OTM-R.....	32
4.	Annex .....	34
	Annex 1: Survey and sample .....	34
	Annex 2: Informative meetings .....	44
	Annex 3: Workshops and meetings.....	46
	Annex 4: Interviews.....	51
	Annex 5: Legal framework of the C&C principles .....	52

## ABBREVIATIONS

- UPM: University Polytechnic of Madrid
- 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 Doctorate
- VR EAI: Vice Rectorate of Students and University Extension
- VR IAS: Vice Rectorate for Internationalization and Academic Strategy
- OPE: Office for European Projects

## 1 CONTACT DETAILS

---

Name of Organisation under review:	Universidad Politécnica de Madrid
Organisation's contact details:	Prof. Dr. Asunción Gómez-Pérez Vice Rector of Research, Innovation and Doctoral Studies
Submission date:	30 <sup>th</sup> May 2018
Date of Charter and Code Endorsement	November 2017

---

## 2 THE PROCESS

### 2.1 PEOPLE INVOLVED IN THE PROCESS

The implementation of the code of conduct for the researchers of UPM is led by the **Vice Rectorate of Research, Innovation and Doctorate and Vice Rectorate for Quality and Efficiency**, commissioned by the Governing Board.

A Steering Committee was formed to monitor the process, and a Working Group was appointed to implement the process and to manage the communication with EC authorities.

The **Steering Committee** has monitored the process and validated the final documents. It is composed of:

- **Rector, Guillermo Cisneros Pérez**
- <mailto:rector@upm.es> Vice Rector of Research, Innovation and Doctorate, **Asunción Gómez-Pérez**
- Vice Rector of Quality and Efficiency, **Alberto Garrido Colmenero**
- **Vice rector of Economic Issues, Antonio Hidalgo Nuchera**

The **Working Group** has been responsible for the preparation of the Gap Analysis & Action Plan and will participate and follow up the implementation process. It is composed of 18 persons.

Vice Rectorate of Research, Innovation and Doctorate.

- Asunción Gómez-Pérez (R4), Vice Chancellor of Research, Innovation and Doctorate.
- Carmen Perez Nadal, Research Area Supervisor
- Carmen Gascó, European Projects Office.

Vice Rectorate of Quality and Efficiency

- Alberto Garrido (R4), Vice Chancellor of Quality and Efficiency
- Juan Garbajosa (R4)

Vice Rectorate of Economic Affairs

- Beatriz Díaz

Management and Research Teaching Staff

- Emma Cobo

Researchers

- José Ramón Casar (R4)
- Marta Patiño (R3)
- Jose María López Martínez (R3)
- Luis Cueto-Felgueroso (R2)
- Ramón Perea García-Calvo (R2)
- Guillermo Velázquez Romera (R1)
- Virginia Raposo Pulido (R1)
- Sergio Calonge Pascual (R1)

HR Managers

- Esperanza Luque (CEIGRAM)
- Paula Barrera (CBGP)
- Jose Angel Ramos (R2)

The **OTM-R Working Group** has been responsible for the analysis of OTM-R issues and will participate and follow up the implementation process. It is composed of:

- Beatriz Díaz, Vice Rectorate of Economic Affairs
- Emma Cobo, Management and Research Teaching Staff
- Esperanza Luque, HR Manager at CEIGRAM
- Paula Barrera, HR Manager at CBGP
- Carmen Gascó, VR IID
- Carmen Perez, VR IID
- José Ángel Ramos (R2 and HR manager)
- Luis Cueto-Felgueroso (R2)
- Ramón Perea García-Calvo (R2)
- Andrés Mejía, Academic Observatory and Staff responsible of University Surveys

## 2.2 CALENDAR OF THE PROCESS

This table summarises the chronology of the 2017 milestones during the process of preparation for the HR Award application.

TABLE 1 CALENDAR

Date	Action	Responsible
Feb-Jun 2017	<b>Several meetings</b> at the Governing Board were held to start the process for obtaining the HRS4R award. In these meetings, the officer in charge of the process was defined, and an estimation of FTE and resources were forecasted.	Governing Board
Jun 2017	The <b>Governing Board decided</b> to start the process.	Governing Board
November 2017	<b>Submission</b> and reception of the letter of the Charter and Code Endorsement	Governing Board
November 2017	<b>Methodology definition:</b> Working Group designation, project planning, etc. <b>Collection of data</b> about staff profiles and selection of the sample for the survey and for the profiles of the Working Group. Development of a specific site about HRS4R on the website.	Steering Committee
January 18 <sup>th</sup>	<b>Presentation</b> to Schools and Centre's directors.	Rector, all Vice Chancellors and all Schools and Centre's directors.
January 23 <sup>th</sup> , 24 <sup>th</sup> and 25 <sup>th</sup>	<b>Communication: Sessions</b> in UPM Moncloa, Montegancedo and South campuses about the C&C implementation process reflecting on the importance of this matter, informing about the strategy framework and presentation of the working plan, including surveying a stratified sample of researchers and requesting collaboration and commitment of the faculty members. Online and web communication about milestones.	Vice Chancellors All research community
January 24 <sup>th</sup>	<b>Launching Survey Process.</b> The C&C online survey was sent to all researchers, and the online OTM-R survey was sent to a specific target of 6 people from the administrative departments in charge of the recruitment processes.	Working Group Research community
December 14 <sup>th</sup> 18 <sup>th</sup> March 13 <sup>th</sup> April 1 <sup>st</sup> -10 <sup>th</sup>	<b>Interview</b> a selection of key staff members: The Human Resources Manager and Infrastructures were interviewed personally with the aim of gathering further information on key topics.	Working Group, staff and managers
Feb 23 <sup>rd</sup> - March 3 <sup>rd</sup>	<b>Analysis and interpretation</b> of the OTM-R and HRS4R surveys.	Working Group
Feb 8 <sup>th</sup>	<b>Benchmarking Meeting.</b> Discussion on benchmark of the Action Plan of other awarded institutions.	Working Group
Feb 16 <sup>th</sup>	<b>1<sup>st</sup> Workshop:</b> Half-day workshop evaluating and discussing results of the <b>OTM-R survey</b>	Working Group
March 5 <sup>th</sup>	<b>2<sup>nd</sup> Workshop:</b> Half-day workshop evaluating and discussing the responses of the <b>HRS4R survey</b> . Validation Gap Analysis conclusions.	Working Group

March 13 <sup>th</sup>	<b>Internal review:</b> 1 <sup>st</sup> Meeting with part of the Steering Committee. A review of the Gap Analysis was made. An in-depth discussion about focus and scope for each of the statements was had.	Steering Committee
March 19 <sup>th</sup>	<b>3<sup>rd</sup> Workshop:</b> Half-day workshop evaluating and discussing <b>Action Plan</b> .	Working Group
April 3 <sup>rd</sup>	<b>Internal review:</b> 2 <sup>nd</sup> Meeting with part of the Steering Committee. A review of the Gap Analysis and its correlation with Action Plan was made. An in-depth discussion about focus and scope for each of the actions was had.	Steering Committee
April 18 <sup>th</sup>	<b>Presentation to the Governing Board:</b> Steering Committee presents the Gap Analysis and Action Plan to the members of the Governing Board.	Steering Committee, Working Group and all researchers
May 3 <sup>th</sup>	<b>Final internal review:</b> 3 <sup>rd</sup> Meeting with the Working Group for final details of Gap Analysis and Action Plan.	Working Group
May 24 <sup>th</sup>	<b>Presentation to the Research Commission:</b> Steering Committee presents the Gap Analysis and Action Plan to the members of the Research Commission.	Steering Committee
May 30 <sup>th</sup>	<b>Submission to EC</b> of UPM proposal.	Vice Chancellors
April 10 <sup>th</sup>	<b>Submission to EC</b> of UPM proposal after evaluation.	Vice Chancellors



## 2.3 SAMPLE, GAP ANALYSIS AND ACTION PLAN

### 2.3.1 DEFINE SAMPLE AND SURVEY

The C&C online survey was sent to all 4350 researchers of the institution, and 672 researchers answered the survey (15,44%).

The online survey for OTM-R was sent to a sample of 15 staff members from the administrative departments in charge of the recruitment processes, and 14 answers were received.

Further information is shown in ANNEX 1.

### 2.3.2 GAP ANALYSIS AND IMPROVEMENT ACTIONS DEFINITION

The C&C UPM's survey asked about the degree of implementation of each of the 40 principles provided by the C&C, and in the case that the surveyed scientist consider that a criterion might not be fully implemented, requested the reason why. Additionally, the option of being unaware of the implementation of the criterion was also considered. The survey also asked the participants to evaluate the importance of each of the 40 principles. The survey was written in Spanish and English. Two online platforms were used for both the C&C and OTM-R surveys:

- C&C: Spanish (intranet link): [https://www.upm.es/politecnica\\_virtual/login.upm?c=1919A](https://www.upm.es/politecnica_virtual/login.upm?c=1919A)
- C&C English: <https://es.surveymonkey.com/r/MZ7YHTK>
- OTR-M: <https://es.surveymonkey.com/r/MQY8H7H>

The answers of the survey were analysed, and the views written for each principle were taken by the Working Group as the starting point of discussion concerning the implementation of each of the 40 principles, and for the definition of the Action Plan.

An average score has been calculated for each of the principles (the degree to which the researchers consider the principles have been implemented and their importance).

Additionally, personal in-depth interviews, lasting approximately one hour, were held with officials concerning specific topics to attain a more comprehensive perspective of the implementation of these principles at UPM. A more detailed explanation of this topic is shown in Annex 4.4.

To attain a broader perspective of the initiatives undertaken by different Spanish and international institutions in the HRS4R accreditation, UPM performed a benchmark of action plans of other similar institutions (available on the EURAXESS portal) that had previously implemented the process. This benchmark was used to identify actions to solve its current gaps, and to identify best practices.

### 2.3.3 Action Plan

To diagnose the implementation of the 40 C&C principles in UPM, and to identify the main actions to overcome this situation, two workshops were held.

During the first day, the diagnosis was presented, discussed and validated; afterwards actions were debated.

In the second workshop, the actions were defined and evaluated more concisely, prioritising the most appropriate and achievable ones for UPM.

A detailed description of the meetings, agenda and participants is shown in Annex 4.3

### 3. RESULTS

This effort provided a Gap Analysis in which 21 principles were considered implemented at the Institution. Annex 4.5 shows the analysis of the National and Institutional legal framework in order to identify the laws, decrees or regulations that may limit the implementation of any of the 40 C&C principles. After revising current regulations, our conclusion is that in a general sense, the National, Autonomic or Institutional legal frameworks are compatible with the integration of the C&C principles to the HR strategy of the Institution.

The Gap Analysis of the 40 C&C and the 23 OTM-R principles are presented in the following section.

#### 3.1 GAP ANALYSIS: CHARTER & CODE

Table 2 presents the Gap Analysis of the HRS4R criteria at the Institution. 21 out of 40 criteria have been considered “fully implemented”; 13 “almost but not fully implemented”; 3 “partially implemented”; and the remaining 3 “insufficiently implemented”.

Notes:

- 1) To show the implementation of already undertaken initiatives, links to the websites to the public documents were provided. The internal-use documents were stored at a special Dropbox repository and are available to be reviewed by the evaluators.
- 2) The researchers’ selection and recruiting processes were analyzed in general terms. Solutions were only provided for the recruitment of researchers hired directly by UPM (OTT). As most of the researchers were recruited following selection processes defined by other institutions outside UPM’s level of responsibility: EU (ERC, Marie Curie, etc.), Spanish Government (Ramón y Cajal, Juan de la Cierva, FPI, FPU, etc.), Regional Government, and other private institutions (La Caixa, etc.). Proposals for improving this situation were centered in this profile of researchers, as is the unique profile whose recruitment depends in UPM.

The GAP analysis was performed considering the views of the researchers that were stated in the **survey, and the opinions** of the members of the working group at the workshops, the implementation degree of some of the 40 criteria was changed after the debate, qualifying the global survey's results. Many criteria were considered implemented, although there is a lack of knowledge about their existence or implementation (Figure 1), this situation will be overcome by the incorporation of this information in the Welcome Manual.

TABLE 2: GAP ANALYSIS

Criteria and Implementation	Indication of the actual "gap"	Initiatives already undertaken and/or suggestions for improvement	Action
<b>1. Research Freedom</b>  Fully implemented	➡ No Gap	<ul style="list-style-type: none"> <li>➡ Research freedom is endorsed by Article 1.2 of UPM's statute. <a href="http://www.upm.es/sfs/SedeUPM/Normativa%20UPM/Estatutos%2020101115%20BOCAM.pdf">http://www.upm.es/sfs/SedeUPM/Normativa%20UPM/Estatutos%2020101115%20BOCAM.pdf</a></li> <li>➡ The specific goal of the research is defined in the research project call.</li> <li>➡ Research projects that include ethical issues in their progress, such as biological samples of human origin and data protection, or animal testing, should be approved by UPM's research activities Ethical Committee. <a href="http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Investigacion/Servicio%20de%20Investigacion/Ayudas_y_Convocatorias/C.ETICA-REGLAMENTO.pdf">http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Investigacion/Servicio%20de%20Investigacion/Ayudas_y_Convocatorias/C.ETICA-REGLAMENTO.pdf</a></li> <li>➡ The Research Centre for the Management of Agricultural and Environmental Risks (CEIGRAM) and the Innovation and Technology for Development Centre (itdUPM) organises courses and seminars about ethical issues. <a href="http://www.ceigram.upm.es/">http://www.ceigram.upm.es/</a>, <a href="http://www.itd.upm.es/">http://www.itd.upm.es/</a></li> <li>➡ The Supercomputing and Visualisation Centre of Madrid (CeSViMa) provides data storage services and protection of sensitive research. <a href="http://www.cesvima.upm.es/">http://www.cesvima.upm.es/</a></li> <li>➡ Although this principle is implemented at UPM, the Working Group considers it convenient to include information about this principle in the Welcome Manual for researchers.</li> </ul>	<ul style="list-style-type: none"> <li>➡ No specific action needed.</li> <li>➡ Incorporate information and links about ethical issues in the Welcome Manual for researchers.</li> </ul>
<b>2. Ethical principles</b>  Fully implemented	➡ No Gap	<ul style="list-style-type: none"> <li>➡ The ethical committee oversees the monitoring and compliance of ethical norms and core ethical principles. <a href="http://www.upm.es/Investigacion/gestion_proyectos/ComiteEtica">http://www.upm.es/Investigacion/gestion_proyectos/ComiteEtica</a></li> <li>➡ In March 2017, UPM's Governing Board approved a new operations regulation for the R&amp;D ethical committee.</li> </ul>	<ul style="list-style-type: none"> <li>➡ No specific action needed.</li> <li>➡ Incorporate information and links about transversal skills training activities for the Doctorate students.</li> </ul>

		<p><a href="http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Investigacion/Servicio%20de%20Investigacion/Ayudas_y_Convocatorias/C.ETICA-REGLAMENTO.pdf">http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Investigacion/Servicio%20de%20Investigacion/Ayudas_y_Convocatorias/C.ETICA-REGLAMENTO.pdf</a></p> <ul style="list-style-type: none"> <li>➔ Different guidelines were applied depending upon how the research is financed: by competitive or non-competitive projects <a href="http://www.upm.es/Investigacion/innovacion/OTRI/Propiedad%20Intelectual%20e%20Industrial/Documentos%20Relacionados?fmt=detail&amp;prefmt=articulo&amp;id=c99898a9018dc310VgnVCM10000009c7648a">http://www.upm.es/Investigacion/innovacion/OTRI/Propiedad%20Intelectual%20e%20Industrial/Documentos%20Relacionados?fmt=detail&amp;prefmt=articulo&amp;id=c99898a9018dc310VgnVCM10000009c7648a</a></li> <li>➔ Form 6 should be filled out to alert the existence of ethical issues in projects, contracts, grants or collaborations.</li> </ul> <p><a href="http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Investigacion/Servicio%20de%20Investigacion/Comite_de_etica/2017/COMITE-ETICA-MODELO6.pdf">http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Investigacion/Servicio%20de%20Investigacion/Comite_de_etica/2017/COMITE-ETICA-MODELO6.pdf</a></p> <ul style="list-style-type: none"> <li>➔ Although this principle is fully implemented, the Working Group considers it convenient to explain this topic in the “Code of Good Research Practices” and condense this information into the Welcome Manual.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Incorporate information and links about ethical issues in the Welcome Manual for researchers.</li> <li>➔ Include information in a Code of Good Research Practices.</li> </ul>
<p><b>3. Professional responsibility</b></p> <p>Fully implemented</p>	<ul style="list-style-type: none"> <li>➔ No Gap</li> </ul>	<ul style="list-style-type: none"> <li>➔ UPM provides an antiplagiarism software to verify the originality of the academic papers. <a href="http://www.upm.es/Personal?id=916f0c286b4b8510VgnVCM10000009c7648a&amp;prefmt=articulo&amp;fmt=detail">http://www.upm.es/Personal?id=916f0c286b4b8510VgnVCM10000009c7648a&amp;prefmt=articulo&amp;fmt=detail</a>. Additionally, publications address their own originality verification procedures.</li> <li>➔ UPM has a norm covering intellectual and industrial property, and a special unit at the OTRI (Research Results Transference Office) supporting IP issues. <a href="http://www.upm.es/Investigacion/innovacion/OTRI/Propiedad%20Intelectual%20e%20Industrial">http://www.upm.es/Investigacion/innovacion/OTRI/Propiedad%20Intelectual%20e%20Industrial</a></li> <li>➔ Existence of IP and patent courses provided by OTRI. <a href="https://eventos.upm.es/16403/detail/patentes-y-derechos-de-autor_-todo-lo-que-un-investigador-deberia-saber.html">https://eventos.upm.es/16403/detail/patentes-y-derechos-de-autor_-todo-lo-que-un-investigador-deberia-saber.html</a> <a href="https://eventos.upm.es/7831/detail/patentes-y-derechos-de-autor_-lo-que-todo-investigador-debe-saber.html">https://eventos.upm.es/7831/detail/patentes-y-derechos-de-autor_-lo-que-todo-investigador-debe-saber.html</a></li> <li>➔ IP and Patents topics were included in the horizontal training and teaching collaborations for Ph.D students.</li> </ul>	<ul style="list-style-type: none"> <li>➔ No specific action needed.</li> <li>➔ Incorporate information and links about the antiplagiarism software, and IP norms and rights in the Welcome Manual for researchers.</li> <li>➔ Improve the publicity of the internal courses provided by ICE, OTRI/OPE/ Scientific Culture Unit of the Vice Chairmen of Research, Innovation and Doctorate and increase the diffusion of the events enrolment’s websites.</li> <li>➔ Include information in a Code of Good Research Practices.</li> </ul>

		<p><a href="http://www.upm.es/Estudiantes/Estudios_Titulaciones/Estudios_Doctorado/Actividades_formativas_Doctorado">http://www.upm.es/Estudiantes/Estudios_Titulaciones/Estudios_Doctorado/Actividades_formativas_Doctorado</a></p> <ul style="list-style-type: none"> <li>➔ Although this principle is fully implemented, the Working Group considers it convenient to explain this topic in the “Code of Good Research Practices” and condense this information into the Welcome Manual. In addition, the performance of IP courses should improve its dissemination across UPM’s researchers.</li> </ul>	
<p><b>4. Professional attitude</b> Fully implemented</p>	<p>➔ No Gap</p>	<ul style="list-style-type: none"> <li>➔ The Vice Rectorate of Research, Innovation and Doctorate provides updated information regarding the importance of considering and formalising these issues, suggesting the procedures that should be followed and providing assistance, if needed, in regional (Comunidad de Madrid), National (Plan Nacional) or international (especially H2020) competitive calls.</li> <li>➔ Research projects that include ethical issues in their progress, such as biological samples of human origin and data protection, or animal testing, should be approved by IPM’s research activities ethical committee. <a href="http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Investigacion/Servicio%20de%20Investigacion/Ayudas_y_Convocatorias/C.ETICA-REGLAMENTO.pdf">http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Investigacion/Servicio%20de%20Investigacion/Ayudas_y_Convocatorias/C.ETICA-REGLAMENTO.pdf</a></li> <li>➔ The Technology Transfer Office (OTT) supports researchers in the process of the negotiation of technology transfer agreements with private companies and Industry. <a href="http://www.upm.es/Investigacion/gestion_proyectos/GestionProyectos">http://www.upm.es/Investigacion/gestion_proyectos/GestionProyectos</a></li> <li>➔ UPM’s international R&amp;D projects office (OPE) assists researchers in the process of participation in the main international R&amp;D programs (promotion and preparation of the calls, and management and economic justification of the granted international projects). <a href="http://www.upm.es/Investigacion/gestion_proyectos/AyudasConvocatorias/Programa_Marco">http://www.upm.es/Investigacion/gestion_proyectos/AyudasConvocatorias/Programa_Marco</a></li> </ul> <p>In addition, OPE, also organises training sessions concerning the main international R&amp;D programs, especially H2020, and the preparation and management of European projects <a href="http://eventos.upm.es/13656.html">http://eventos.upm.es/13656.html</a>. These training sessions were advertised on online platforms like UPM events and were included in the curriculum of the Ph.D. students’ horizontal training. Other related training events were “OPE’s Thursdays” which was intended for</p>	<ul style="list-style-type: none"> <li>➔ No specific action needed.</li> <li>➔ Incorporate information and links about professional attitude, and UPM’s projects management support in the Welcome Manual for researchers.</li> </ul>

		<p>UPM's researchers and technical managers.  <a href="http://www.upm.es/Estudiantes/Estudios_Titulaciones/Estudios_Doctorado/Actividades_formativas_Doctorado">http://www.upm.es/Estudiantes/Estudios_Titulaciones/Estudios_Doctorado/Actividades_formativas_Doctorado</a></p> <ul style="list-style-type: none"> <li>➔ UPM's research observatory contributes by providing visibility to different elements related to UPM's research: summary of research groups, annual reports, researchers' curricula, etc. It also provides data accessibility tools that easily enables the access, analysis and comparison of research data.  <a href="http://www.upm.es/Investigacion/personal_estructuras_inv/ObservatorioDi">http://www.upm.es/Investigacion/personal_estructuras_inv/ObservatorioDi</a>  <a href="http://www.upm.es/observatorio/vi/index.jsp">http://www.upm.es/observatorio/vi/index.jsp</a></li> <li>➔ Although this principle is fully implemented, the Working Group considers it convenient to explain this topic in the "Code of Good Research Practices" and condense this information into the Welcome Manual.</li> </ul>	
<p><b>5. Contractual and legal obligations</b></p> <p>Fully implemented</p>	<p>➔ No Gap</p>	<ul style="list-style-type: none"> <li>➔ UPM's OTRI advises researchers about intellectual and industrial property norms and technology transfer.  <a href="http://www.upm.es/Investigacion/innovacion/OTRI">http://www.upm.es/Investigacion/innovacion/OTRI</a></li> <li>➔ UPM owns an intellectual property norm.  <a href="http://www.upm.es/Personal?id=916f0c286b4b8510VgnVCM10000009c7648a&amp;prefmt=articulo&amp;fmt=detail">http://www.upm.es/Personal?id=916f0c286b4b8510VgnVCM10000009c7648a&amp;prefmt=articulo&amp;fmt=detail</a>,</li> <li>➔ Existence of IP and patents courses provided by OTRI.  <a href="https://eventos.upm.es/16403/detail/patentes-y-derechos-de-autor_-todo-lo-que-un-investigador-deberia-saber.html">https://eventos.upm.es/16403/detail/patentes-y-derechos-de-autor_-todo-lo-que-un-investigador-deberia-saber.html</a>  <a href="https://eventos.upm.es/7831/detail/patentes-y-derechos-de-autor_-lo-que-todo-investigador-debe-saber.html">https://eventos.upm.es/7831/detail/patentes-y-derechos-de-autor_-lo-que-todo-investigador-debe-saber.html</a></li> <li>➔ UPM's Centre for Support for Technological Innovation (CAIT) fosters the exploitation of R&amp;D results gathered at the University, <a href="http://www.upm.es/Montegancedo/Transferencia/CAIT">http://www.upm.es/Montegancedo/Transferencia/CAIT</a> by the elaboration of innovation and technology commercialization initiatives, <a href="http://www.upm.es/Investigacion/innovacion/InnovacionComercializacionTecnologias">http://www.upm.es/Investigacion/innovacion/InnovacionComercializacionTecnologias</a> or business creation <a href="http://www.upm.es/Investigacion/innovacion/CreacionEmpresas">http://www.upm.es/Investigacion/innovacion/CreacionEmpresas</a></li> <li>➔ Although this principle is implemented at UPM, the Working Group considers it convenient to include information about this principle in the Welcome Manual for researchers and provide more visibility to the training courses.</li> </ul>	<ul style="list-style-type: none"> <li>➔ No specific action needed.</li> <li>➔ Incorporate information and links about UPM's IP norms and rights in the Welcome Manual for researchers.</li> <li>➔ Improve the publicity of the internal courses provided by ICE, OTRI/OPE/ Scientific Culture Unit of the Vice Chairman of Research, Innovation and Doctorate and increase the diffusion of the events enrolment's websites.</li> </ul>

<p><b>6. Accountability</b></p> <p>Fully implemented</p>	<p>➡ No Gap</p>	<ul style="list-style-type: none"> <li>➡ The OTT and the Vice Rectorate of Research, Innovation and Doctorate, supports researchers in the application, financial management and justification of the regional, national or international research projects granted in competitive calls. <a href="http://www.upm.es/Investigacion/gestion_proyectos/GestionProyectos">http://www.upm.es/Investigacion/gestion_proyectos/GestionProyectos</a></li> <li>➡ OPE organises training sessions concerning the preparation and management of European projects. <a href="http://eventos.upm.es/13656.html">http://eventos.upm.es/13656.html</a></li> <li>➡ UPM offers grants for the recruitment of technicians in research project management. <a href="http://www.upm.es/Investigacion/Programa_Propio_UPM/2018">http://www.upm.es/Investigacion/Programa_Propio_UPM/2018</a></li> <li>➡ Although this principle is fully implemented, the Working Group considers it convenient to explain this topic in the “Code of Good Research Practices” and condense this information into the Welcome Manual for researchers.</li> </ul>	<ul style="list-style-type: none"> <li>➡ No specific action needed.</li> <li>➡ Incorporate information and links about professional attitude, and UPM’s projects management support in the Welcome Manual for researchers.</li> <li>➡ Include information in a Code of Good Research Practices.</li> </ul>
<p><b>7. Good practice in research</b></p> <p>Almost but not fully implemented</p>	<p>➡ The Working Group considers it convenient to include information about this principle in the Welcome Manual for researchers.</p>	<ul style="list-style-type: none"> <li>➡ Research projects that include ethical issues in their progress, such as biological samples of human origin and data protection, or animal testing, should be approved by UPM’s research activities ethical committee. <a href="http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Investigacion/Servicio%20de%20Investigacion/Ayudas_y_Convocatorias/C.ETICA-REGLAMENTO.pdf">http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Investigacion/Servicio%20de%20Investigacion/Ayudas_y_Convocatorias/C.ETICA-REGLAMENTO.pdf</a>.</li> <li>➡ UPM’s health and security committee monitors and guides issues related to workplace health. <a href="http://www.upm.es/Personal/PrevencionRiesgosLaborales/OrganizacionPreventivaUPM/CSS">http://www.upm.es/Personal/PrevencionRiesgosLaborales/OrganizacionPreventivaUPM/CSS</a>; and a risk prevention policy. <a href="http://www.upm.es/Personal/PrevencionRiesgosLaborales/PoliticaPreventionRiesgosLaborales">http://www.upm.es/Personal/PrevencionRiesgosLaborales/PoliticaPreventionRiesgosLaborales</a>; and a flyer summarising basic norms of workplace security. <a href="http://www.upm.es/sfs/Rectorado/Gerencia/Prevencion%20de%20Riesgos%20Laborales/Informacion%20sobre%20Prevencion%20de%20Riesgos%20Laborales/Tripticos/TRIPTICO%20UPM.pdf">http://www.upm.es/sfs/Rectorado/Gerencia/Prevencion%20de%20Riesgos%20Laborales/Informacion%20sobre%20Prevencion%20de%20Riesgos%20Laborales/Tripticos/TRIPTICO%20UPM.pdf</a>.</li> <li>➡ UPM’s singular scientific and technological infrastructures have their own procedures to guarantee their security. In addition, UPM offers 32 accredited international degrees. The accreditation process includes the inspection and review of security validation of the laboratories used in the degrees.</li> </ul>	<ul style="list-style-type: none"> <li>➡ Incorporate information and links about security and workplace health in the Welcome Manual for researchers.</li> <li>➡ Include information in a Code of Good Research Practices.</li> </ul>

		<ul style="list-style-type: none"> <li>➔ Before starting a European Project, OPE advises researchers about the procedures that should be followed. A confidentiality agreement should be signed by the staff involved in collaborative projects (UPM's research projects, national projects and H2020).</li> <li>➔ UPM's projects' sensitive data, as well as their backups, were encrypted. The access to sensitive infrastructures by VPN is recorded. Although there is not a corporate policy for data protection, each individual centre oversees the backup process of the researchers' computers. A new centralised antivirus system will be available soon for all UPM's computers and nets. UPM also provides access to a private cloud service, which is accessed and managed by the research groups.</li> <li>➔ UPM has already instituted a new position of Data Manager which has already been filled, which will define the data accessibility policy and distribute the information to UPM's researchers.</li> </ul>	
<p><b>8. Dissemination, exploitation of results</b></p> <p>Almost but not fully implemented</p>	<ul style="list-style-type: none"> <li>➔ The Working Group considers it convenient to include information about this principle in the Welcome Manual for researchers.</li> </ul>	<ul style="list-style-type: none"> <li>➔ UPM's CAIT organises courses and events to foster the exploitation of R&amp;D results gathered at the University, through innovation, commercialisation of technologies and entrepreneurship such as INNOVATECH. <a href="http://www.upm.es/Investigacion/innovacion/InnovacionComercializacionTecnologias">http://www.upm.es/Investigacion/innovacion/InnovacionComercializacionTecnologias</a>, and ACTUAUPM (that is presently working in its XV edition). <a href="http://www.upm.es/Investigacion/innovacion/CreacionEmpresas/Servicios/Competicion_Creacion_Empresas">http://www.upm.es/Investigacion/innovacion/CreacionEmpresas/Servicios/Competicion_Creacion_Empresas</a>,</li> <li>➔ In 2017, the PhD SYMPOSIUM initiative was launched: An outreach initiative of the symposium, "Ph.D. thesis in 4 minutes" in which PH.D students should explain their Ph.D. project in 4 minutes in a non-scientific language. <a href="http://www.upm.es/Estudiantes/Estudios_Titulaciones/Estudios_Doctorado/Actividades_formativas_Doctorado">http://www.upm.es/Estudiantes/Estudios_Titulaciones/Estudios_Doctorado/Actividades_formativas_Doctorado</a> <a href="http://dssc.fi.upm.es/verSeminario.php?seminario=13&amp;lang=1&amp;plan=1&amp;actividad=1">http://dssc.fi.upm.es/verSeminario.php?seminario=13&amp;lang=1&amp;plan=1&amp;actividad=1</a></li> <li>➔ Other UPM scientific outreach initiatives include the newsletter, <a href="http://www.upm.es/UPM/SalaPrensa/newsletter">http://www.upm.es/UPM/SalaPrensa/newsletter</a>, and UPM's research and innovation. <a href="http://www.upm.es/UPM/SalaPrensa/epolitecnica_inv">http://www.upm.es/UPM/SalaPrensa/epolitecnica_inv</a></li> <li>➔ UPM's digital archive hosts the scientific and academic documentation in digital format. <a href="http://oa.upm.es/">http://oa.upm.es/</a></li> </ul>	<ul style="list-style-type: none"> <li>➔ Incorporate information and links about UPM's IP norms and rights, OTRI and Scientific Culture Unit (UCC) in the Welcome Manual for researchers.</li> </ul>



		<ul style="list-style-type: none"> <li>UPM is the Spanish University with the highest international projection in the press media, a fact that is related to its research production. <a href="http://www.upm.es/?id=db5a9df3b0e22610VgnVCM10000009c7648a&amp;prefmt=articulo&amp;fmt=detail">http://www.upm.es/?id=db5a9df3b0e22610VgnVCM10000009c7648a&amp;prefmt=articulo&amp;fmt=detail</a></li> </ul>	
<p><b>9. Public Engagement</b></p> <p>Almost but not fully implemented</p>	<ul style="list-style-type: none"> <li>The dissemination of research results is not included in the research staff's evaluation criteria. Researchers focus their efforts and time to other more valued activities.</li> <li>No assistance to prepare dissemination activities is provided.</li> <li>No support is provided to the Scientific Culture Unit, for example to translate its developed contents to other languages, or to develop new contents using audio-visual technologies.</li> </ul>	<ul style="list-style-type: none"> <li>UPM has scientific dissemination activities such as a newsletter, <a href="http://www.upm.es/UPM/SalaPrensa/newsletter">http://www.upm.es/UPM/SalaPrensa/newsletter</a>, websites including STARS4ALL (H2020 project coordinated by UPM) <a href="http://stars4all.eu/?lang=es">http://stars4all.eu/?lang=es</a>, UPM's research and innovation <a href="http://www.upm.es/UPM/SalaPrensa/epolitecnica_iny">http://www.upm.es/UPM/SalaPrensa/epolitecnica_iny</a> etc.</li> <li>UPM's Unit of Scientific Culture (UCC) coordinates the participation of the University at dissemination and open day events: European night of researchers. <a href="http://www.upm.es/Investigacion/innovacion/OTRI/UnidadCulturaCientifica/NocheInvestigadores/ultima">http://www.upm.es/Investigacion/innovacion/OTRI/UnidadCulturaCientifica/NocheInvestigadores/ultima</a> "Science Week" <a href="http://www.upm.es/Investigacion/innovacion/OTRI/UnidadCulturaCientifica/SemanaCiencia/ultima_Finde">http://www.upm.es/Investigacion/innovacion/OTRI/UnidadCulturaCientifica/SemanaCiencia/ultima_Finde</a> "Science Weekend" <a href="http://www.upm.es/Investigacion/innovacion/OTRI/UnidadCulturaCientifica/Otros/FindeCientifico">http://www.upm.es/Investigacion/innovacion/OTRI/UnidadCulturaCientifica/Otros/FindeCientifico</a></li> <li>The Department of Science Communication and Outreach of UPM aims to provide society with the scientific and technological knowledge generated in the university. <a href="http://www.upm.es/internacional/Researchers/SupportRDIPromotions/ResearchResultsTransfer/ScienceSociety">http://www.upm.es/internacional/Researchers/SupportRDIPromotions/ResearchResultsTransfer/ScienceSociety</a></li> <li>UPM is part of the Regional Network of Scientific Information Offices of the Comunidad de Madrid and of the National Network of Scientific Culture Units coordinated by FECYT.</li> <li>Technical schools organise their own dissemination activities, for example: Forestry Week, <a href="https://www.upm.es/e-politecnica/?p=5552">https://www.upm.es/e-politecnica/?p=5552</a> HACKFORGOOD <a href="https://www.upm.es/e-politecnica/?p=5552">https://www.upm.es/e-politecnica/?p=5552</a></li> <li>Dissemination of the research is obliged for all the H2020 projects.</li> <li>Training courses and events were performed to encourage the oratory for scientific dissemination e.g. "Ph.D. thesis in 4 minutes". <a href="https://eventos.upm.es/13194/detail/simposio-tu-tesis-en-4-minutos-y-concurso-de-posters.html">https://eventos.upm.es/13194/detail/simposio-tu-tesis-en-4-minutos-y-concurso-de-posters.html</a></li> </ul>	<ul style="list-style-type: none"> <li>Establish a scientific dissemination prize.</li> <li>Organise courses of dissemination methods and abilities and include them in the R1 and R2 course offering.</li> <li>Centralise the catalogue of public engagement activities on a website.</li> </ul>

		<ul style="list-style-type: none"> <li>➔ Twenty museums and university collections were placed at different UPM dependent centres. <a href="http://www.upm.es/UPM/MuseosUPM">http://www.upm.es/UPM/MuseosUPM</a>.</li> <li>➔ UPM also holds a scientific photography collection <a href="http://www.upm.es/UPM/FotografiaCientifica">http://www.upm.es/UPM/FotografiaCientifica</a> and organises scientific photography contests: FototechUPM. <a href="https://www.etsisi.upm.es/noticias/concurso-fotografia-cientifica-fototechupm">https://www.etsisi.upm.es/noticias/concurso-fotografia-cientifica-fototechupm</a></li> </ul>	
<p><b>10. Non-discrimination</b></p> <p>Almost but not fully implemented</p>	<ul style="list-style-type: none"> <li>➔ No information about women in research innovation and Doctorate activities is available.</li> </ul>	<ul style="list-style-type: none"> <li>➔ UPM is cosmopolitan, and no discrimination cases have ever been recorded.</li> <li>➔ UPM proposes a gender equality unit <a href="http://www.upm.es/UPM/Politicassigualdad">http://www.upm.es/UPM/Politicassigualdad</a> that is responsible of writing gender equality policies, collects and analyses data about gender issues, and wrote the gender equality plan that was approved in the Governing Board of July 20<sup>th</sup>, 2017. <a href="http://www.upm.es/UPM/Politicassigualdad/Plan">http://www.upm.es/UPM/Politicassigualdad/Plan</a></li> <li>➔ UPM has a non-sexist language manual. <a href="http://www.upm.es/UPM/Politicassigualdad/LenguajeNoSexista">http://www.upm.es/UPM/Politicassigualdad/LenguajeNoSexista</a> and offers training courses in gender equality. <a href="http://www.upm.es/UPM/Politicassigualdad/Formacion">http://www.upm.es/UPM/Politicassigualdad/Formacion</a></li> <li>➔ UPM participate in events to foster scientific vocations in women: INSPIRING GIRLS. <a href="https://www.flickr.com/photos/universidadpolitecnica/albums/72157690648270962">https://www.flickr.com/photos/universidadpolitecnica/albums/72157690648270962</a></li> <li>➔ Almost 30% of UPM researchers are women, UPM is committed increasing this number. A further analysis of the participation of women at all levels in UPM is needed.</li> <li>➔ Although implemented at UPM, the Working Group considers it convenient to include information about this principle in the Welcome Manual for researchers.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Analyse the participation of women in research innovation and Doctorate activities biannually.</li> <li>➔ Incorporate information and links about UPM's gender equality policies in the Welcome Manual for researchers.</li> </ul>
<p><b>11. Evaluation/appraisal systems</b></p> <p>Almost but not fully implemented</p>	<ul style="list-style-type: none"> <li>➔ There were no procedures for evaluating the teaching of R2 researchers whose contracts were provided by official competitive calls: Marie Curie Ramon y Cajal or Juan de la Cierva.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Teaching taught by R3 and R4 researchers is evaluated will be included DOCENTIA program of Teaching Evaluation (to be approved in the next months). Norms describing the evaluation procedure for the evaluation of teaching for UPM's teaching staff is linked below. <a href="http://www.upm.es/sfs/Rectorado/Legislacion%20y%20Normativa/Normativa/Normativa%20del%20Personal%20Docente%20e%20Investigador/DOCEN">http://www.upm.es/sfs/Rectorado/Legislacion%20y%20Normativa/Normativa/Normativa%20del%20Personal%20Docente%20e%20Investigador/DOCEN</a></li> </ul>	<ul style="list-style-type: none"> <li>➔ Facilitate procedures to evaluate the teaching 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.</li> </ul>

	<ul style="list-style-type: none"> <li>➔ There were no direct procedures to evaluate the research activity of R1 and R2 researchers hired within research projects.</li> </ul>	<p><a href="http://www.aneca.es/Programas-de-evaluacion/CNEAI">TIA%20UPM%20-%20Normativa%20del%20proc.%20de%20evaluacion%20-%20C.%20Gov.%204%20y%2025-02-2010.pdf</a></p> <ul style="list-style-type: none"> <li>➔ Each five-year term of teaching activities, UPM accredited R3 and R4 researchers with a “quinquenio”. Independently, researchers could voluntarily present their curriculum each six-year term to be evaluated by the National Research Activity Evaluation Commission, (CNEAI “sexenio”). <a href="http://www.aneca.es/Programas-de-evaluacion/CNEAI">http://www.aneca.es/Programas-de-evaluacion/CNEAI</a></li> <li>➔ R1 and R2 researchers hired by official calls must justify their research activity to the funding institutions annually.</li> <li>➔ R1 researchers funded by UPM must present a annual report of their research activity to the doctorate commission. <a href="http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Doctorado%20y%20Postgrado/Negociados%20de%20Doctorado%20y%20Postgrado/Normativas/Reglamento%20de%20Elaboración%20y%20Evaluación%20de%20Tesis.pdf">http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Doctorado%20y%20Postgrado/Negociados%20de%20Doctorado%20y%20Postgrado/Normativas/Reglamento%20de%20Elaboración%20y%20Evaluación%20de%20Tesis.pdf</a></li> <li>➔ There is an evaluation procedure for the research groups described in the Research Quality General Plan (PGCI). <a href="http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Investigacion/Servicio%20de%20Investigacion/Compromiso%20con%20la%20Calidad/pgci.pdf">http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Investigacion/Servicio%20de%20Investigacion/Compromiso%20con%20la%20Calidad/pgci.pdf</a></li> <li>➔ There is an evaluation procedure for university institutes and R&amp;D Centres described in the Research Quality General Plan, (PGCI). <a href="http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Investigacion/Servicio%20de%20Investigacion/Compromiso%20con%20la%20Calidad/pgciinsycentros.pdf">http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Investigacion/Servicio%20de%20Investigacion/Compromiso%20con%20la%20Calidad/pgciinsycentros.pdf</a></li> <li>➔ A website publishes the results of the application of the PGCI to the institutes, centres and research groups of UPM. <a href="http://www.upm.es/Investigacion/personal_estructuras_inv/Plan%20de%20Calidad%20de%20la%20Investigaci%C3%B3n">http://www.upm.es/Investigacion/personal_estructuras_inv/Plan%20de%20Calidad%20de%20la%20Investigaci%C3%B3n</a></li> <li>➔ Research institutes evaluate their staff periodically.</li> </ul>	<ul style="list-style-type: none"> <li>➔ 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.</li> <li>➔ Incorporate information and links about UPM’s evaluation policies in the Welcome Manual for researchers.</li> </ul>
<p><b>12. Recruitment</b> Almost but not fully implemented</p>	<ul style="list-style-type: none"> <li>➔ There is not a defined procedure for the recruitment of R1 and R2 research staff hired within research projects. Currently there</li> </ul>	<ul style="list-style-type: none"> <li>➔ The official recruitment procedures for research and teaching staff include positions for disadvantaged candidates and analyse the research curriculum of the candidate according to public and defined guidelines.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Update the norms and create a recruitment procedure for the R1 and R2 research staff hired within research projects, applying initiatives for</li> </ul>

	<p>is a regulation that should be updated; applications and forms should be updated and translated into English.</p> <ul style="list-style-type: none"> <li>➔ The services for welcoming and assisting foreign researchers could be improved.</li> </ul>	<ul style="list-style-type: none"> <li>➔ The norms for the recruitment of R2 researchers as Teaching Assistant, Assistant Professor and Lecturer <a href="https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf">https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf</a> also follows the Organic University Law 6/2001, of December 21 concerning the inclusion of disadvantaged candidates. <a href="https://www.boe.es/buscar/pdf/2001/BOE-A-2001-24515-consolidado.pdf">https://www.boe.es/buscar/pdf/2001/BOE-A-2001-24515-consolidado.pdf</a>.</li> <li>➔ The recruitment of R1 researchers for UPM's self-funding research program follows the procedures of the Spanish Science Law. <a href="http://www.upm.es/Investigacion/Programa_Propio_UPM/2018">http://www.upm.es/Investigacion/Programa_Propio_UPM/2018</a> and <a href="https://www.boe.es/buscar/pdf/2011/BOE-A-2011-9617-consolidado.pdf">https://www.boe.es/buscar/pdf/2011/BOE-A-2011-9617-consolidado.pdf</a>.</li> <li>➔ Website for foreign visitors provides information about accommodation, insurances and visas. <a href="http://www.upm.es/Investigacion/personal_estructuras_inv/AtencionVisitan te">http://www.upm.es/Investigacion/personal_estructuras_inv/AtencionVisitan te</a></li> </ul>	<p>disadvantaged candidates as much as possible.</p> <ul style="list-style-type: none"> <li>➔ Fund a centralized unit for the welcoming and continuous assistance of the foreign researchers.</li> <li>➔ Design of a website to include comprehensive information for foreign researchers.</li> </ul>
<p><b>13. Recruitment (Code)</b></p> <p>Almost but not fully implemented</p>	<ul style="list-style-type: none"> <li>➔ There is not a unified website that collects all UPM's job offers.</li> <li>➔ Most job offers are published in Spanish, except those in which is mandatory to publish on international pages, e.g. Marie Curie.</li> <li>➔ There is not a defined procedure for the recruitment of R1 and R2 research staff hired within research projects.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Recruitment of R3 and R4 researchers is dependent on the number of public employee positions, admitted by the Ministry of Education and governed by the corresponding legislation.</li> <li>➔ Recruitment of R1 and R2 researchers in competitive calls is governed by the funding organisms.</li> <li>➔ The norms for the recruitment of R2 researchers as Teaching Assistant, Assistant Professor and Lecturer sets the procedures for the publication of the job offers. <a href="https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf">https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf</a></li> <li>➔ The recruitment of R1 researchers for UPM's self-funding research program follows the procedures of the Spanish Science Law. <a href="http://www.upm.es/Investigacion/Programa_Propio_UPM/2018">http://www.upm.es/Investigacion/Programa_Propio_UPM/2018</a> and <a href="https://www.boe.es/buscar/pdf/2011/BOE-A-2011-9617-consolidado.pdf">https://www.boe.es/buscar/pdf/2011/BOE-A-2011-9617-consolidado.pdf</a></li> </ul>	<ul style="list-style-type: none"> <li>➔ 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.</li> <li>➔ Define a recruitment procedure for the R1 and R2 research staff hired within research projects that will include information about labour rights and the possible prospective of professional development.</li> <li>➔ Write all the job offers and contracts both in English and Spanish.</li> <li>➔ Create a centralized unit for the welcoming and continuous assistance of the foreign researchers.</li> <li>➔ Incorporate information and links about UPM's recruitment in the Welcome Manual for researchers.</li> </ul>

<p><b>14. Selection (Code)</b></p> <p>Almost but not fully implemented</p>	<ul style="list-style-type: none"> <li>➔ There is not a defined procedure for the recruitment of R1 and R2 research staff hired within research projects.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Recruitment of R3 and R4 researchers is dependent on the number of public employee positions, admitted by the Ministry of Education and governed by the corresponding legislation.</li> <li>➔ Recruitment of R1 and R2 researchers in competitive calls is governed by the funding organisms.</li> <li>➔ The norms for the recruitment of R2 researchers as Teaching Assistant, Assistant Professor and Lecturer define the norm of creating evaluation committees. <a href="https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf">https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf</a></li> <li>➔ The recruitment of R1 researchers for UPM's self-funding research program follows the procedures of the Spanish Science Law. <a href="http://www.upm.es/Investigacion/Programa_Propio_UPM/2018">http://www.upm.es/Investigacion/Programa_Propio_UPM/2018</a> and <a href="https://www.boe.es/buscar/pdf/2011/BOE-A-2011-9617-consolidado.pdf">https://www.boe.es/buscar/pdf/2011/BOE-A-2011-9617-consolidado.pdf</a></li> </ul>	<ul style="list-style-type: none"> <li>➔ Define a recruitment procedure for the R1 and R2 research staff hired within research projects that will recommend the performance of interviews.</li> <li>➔ 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.</li> </ul>
<p><b>15. Transparency (Code)</b></p> <p>Almost but not fully implemented</p>	<ul style="list-style-type: none"> <li>➔ There is not a defined procedure for the recruitment of R1 and R2 research staff hired within research projects.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Recruitment of R3 and R4 researchers is dependent on the public employee's positions, admitted by the Ministry of Education, and is governed by the corresponding legislation.</li> <li>➔ Recruitment of R1 and R2 researchers in competitive calls is governed by the funding organisms.</li> <li>➔ The norms for the recruitment of R2 researchers as Teaching Assistant, Assistant Professor and Lecturer define the regulation of resolution and communication to the candidates. <a href="https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf">https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf</a></li> <li>➔ The recruitment of R1 researchers for UPM's self-funding research program follows the procedures of the Spanish Science Law. <a href="http://www.upm.es/Investigacion/Programa_Propio_UPM/2018">http://www.upm.es/Investigacion/Programa_Propio_UPM/2018</a> <a href="https://www.boe.es/buscar/pdf/2011/BOE-A-2011-9617-consolidado.pdf">https://www.boe.es/buscar/pdf/2011/BOE-A-2011-9617-consolidado.pdf</a></li> </ul>	<ul style="list-style-type: none"> <li>➔ Define a recruitment procedure for the R1 and R2 research staff hired within research projects that will include information about the communication of the resolution of the calls to the candidates.</li> <li>➔ 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.</li> </ul>
<p><b>16. Judging merit (Code)</b></p> <p>Almost but not fully implemented</p>	<ul style="list-style-type: none"> <li>➔ There are no procedures for evaluating the teaching of R2 researchers whose contracts were provided by official competitive calls: Marie Curie</li> </ul>	<ul style="list-style-type: none"> <li>➔ Recruitment of R3 and R4 researchers is dependent on the public employee's positions, admitted by the Ministry of Education, and is governed by the corresponding legislation.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Define a recruitment procedure for the R1 and R2 research staff hired within research projects that will include information about the communication of the resolution of the calls to the candidates.</li> </ul>

	<p>Ramon y Cajal or Juan de la Cierva.</p> <ul style="list-style-type: none"> <li>➔ There is not a defined procedure for the evaluation of R1 and R2 research staff hired within research projects.</li> <li>➔ The performance of research results dissemination is not included in the research staff's evaluation criteria.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Recruitment of R1 and R2 researchers in competitive calls is governed by the funding organisms.</li> <li>➔ The norms for the recruitment of R2 researchers as Teaching Assistant, Assistant Professor and Lecturer define the regulation of merits evaluation. <a href="https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf">https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf</a></li> <li>➔ The recruitment of R1 researchers for UPM's self-funding research program follows the procedures of the Spanish Science Law. <a href="http://www.upm.es/Investigacion/Programa_Propio_UPM/2018">http://www.upm.es/Investigacion/Programa_Propio_UPM/2018</a> <a href="https://www.boe.es/buscar/pdf/2011/BOE-A-2011-9617-consolidado.pdf">https://www.boe.es/buscar/pdf/2011/BOE-A-2011-9617-consolidado.pdf</a></li> </ul>	<ul style="list-style-type: none"> <li>➔ Include scientific dissemination activities as a positive criterion for the selection of the R1 and R2 research staff hired within research projects.</li> <li>➔ Include Marie Curie and Spanish official Post-doc (e.g. Ramon y Cajal, Juan de la Cierva, talent, Beatriz Galindo, and other) programmes holders in the DOCENTIA programme.</li> </ul>
<p><b>17. Variations in the chronological order of CVs (Code)</b></p> <p>Almost but not fully implemented</p>	<ul style="list-style-type: none"> <li>➔ There is not a defined procedure for the evaluation of R1 and R2 research staff hired within research projects.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Recruitment of R3 and R4 researchers is dependent on the public employee's positions, admitted by the Ministry of Education, and is governed by the corresponding legislation.</li> <li>➔ Recruitment of R1 and R2 researchers in competitive calls is governed by the funding organisms.</li> <li>➔ The norms for the recruitment of R2 researchers as Teaching Assistant, Assistant Professor and Lecturer follow the merit scales defined by UPM. <a href="https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf">https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf</a></li> <li>➔ The recruitment of R1 researchers for UPM's self-funding research program follow the procedures of the Spanish Science Law. <a href="http://www.upm.es/Investigacion/Programa_Propio_UPM/2018">http://www.upm.es/Investigacion/Programa_Propio_UPM/2018</a> <a href="https://www.boe.es/buscar/pdf/2011/BOE-A-2011-9617-consolidado.pdf">https://www.boe.es/buscar/pdf/2011/BOE-A-2011-9617-consolidado.pdf</a></li> </ul>	<ul style="list-style-type: none"> <li>➔ Define a recruitment procedure for the R1 and R2 research staff hired within research projects that will include information about the merit scales considered.</li> </ul>
<p><b>18. Recognition of mobility experience (Code)</b></p> <p>Almost but not fully implemented</p>	<ul style="list-style-type: none"> <li>➔ There is not a defined procedure for the evaluation of R1 and R2 research staff hired within research projects.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Mobility is considered a positive criterion in all the competitive calls, and tacitly, is also considered as a positive criterion in the selection of R1 and R2 research staff hired within research projects.</li> <li>➔ UPM self-funded research program includes two international mobility calls. <a href="http://www.upm.es/Investigacion/Programa_Propio_UPM/2018/movilidad">http://www.upm.es/Investigacion/Programa_Propio_UPM/2018/movilidad</a> <a href="http://www.upm.es/Investigacion/Programa_Propio_UPM/2018">http://www.upm.es/Investigacion/Programa_Propio_UPM/2018</a></li> <li>➔ UPM provides numerous supporting tools for international mobility of students and researchers. <a href="http://www.upm.es/Estudiantes/Movilidad">http://www.upm.es/Estudiantes/Movilidad</a></li> </ul>	<ul style="list-style-type: none"> <li>➔ Define a recruitment procedure for the R1 and R2 research staff hired within research projects that will include mobility of the candidate as a positive criterion for the selection.</li> </ul>

<p><b>19. Recognition of qualifications (Code)</b></p> <p>Almost but not fully implemented</p>	<ul style="list-style-type: none"> <li>➔ There is not a defined procedure for the evaluation of R1 and R2 research staff hired within research projects.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Recruitment of R3 and R4 researchers is dependent on the public employee's positions, admitted by the Ministry of Education, and is governed by the corresponding legislation.</li> <li>➔ Recruitment of R1 and R2 researchers in competitive calls is governed by the funding organisms.</li> <li>➔ The norms for the recruitment of R2 researchers as Teaching Assistant, Assistant Professor and Lecturer follow the merit scales defined by UPM. <a href="https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf">https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf</a></li> <li>➔ The recruitment of R1 researchers for UPM's self-funding research program follows the procedures of the Spanish Science Law. <a href="http://www.upm.es/Investigacion/Programa_Propio_UPM/2018">http://www.upm.es/Investigacion/Programa_Propio_UPM/2018</a> <a href="https://www.boe.es/buscar/pdf/2011/BOE-A-2011-9617-consolidado.pdf">https://www.boe.es/buscar/pdf/2011/BOE-A-2011-9617-consolidado.pdf</a></li> </ul>	<ul style="list-style-type: none"> <li>➔ Define a recruitment procedure for the R1 and R2 research staff hired within research projects that will include information about the merit scales considered.</li> </ul>
<p><b>20. Seniority (Code)</b></p> <p>Fully implemented</p>	<ul style="list-style-type: none"> <li>➔ No Gap</li> </ul>	<ul style="list-style-type: none"> <li>➔ Seniority is considered a positive criterion in all the competitive calls, and tacitly, is also considered as a positive criterion in the selection of R1 and R2 research staff hired within research projects.</li> </ul>	<ul style="list-style-type: none"> <li>➔ No specific action needed.</li> </ul>
<p><b>21. Postdoctoral appointments (Code)</b></p> <p>Almost but not fully implemented</p>	<ul style="list-style-type: none"> <li>➔ There is not a defined procedure for the evaluation of R1 and R2 research staff hired within research projects.</li> <li>➔ Present economic conditions are not favourable to consolidate R2 researchers into stable research positions.</li> <li>➔ The work perspectives of the R2 research staff hired within research projects are difficult.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Recruitment of R1 and R2 researchers in competitive calls is governed by the funding organisms. In general terms, these R2 could co-direct a PH.D. thesis project at UPM.</li> <li>➔ The norms for the recruitment of R2 researchers as Teaching Assistant, Assistant Professor and Lecturer follow the merit scales defined by UPM. <a href="https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf">https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf</a></li> <li>➔ UPM's self-funding research program includes calls for the incorporation and retention of talent. <a href="http://www.upm.es/Investigacion/Programa_Propio_UPM/Convocatorias2017?id=0677f86294a7c510VgnVCM10000009c7648a&amp;fmt=detail">http://www.upm.es/Investigacion/Programa_Propio_UPM/Convocatorias2017?id=0677f86294a7c510VgnVCM10000009c7648a&amp;fmt=detail</a></li> <li>➔ The contract signed by R2 researchers defines their salary, obligations and working rights.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Define a recruitment procedure for the R1 and R2 research staff hired within research projects that will include information about the maximum length and the objectives of the appointments.</li> <li>➔ Design a call in UPM's self-funded program for the consolidation of R2 researchers hired by competitive official calls.</li> </ul>

<p><b>22. Recognition of the profession</b></p> <p>Fully implemented</p>	<ul style="list-style-type: none"> <li>➔ No Gap</li> </ul>	<ul style="list-style-type: none"> <li>➔ The right of professional recognition is considered in the national legislation (Law of Science), in collective agreements and the University statutes.</li> </ul>	<ul style="list-style-type: none"> <li>➔ No specific action needed.</li> </ul>
<p><b>23. Research environment</b></p> <p>Almost but not fully implemented</p>	<ul style="list-style-type: none"> <li>➔ There is not a written catalogue of UPM's infrastructures.</li> <li>➔ Specific cases of obsolescence or inconvenient adaptation of some research infrastructures have been recorded.</li> <li>➔ Lack of knowledge about the protocols of medical assistance in international mobility actions.</li> </ul>	<ul style="list-style-type: none"> <li>➔ UPM's health and security committee monitors and guides issues related to workplace health: <a href="http://www.upm.es/Personal/PrevencionRiesgosLaborales/OrganizacionPreventivaUPM/CSS">http://www.upm.es/Personal/PrevencionRiesgosLaborales/OrganizacionPreventivaUPM/CSS</a>; UPM has a risk prevention policy: <a href="http://www.upm.es/Personal/PrevencionRiesgosLaborales/PoliticaPrevisionRiesgosLaborales">http://www.upm.es/Personal/PrevencionRiesgosLaborales/PoliticaPrevisionRiesgosLaborales</a>; and a flyer summarising basic norms of workplace security: <a href="http://www.upm.es/sfs/Rectorado/Gerencia/Prevencion%20de%20Riesgos%20Laborales/Informacion%20sobre%20Prevencion%20de%20Riesgos%20Laborales/Tripticos/TRIPTICO%20UPM.pdf">http://www.upm.es/sfs/Rectorado/Gerencia/Prevencion%20de%20Riesgos%20Laborales/Informacion%20sobre%20Prevencion%20de%20Riesgos%20Laborales/Tripticos/TRIPTICO%20UPM.pdf</a>.</li> <li>➔ UPM's researchers participated in numerous national or international research networks.</li> <li>➔ Although this principle is fully implemented, the Working Group considers it convenient to explain this topic in the "Code of Good Research Practices" and condense this information into the Welcome Manual for researchers.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Collect information and set up a comprehensive catalogue of UPM's infrastructures.</li> <li>➔ Incorporate information and links about risk prevention associated with international mobility activities in the Welcome Manual for researchers.</li> <li>➔ Write a Code of Good Research Practices.</li> </ul>
<p><b>24. Working conditions</b></p> <p>Fully implemented</p>	<ul style="list-style-type: none"> <li>➔ No Gap</li> </ul>	<ul style="list-style-type: none"> <li>➔ Work-life balance agreements: <a href="http://www.upm.es/Personal/Acuordos">http://www.upm.es/Personal/Acuordos</a></li> <li>➔ Sabbatical calls: <a href="http://www.upm.es/Personal/PDI/Concursos/ModelosInstancias/PeriodosSabbaticos">http://www.upm.es/Personal/PDI/Concursos/ModelosInstancias/PeriodosSabbaticos</a>.</li> <li>➔ Although this principle is fully implemented, the Working Group considers it convenient to condense this information into the Welcome Manual for researchers.</li> </ul>	<ul style="list-style-type: none"> <li>➔ No specific action needed.</li> <li>➔ Incorporate information and links about work-life balance in the Welcome Manual for researchers.</li> </ul>
<p><b>25. Stability and permanence of employment</b></p> <p>Insufficiently implemented</p>	<ul style="list-style-type: none"> <li>➔ Present economic conditions are not favourable to consolidate R2 researchers into stable research positions.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Recruitment of R3 and R4 researchers is dependent on the public employee's positions, admitted by the Ministry of Education, and is governed by the corresponding legislation.</li> <li>➔ Recruitment of R1 and R2 researchers in competitive calls is governed by the funding organisms.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Design a call in UPM's self-funded program for the incorporation and talent retention.</li> </ul>



		<ul style="list-style-type: none"> <li>➔ The norms for the recruitment of R2 researchers as Teaching Assistant, Assistant Professor and Lecturer follow the merit scales defined by UPM. <a href="https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf">https://www.aero.upm.es/etsia/normativa/Reglamento_contratacion_personal_docente.pdf</a></li> <li>➔ National competitive calls to incentivise the stability of the employment of R2 (IED). <a href="http://www.idi.mineco.gob.es/portal/site/MICINN/menuitem.dbc68b34d11c cbd5d52ffeb801432ea0/?vgnnextoid=0680fff41394e410VgnVCM1000001d04140aRCRD">http://www.idi.mineco.gob.es/portal/site/MICINN/menuitem.dbc68b34d11c cbd5d52ffeb801432ea0/?vgnnextoid=0680fff41394e410VgnVCM1000001d04140aRCRD</a></li> <li>➔ A First Talent Retention Call has been launched in 2018 <a href="http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Investigacion/Servicio%20de%20Investigacion/Ayudas_y_Convocatorias/Programa_Ramon_y_Cajal/ActuacionesRyCyJC2017_en.pdf">http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Investigacion/Servicio%20de%20Investigacion/Ayudas_y_Convocatorias/Programa_Ramon_y_Cajal/ActuacionesRyCyJC2017_en.pdf</a></li> </ul>	
<p><b>26. Funding and salaries</b></p> <p>Insufficiently implemented</p>	<ul style="list-style-type: none"> <li>➔ Present economic conditions are not favourable for raising salaries of public employees.</li> </ul>	<ul style="list-style-type: none"> <li>➔ The salaries of public employees were assigned following unified salary scales established by the regional governments.</li> <li>➔ The salaries of the R1 and R2 researchers contracted within research projects were established by the “Norm for the staff hired within research projects” that is managed by the OTT, according to a salary range that includes the different training levels. This regulation envisages the rising of the salary due to the increase of consumer price index (IPC).</li> <li>➔ UPM’s self-funding research program includes calls for the incorporation and retention of talent. <a href="http://www.upm.es/Investigacion/Programa_Propio_UPM/Convocatorias2017?id=0677f86294a7c510VgnVCM10000009c7648a&amp;fmt=detail">http://www.upm.es/Investigacion/Programa_Propio_UPM/Convocatorias2017?id=0677f86294a7c510VgnVCM10000009c7648a&amp;fmt=detail</a></li> <li>➔ Article 83 of the Organic Law of Universities 6/2001, December 29. R1, R2, R3 and R4 Researchers could receive a salary supplement from the funds aimed to that concept in the competitive calls.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Design a call in UPM’s self-funded program for the consolidation of R2 researchers hired by competitive official calls.</li> <li>➔ Design a call in UPM’s self-funded program for providing a salary supplement to R2 researchers recruited by the Ramón y Cajal Call.</li> </ul>
<p><b>27. Gender balance</b></p> <p>Fully implemented</p>	<ul style="list-style-type: none"> <li>➔ No Gap</li> </ul>	<ul style="list-style-type: none"> <li>➔ There is gender balance in the number of researchers contracted as Associate Professors.</li> <li>➔ UPM has a gender equality unit <a href="http://www.upm.es/UPM/PoliticasiGualdad">http://www.upm.es/UPM/PoliticasiGualdad</a> that is responsible for writing gender equality policies, and wrote the gender equality plan that was approved in the Governing Board of July 20, 2017, whose first objective is to enhance female representation in executive</li> </ul>	<ul style="list-style-type: none"> <li>➔ No specific action needed.</li> <li>➔ Incorporate information and links about UPM’s gender equality policies in the Welcome Manual for researchers.</li> </ul>

		<p>positions to reach an equalitarian presence in decision-making bodies.  <a href="http://www.upm.es/UPM/Politicasligualdad/Plan">http://www.upm.es/UPM/Politicasligualdad/Plan</a></p> <ul style="list-style-type: none"> <li>➔ UPM has a non-sexist language manual.  <a href="http://www.upm.es/UPM/Politicasligualdad/LenguajeNoSexista">http://www.upm.es/UPM/Politicasligualdad/LenguajeNoSexista</a> and offers online training courses in gender equality.  <a href="http://www.upm.es/UPM/Politicasligualdad/Formacion">http://www.upm.es/UPM/Politicasligualdad/Formacion</a></li> <li>➔ UPM participates in events to foster scientific vocations for women: INSPIRING GIRLS.  <a href="https://www.flickr.com/photos/universidadpolitecnica/albums/72157690648270962">https://www.flickr.com/photos/universidadpolitecnica/albums/72157690648270962</a></li> <li>➔ UPM possesses an association of woman studies.  <a href="http://www.upm.es/Personal/PDI/Asociaciones/AsociacionEstudiosMujer">http://www.upm.es/Personal/PDI/Asociaciones/AsociacionEstudiosMujer</a></li> <li>➔ Although this principle is implemented at UPM, the Working Group considers it convenient to include information about this principle in the Welcome Manual for researchers.</li> <li>➔ UPM's self-funded program finances actions to enhance scientific vocations among women.  <a href="http://www.upm.es/Investigacion/Programa_Propio_UPM/2018">http://www.upm.es/Investigacion/Programa_Propio_UPM/2018</a></li> </ul>	
<p><b>28. Career development</b>  Insufficiently implemented</p>	<ul style="list-style-type: none"> <li>➔ There is not a professional development strategy for researchers at UPM.</li> <li>➔ At UPM, mentorship is informally provided by the supervisor. No Mentorship attribution is addressed to other researchers.</li> <li>➔ UPM does not have procedures to help researchers set up a professional development plan.</li> </ul>	<ul style="list-style-type: none"> <li>➔ UPM has a centre for information and career services, dependent on the Students Vice Rectorate. <a href="http://www.upm.es/Estudiantes/EmpleoPracticas">http://www.upm.es/Estudiantes/EmpleoPracticas</a> It centralises career services, job searches and entrepreneurship initiatives.</li> <li>➔ UPM rewards research careers:  <a href="http://www.upm.es/internacional/Researchers/UPM%20Excellence%20Awards">http://www.upm.es/internacional/Researchers/UPM%20Excellence%20Awards</a></li> <li>➔ UPM self-funded research program includes a call for enforcing the autonomy and scientific leadership of young doctors with outstanding scientific careers that perform their research in cutting-edge science.  <a href="http://www.upm.es/Investigacion/Programa_Propio_UPM/2018">http://www.upm.es/Investigacion/Programa_Propio_UPM/2018</a></li> </ul>	<ul style="list-style-type: none"> <li>➔ Design a conceptual map of the researcher's professional career.</li> <li>➔ Set up a piloting programme of mentors.</li> <li>➔ Set training activities related to professional career in the doctorate programs in third and fourth year.</li> <li>➔ Incorporate information and links about professional careers at UPM in the Welcome Manual for researchers.</li> </ul>
<p><b>29. Value of mobility</b></p>	<ul style="list-style-type: none"> <li>➔ No Gap</li> </ul>	<ul style="list-style-type: none"> <li>➔ UPM provides different programs for funding mobility.</li> </ul>	<ul style="list-style-type: none"> <li>➔ No specific action needed.</li> </ul>

Fully implemented		<p><a href="http://www.upm.es/Personal/PDI/Movilidad">http://www.upm.es/Personal/PDI/Movilidad</a> y <a href="http://www.upm.es/FuturosEstudiantes/Movilidad/ProgramasInternacionales">http://www.upm.es/FuturosEstudiantes/Movilidad/ProgramasInternacionales</a></p> <p>Additionally, UPM's self-funded research program includes two international mobility calls fostering physical and virtual mobility. <a href="http://www.upm.es/Investigacion/Programa Propio UPM/2018/movilidad">http://www.upm.es/Investigacion/Programa Propio UPM/2018/movilidad</a></p> <p><a href="http://www.upm.es/Investigacion/Programa Propio UPM/2018">http://www.upm.es/Investigacion/Programa Propio UPM/2018</a></p> <ul style="list-style-type: none"> <li>➔ UPM provides numerous supporting tools for international mobility of students and researchers. <a href="http://www.upm.es/Estudiantes/Movilidad">http://www.upm.es/Estudiantes/Movilidad</a></li> <li>➔ UPM provides a program for health insurance during international mobility. <a href="http://www.upm.es/Personal/PDI/Movilidad">http://www.upm.es/Personal/PDI/Movilidad</a></li> <li>➔ Sabbaticals calls. <a href="http://www.upm.es/Personal/PDI/Concursos/ModelosInstancias/PeriodosSabbaticos">http://www.upm.es/Personal/PDI/Concursos/ModelosInstancias/PeriodosSabbaticos</a></li> <li>➔ UPM has an Industrial doctorate program. <a href="http://www.upm.es/Estudiantes/Estudios_Titulaciones/Estudios_Doctorado/Tesis/doctoradoIndustrial">http://www.upm.es/Estudiantes/Estudios_Titulaciones/Estudios_Doctorado/Tesis/doctoradoIndustrial</a></li> <li>➔ UPM has an international web portal. <a href="http://www.upm.es/internacional">http://www.upm.es/internacional</a></li> <li>➔ UPM has an ambitious international mobility program with physical headquarters in China, Brazil, India and the United States.</li> <li>➔ UPM has 3 international directors:            Director North America: JULIO LUMBRERAS MARTIN            Director Asia and Africa: ANTONIO FEIJOO GONZALEZ, CLAUDIO            Director Latin America and development cooperation: MANUEL SIERRA CASTAÑER,  <a href="http://www.upm.es/contacto/directorio?centro=90&amp;organo=7000">http://www.upm.es/contacto/directorio?centro=90&amp;organo=7000</a></li> <li>➔ Although this principle is implemented at UPM, the Working Group considers it convenient to include information about this principle in the Welcome Manual for researchers.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Incorporate information and links about mobility at UPM in the Welcome Manual for researchers.</li> </ul>
30. Access to career advice	<ul style="list-style-type: none"> <li>➔ There is not a career advice strategy for researchers at UPM.</li> </ul>	<ul style="list-style-type: none"> <li>➔ UPM has a centre for information and career services, dependent on the Student Vice Rectorate. <a href="http://www.upm.es/Estudiantes/EmpleoPracticas">http://www.upm.es/Estudiantes/EmpleoPracticas</a> It centralises career services, job searches and entrepreneurship initiatives.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Design a conceptual map of the researcher's professional careers</li> </ul>

Partially implemented		<ul style="list-style-type: none"> <li>➔ UPM's Education Sciences Institute organised transversal skill courses. <a href="http://www.ice.upm.es/v2007/actividades/?c=FC">http://www.ice.upm.es/v2007/actividades/?c=FC</a></li> </ul>	<ul style="list-style-type: none"> <li>➔ Set up a piloting mentorship plan.</li> <li>➔ Strengthen/communicate/coordinate the training activities related to professional career in the third and Fourth year of the Doctorate program.</li> </ul>
<b>31. Intellectual Property Rights</b>  Fully implemented	<ul style="list-style-type: none"> <li>➔ No Gap</li> </ul>	<ul style="list-style-type: none"> <li>➔ The Department of Science Communication and Outreach of UPM aims to provide society with the scientific and technological knowledge generated in the university. <a href="http://www.upm.es/internacional/Researchers/SupportRDIPProjects/ResearchResultsTransfer/ScienceSociety">http://www.upm.es/internacional/Researchers/SupportRDIPProjects/ResearchResultsTransfer/ScienceSociety</a></li> <li>➔ Existence of IP and patent courses provided by OTRI. <a href="https://eventos.upm.es/16403/detail/patentes-y-derechos-de-autor -todo-lo-que-un-investigador-deberia-saber.html">https://eventos.upm.es/16403/detail/patentes-y-derechos-de-autor -todo-lo-que-un-investigador-deberia-saber.html</a> <a href="https://eventos.upm.es/7831/detail/patentes-y-derechos-de-autor -lo-que-todo-investigador-debe-saber.html">https://eventos.upm.es/7831/detail/patentes-y-derechos-de-autor -lo-que-todo-investigador-debe-saber.html</a></li> <li>➔ IP and Patent topics were included at the transversal skills training and teaching collaborations for Ph.D students. <a href="http://www.upm.es/Estudiantes/Estudios Titulaciones/Estudios Doctorado/Actividades formativas Doctorado">http://www.upm.es/Estudiantes/Estudios Titulaciones/Estudios Doctorado/Actividades formativas Doctorado</a></li> <li>➔ UPM's OTRI advises researchers about intellectual and industrial property norms and technology transfer. <a href="http://www.upm.es/Investigacion/innovacion/OTRI">http://www.upm.es/Investigacion/innovacion/OTRI</a></li> <li>➔ UPM owns an intellectual property regulation. <a href="http://www.upm.es/Personal?id=916f0c286b4b8510VgnVCM10000009c7648a &amp;prefmt=articulo&amp;fmt=detail">http://www.upm.es/Personal?id=916f0c286b4b8510VgnVCM10000009c7648a &amp;prefmt=articulo&amp;fmt=detail</a>,</li> <li>➔ UPM's Centre for Support for Technological Innovation (CAIT) fosters the exploitation of R&amp;D results gathered at the University, <a href="http://www.upm.es/Montegancedo/Transferencia/CAIT">http://www.upm.es/Montegancedo/Transferencia/CAIT</a> by the elaboration of innovation and technology commercialisation initiatives, <a href="http://www.upm.es/Investigacion/innovacion/InnovacionComercializacionTecnologias">http://www.upm.es/Investigacion/innovacion/InnovacionComercializacionTecnologias</a> or business creation. <a href="http://www.upm.es/Investigacion/innovacion/CreacionEmpresas">http://www.upm.es/Investigacion/innovacion/CreacionEmpresas</a></li> <li>➔ Although this principle is fully implemented, the Working Group considers it convenient to explain this topic in the "Code of Good Research Practices" and</li> </ul>	<ul style="list-style-type: none"> <li>➔ No specific action needed.</li> <li>➔ Incorporate information and links about UPM's IP norms and rights and OTRI in the Welcome Manual for researchers.</li> <li>➔ Improve the publicity of the internal courses provided by ICE, OTRI/OPE/ Scientific Culture Unit of the Vice Chairman of Research, Innovation and Doctorate, increasing the diffusion of the events enrolment websites.</li> <li>➔ Write a Code of Good Research Practices.</li> </ul>

		condense this information into the Welcome Manual. In addition, the performance of IP courses should improve its dissemination across UPM's researchers.	
<b>32. Co-authorship</b> Almost but not fully implemented	<ul style="list-style-type: none"> <li>UPM does not incorporate recommendations about Co-authorship.</li> </ul>	<ul style="list-style-type: none"> <li>Norms of joint supervision of Doctoral thesis. <a href="http://www.upm.es/Estudiantes/Estudios_Titulaciones/Estudios_Doctorado/Tesis/cotutelaInternacional">http://www.upm.es/Estudiantes/Estudios_Titulaciones/Estudios_Doctorado/Tesis/cotutelaInternacional</a></li> <li>Letter of commitment of training and supervision of doctorate students. <a href="http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Doctorado%20y%20Postgrado/Negociados%20de%20Doctorado%20y%20Postgrado/Impresos/espanol.pdf">http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Doctorado%20y%20Postgrado/Negociados%20de%20Doctorado%20y%20Postgrado/Impresos/espanol.pdf</a></li> </ul>	<ul style="list-style-type: none"> <li>Write recommendations about co-authorship/joint supervision, including recommendations for the performance of the Ph.D thesis for researchers recruited within research projects.</li> <li>Include information about co-authorship/joint supervision in the Welcome Manual for researchers.</li> <li>Include co-authorship/joint supervision topics in the Manual for Good Research Practices.</li> </ul>
<b>33. Teaching</b> Partially implemented	<ul style="list-style-type: none"> <li>The control of the teaching workload is not fully reliable.</li> </ul>	<ul style="list-style-type: none"> <li>Teaching by R3 and R4 researchers is evaluated by DOCENTIA programme. Norms describing the evaluation procedure for the evaluation of teaching for UPM's teaching staff is linked below. <a href="http://www.upm.es/sfs/Rectorado/Legislacion%20y%20Normativa/Normativa/Normativa%20del%20Personal%20Docente%20e%20Investigador/DOCENTIA%20UPM%20-%20Normativa%20del%20proc.%20de%20evaluacion%20-%20C.%20Gov.%204%20y%2025-02-2010.pdf">http://www.upm.es/sfs/Rectorado/Legislacion%20y%20Normativa/Normativa/Normativa%20del%20Personal%20Docente%20e%20Investigador/DOCENTIA%20UPM%20-%20Normativa%20del%20proc.%20de%20evaluacion%20-%20C.%20Gov.%204%20y%2025-02-2010.pdf</a></li> <li>UPM has an educational innovation web portal. <a href="https://innovacioneducativa.upm.es/index.php">https://innovacioneducativa.upm.es/index.php</a></li> <li>ICE provides courses about teaching and educational innovation. <a href="http://www.ice.upm.es/v2007/actividades/Inicio.asp?c=FI">http://www.ice.upm.es/v2007/actividades/Inicio.asp?c=FI</a></li> <li>A Commission is developing a new Model for controlling and measuring the teaching, managing and research workload of all teaching staff (all levels and categories)</li> </ul>	<ul style="list-style-type: none"> <li>Incorporate information and links about ICE and the educational innovation activities provided by UPM in the Welcome Manual for researchers.</li> <li>Set up an evaluation model for teaching workload that could show, with transparency, the traceability and real teaching activity of researchers, including the teaching activities specified in their contract.</li> <li>Improve the publicity of the internal courses provided by ICE, OTRI/OPE/ Scientific Culture Unit of the Vice Rectorate of Research, Innovation and Doctorate and increase the diffusion of the event enrolment websites.</li> </ul>
<b>34. Complaints/appeals</b>	<ul style="list-style-type: none"> <li>The survey showed that there is a general unawareness about the complaints mechanisms.</li> </ul>	<ul style="list-style-type: none"> <li>UPM has the position of University Ombudsman. <a href="http://www.upm.es/UPM/DefensorUniversitario">http://www.upm.es/UPM/DefensorUniversitario</a>, and the office of University Ombudsmen, <a href="http://www.upm.es/UPM/DefensorUniversitario/Oficina">http://www.upm.es/UPM/DefensorUniversitario/Oficina</a>.</li> </ul>	<ul style="list-style-type: none"> <li>No specific action needed.</li> <li>Incorporate information and links about complaint mechanisms and university</li> </ul>

Fully implemented	<ul style="list-style-type: none"> <li>➔ The University Ombudsman position has not been covered for long.</li> </ul>	<ul style="list-style-type: none"> <li>➔ In December 2017, the University staff approved the proposal of modification of UPM's statutes in the articles concerning the University Ombudsmen. <a href="http://www.upm.es/sfs/Rectorado/Secretaria%20General/BOUPM/2018/01/I.B.b-%20Acuerdos%20y%20Resoluciones.%20Claustro%20Universitario.pdf">http://www.upm.es/sfs/Rectorado/Secretaria%20General/BOUPM/2018/01/I.B.b-%20Acuerdos%20y%20Resoluciones.%20Claustro%20Universitario.pdf</a>, This modification is in the process of being approved by the Community of Madrid and UPM is covering the position of the University Ombudsmen.</li> <li>➔ UPM has created the Institutional Intelligence Project that consists of providing a platform for designing, implementing and providing a set of consultations and control panels to the University community, for basing an integrated decision support for assessing the Governing Board of University. <a href="http://www.upm.es/UPM/Inteligencia/QueEsInteligenciaInstitucional">http://www.upm.es/UPM/Inteligencia/QueEsInteligenciaInstitucional</a></li> </ul>	ombudsman provided by UPM in the Welcome Manual for researchers.
<b>35. Participation in decision-making bodies</b>  Fully implemented	<ul style="list-style-type: none"> <li>➔ No Gap</li> </ul>	<ul style="list-style-type: none"> <li>➔ The statutes of UPM confer representation to the different professional profiles in the boards of University representation: Commission Formation, University Senate, University School Board, Department Council, and Council of the University Institute. <a href="http://www.upm.es/sfs/SedeUPM/Normativa%20UPM/Estatutos%2020101115%20BOCAM.pdf">http://www.upm.es/sfs/SedeUPM/Normativa%20UPM/Estatutos%2020101115%20BOCAM.pdf</a>.</li> <li>➔ Although this principle is implemented at UPM, the Working Group considers it convenient to include information about this principle in the Welcome Manual for researchers.</li> </ul>	<ul style="list-style-type: none"> <li>➔ No specific action needed.</li> <li>➔ Incorporate information and links about the participation of the different professional profiles in the decision-making bodies of UPM in the Welcome Manual for researchers.</li> </ul>
<b>36. Relation with supervisors</b>  Fully implemented	<ul style="list-style-type: none"> <li>➔ No Gap.</li> </ul>	<ul style="list-style-type: none"> <li>➔ Letter of commitment of training and supervision of doctorate students. <a href="http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Doctorado%20y%20Postgrado/Negociados%20de%20Doctorado%20y%20Postgrado/Impresos/espanol.pdf">http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Doctorado%20y%20Postgrado/Negociados%20de%20Doctorado%20y%20Postgrado/Impresos/espanol.pdf</a></li> <li>➔ For R1 researchers, the organisation, procedures and supervision of the Ph.D. studies is clearly established. <a href="http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Doctorado%20y%20Postgrado/Negociados%20de%20Doctorado%20y%20Postgrado/Normativas/Reglamento%20de%20Elaboraci%C3%B3n%20y%20Evaluacion%20de%20Tesis.pdf">http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Doctorado%20y%20Postgrado/Negociados%20de%20Doctorado%20y%20Postgrado/Normativas/Reglamento%20de%20Elaboraci%C3%B3n%20y%20Evaluacion%20de%20Tesis.pdf</a></li> <li>➔ In June 2017, a Code of Good Practices for UPM doctorate was approved. <a href="http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Doctorado%20y%20Postgrado/Negociados%20de%20Doctorado%20y%20Postgrado/Normativas/Guia%20de%20buenas%20practicas%20junio%202017.pdf">http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Doctorado%20y%20Postgrado/Negociados%20de%20Doctorado%20y%20Postgrado/Normativas/Guia%20de%20buenas%20practicas%20junio%202017.pdf</a></li> </ul>	<ul style="list-style-type: none"> <li>➔ No specific action needed.</li> <li>➔ Incorporate information and links about good supervision practices at UPM in the Welcome Manual for researchers.</li> <li>➔ Improve the publicity of the internal courses provided by ICE.</li> </ul>

		<ul style="list-style-type: none"> <li>➡ ICE provides training courses about tutorial action at the University. <a href="http://www.ice.upm.es/v2007/actividades/Inicio.asp?c=FI">http://www.ice.upm.es/v2007/actividades/Inicio.asp?c=FI</a></li> <li>➡ Although this principle is implemented at UPM, the Working Group considers it convenient to include information about this principle in the Welcome Manual for researchers.</li> </ul>	
<b>37. Supervision and managerial duties</b>  Fully implemented	➡ No Gap	<ul style="list-style-type: none"> <li>➡ National regulation establishes the different functions of the university staff, in addition to their obligations as tutors of thesis directors.</li> <li>➡ The funding organisms define the obligations of researchers as project leaders.</li> <li>➡ Internal regulations of UPM concerning the teaching and research staff, sets teaching, researching and administration as their duties.</li> <li>➡ The norms for the recruitment of post-doctoral staff require that a mentor or tutor be provided for the post-doctoral researchers recruited.</li> <li>➡ The obligations and rights of the researchers, regarding their role as leaders and managers of projects, are defined and provided by the Vice-Rector for Research.</li> <li>➡ ICE provides training in negotiation and leadership <a href="http://www.ice.upm.es/v2007/actividades/Inicio.asp?c=FI">http://www.ice.upm.es/v2007/actividades/Inicio.asp?c=FI</a></li> <li>➡ Although implemented at UPM, the Working Group considers it convenient to include information about this principle in the Welcome Manual for researchers.</li> </ul>	<ul style="list-style-type: none"> <li>➡ No specific action needed.</li> <li>➡ Incorporate information and links about good supervision practices at UPM in the Welcome Manual for researchers.</li> <li>➡ Improve the publicity of the internal courses provided by ICE.</li> </ul>
<b>38. Continuing Professional Development</b>  Fully implemented	➡ No Gap	<ul style="list-style-type: none"> <li>➡ ICE provides courses for continuous education with a wide range of courses, seminars, workshops, conferences, etc. It provides Methodological Strategies, Basic Training for Research, Training for Personal Development, English Applied to Teaching and Research, Technologies Applied to University Teaching, etc. <a href="http://www.ice.upm.es/v2007/actividades/Inicio.asp?c=FC">http://www.ice.upm.es/v2007/actividades/Inicio.asp?c=FC</a></li> <li>➡ The access to continuous development and other activities of professional development is granted by norms and promoted by permissions.</li> <li>➡ UPM offers funding (Stays for research staff). <a href="http://www.upm.es/Investigacion/Programa_Propio_UPM/2018">http://www.upm.es/Investigacion/Programa_Propio_UPM/2018</a></li> <li>➡ UPM aids researchers that wish to apply for European competitive calls.</li> </ul>	<ul style="list-style-type: none"> <li>➡ No specific action needed.</li> <li>➡ Incorporate information and links about good supervision practices at UPM in the Welcome Manual for researchers.</li> <li>➡ Improve the publicity of the internal courses provided by ICE, OTRI/OPE/ Scientific Culture Unit of the Vice Chairman of Research, Innovation and Doctorate.</li> </ul>

		<ul style="list-style-type: none"> <li>➔ Although implemented at UPM, the Working Group considers it convenient to include information about this principle in the Welcome Manual for researchers.</li> </ul>	
<b>39. Access to research training and continuous development</b>  Fully implemented	<ul style="list-style-type: none"> <li>➔ No Gap</li> </ul>	<ul style="list-style-type: none"> <li>➔ UPM's Education Sciences Institute organised transversal skills courses. <a href="http://www.ice.upm.es/v2007/actividades/?c=FC">http://www.ice.upm.es/v2007/actividades/?c=FC</a></li> <li>➔ Although implemented at UPM, the Working Group considers it convenient to include information about this principle in the Welcome Manual for researchers.</li> </ul>	<ul style="list-style-type: none"> <li>➔ No specific action needed.</li> <li>➔ Incorporate information and links about good supervision practices at UPM in the Welcome Manual for researchers.</li> <li>➔ Improve the publicity of the internal courses provided by ICE, OTRI/OPE/ Scientific Culture Unit of the Vice Chairman of Research, Innovation and Doctorate.</li> </ul>
<b>40. Supervision</b>  Fully implemented	<ul style="list-style-type: none"> <li>➔ No Gap</li> </ul>	<ul style="list-style-type: none"> <li>➔ The doctorate norms include the procedures and capacitation to perform the tutorship of a doctoral thesis. <a href="http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Doctorado%20y%20Postgrado/Negociados%20de%20Doctorado%20y%20Postgrado/Normativas/Reglamento%20de%20Elaboraci%C3%B3n%20y%20Evaluaci%C3%B3n%20de%20Tesis.pdf">http://www.upm.es/sfs/Rectorado/Vicerrectorado%20de%20Doctorado%20y%20Postgrado/Negociados%20de%20Doctorado%20y%20Postgrado/Normativas/Reglamento%20de%20Elaboraci%C3%B3n%20y%20Evaluaci%C3%B3n%20de%20Tesis.pdf</a></li> <li>➔ ICE provides training about tutorial action at the University. <a href="http://www.ice.upm.es/v2007/actividades/Inicio.asp?c=FI">http://www.ice.upm.es/v2007/actividades/Inicio.asp?c=FI</a></li> <li>➔ Although implemented at UPM, the Working Group considers it convenient to include information about this principle in the Welcome Manual for researchers.</li> </ul>	<ul style="list-style-type: none"> <li>➔ No specific action needed.</li> <li>➔ Incorporate information and links about good supervision practices at UPM in the Welcome Manual for researchers.</li> <li>➔ Improve the publicity of the internal courses provided by ICE, OTRI/OPE/ Scientific Culture Unit of the Vice Chairman of Research, Innovation and Doctorate.</li> </ul>



### 3.2 GAP ANALYSIS: OTM-R

Table 3 shows the Implementation of the OTM-R criteria at the Institution. Three of the criteria were found fully implemented.

TABLE 3 GAP ANALYSIS OF THE OTM-R CHECK LIST

	Open	Trans- parent	Merit- based	Implemen- tation	Suggested indicators (or form of measurement)
OTM-R system					
1. Have we published a version of our OTM-R policy online (in the national language and in English)?				No	No, it should be published on the UPM website.
2. Do we have an internal guide which sets out clear OTM-R procedures and practices for all types of positions?	x	x	X	-/+ partially Yes	Write a guideline and incorporate it on the website. Create a platform for connecting the departments in charge of recruitment, in order to follow each recruitment case.
3. Is everyone involved in the process sufficiently trained in the area of OTM-R?	x	x	x	-/+ partially Yes	Staff with recruitment responsibilities will be trained in OTM-R.
4. Do we make (sufficient) use of e-recruitment tools?	x	x	x	-/+ partially Yes	Design a unique web portal for job offers.
5. Do we have a quality control system for OTM-R in place?				No	Design a digital tool for the follow-up of recruitment process.
6. Does our current OTM-R policy encourage external candidates to apply?	x	x	X	+/-Yes partially	Translate job offers into English and create a unique web portal for the recruitment process.
7. Is our current OTM-R policy in line with policies to attract researchers from abroad?	x	x	x	+/-Yes partially	Enforce the use of EURAXESS for posting UPM job offers.
8. Is our current OTM-R policy in line with policies to attract underrepresented groups?				No	Calculate ratios of underrepresented groups.
9. Is our current OTM-R policy in line with policies to provide attractive working conditions for researchers?	x	x	x	-/+ partially Yes	UPM offers benchmarked salary, flexible working schedules, tele-work option for all employees
10. Do we have the means to monitor whether the most suitable researchers apply?	x	x	x	+/-Yes partially	No, there is no means to monitor and check whether the most suitable OTT (R1 and R2) researchers apply

Advertising and application phase					
11. Do we have clear guidelines or templates (e.g. EURAXESS) for advertising positions?	x	x	X	+/-Yes partially	There are several uncoordinated templates.
12. In the job advertisement do we include references/links to all the elements foreseen in the relevant section of the toolkit? [see Chapter 4.4.1 a) of the OTM-R expert report]	x	x	x	-/+ Yes partially	The job offers are not often digital; create a common digital platform for recruitment to follow each recruitment case.
13. Do we make full use of EURAXESS to ensure our research vacancies reach a wider audience?	x	x	x	-/+ Yes partially	No, only for European projects.
14. Do we make use of other job advertising tools?	x	x	x	+/-Yes partially	Yes, among others <a href="http://www.madrimasd.org/empleo/ofertas-destacadas/">http://www.madrimasd.org/empleo/ofertas-destacadas/</a>
15. Do we keep the administrative burden to a minimum for the candidate?	x	x	x	-/+ Yes partially	Create a common digital platform for recruitment to follow each recruitment case.
Selection and evaluation phase					
16. Do we have clear rules governing the appointment of selection committees? [see Chapter 4.4.2 a) 45]	x	x	x	-/+ Yes partially	Write recruitment guidelines and recommendations.
17. Do we have clear rules concerning the composition of selection committees?	x	x	x	+/-Yes partially	Write recruitment guidelines.
18. Are the committees sufficiently gender-balanced?	x	x	x	-/+ Yes partially	Write recruitment guidelines.
19. Do we have clear guidelines for selection committees, which help to judge 'merit' in a way that leads to the best candidate being selected?	x	x	x	+/-Yes partially	Write recruitment guidelines
Appointment phase					
20. Do we inform all applicants at the end of the selection process?	x	x	x	+/-Yes partially	Create a common digital platform for recruitment to follow each recruitment case.
21. Do we provide adequate feedback to respondents?				-/+ Yes partially	Create a common digital platform for recruitment to follow each recruitment case.
22. Do we have an appropriate complaints mechanism in place?				+/-Yes partially	Create a common digital platform for recruitment to follow each recruitment case.
Overall assessment					
23. Do we have a system in place to assess whether OTM-R delivers on its objectives?				-/+ Yes partially	No, create a common digital platform for recruitment to follow each recruitment case.

## 4. ANNEX

### ANNEX 1: SURVEY AND SAMPLE

Presently 4350 researchers work at the Institution, distributed in five research areas and three Campuses. The survey that evaluates the implementation of the 40 criteria at UPM was sent to all these researchers. From the 4350 researchers, 672 answered the complete survey (15,40 %). This sample is statistically representative of the whole population, its sampling error is **+ 3,48%** for a confidence level of 95% in the worst case of variance ( $p = q$ ). The distribution of the population of the sample universe and the answers received is presented in Table 4.

Table 4. Overall Survey Results

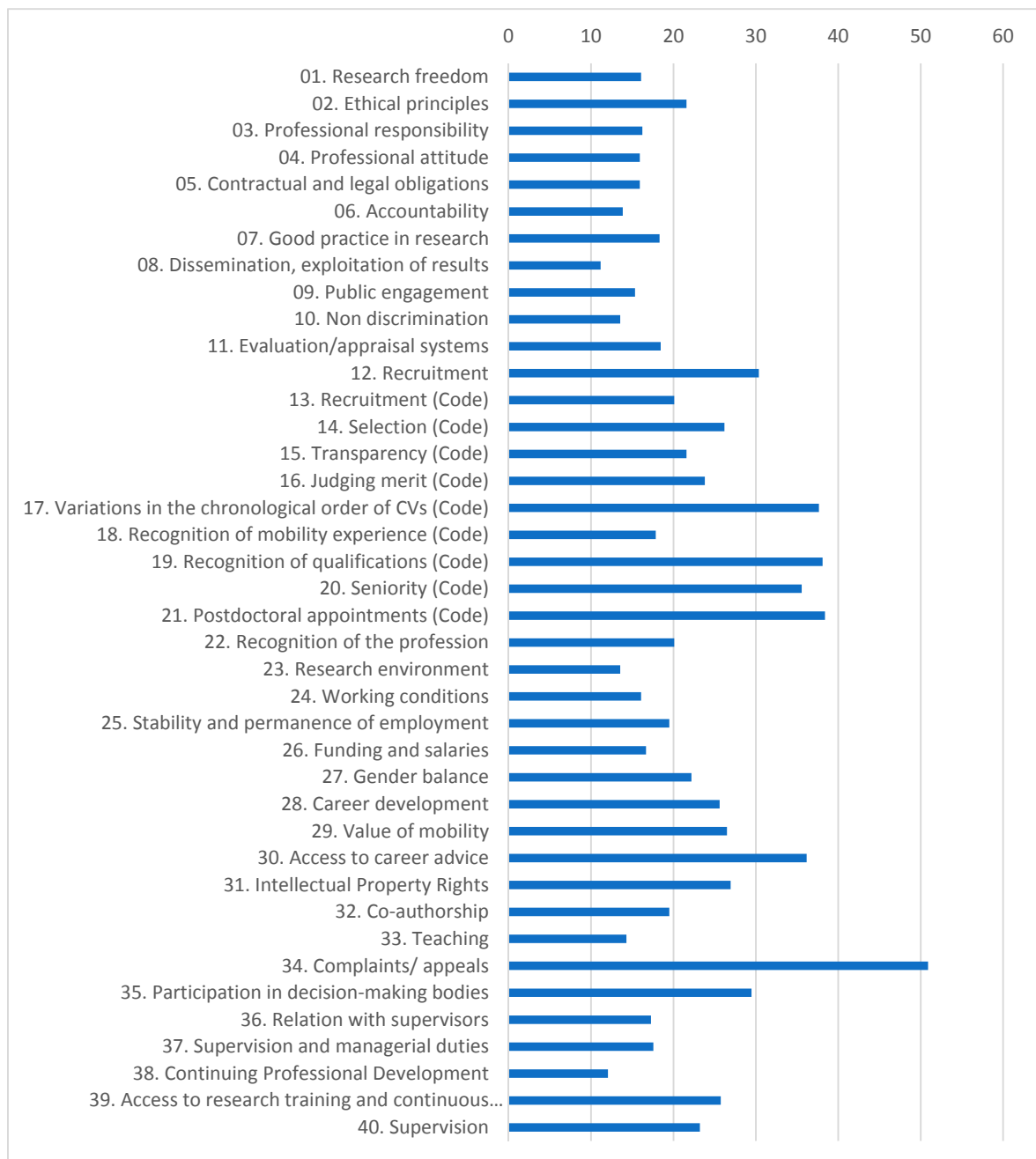
		Sample Universe	Percentage	Answers received	Percentage	% answers in sample universe
Professional Profile	<i>R1</i>	2.366	54,28%	270	40,18%	11,41
	<i>R2</i>	312	7,16%	87	12,95%	27,88
	<i>R3</i>	1.346	30,88%	242	36,01%	17,98
	<i>R4</i>	335	7,69%	73	10,86%	21,79
Gender	<i>Male</i>	3.068	70,40%	454	67,56%	14,80
	<i>Female</i>	1.290	29,60%	218	33,44%	16,90
Research Area	<i>Agro forestal/green</i>	708	16,28%	128	19,05%	18,08
	<i>Construction/Civil</i>	1213	27,89%	123	18,30%	10,14
	<i>Humanities</i>	173	3,98%	18	2,68%	10,40
	<i>Industrial</i>	1152	26,48%	157	23,36%	13,63
	<i>ICT</i>	1104	25,38%	244	36,31%	22,10
	<i>Non-assigned area.</i>			2	0,30%	
	<b>Total</b>	<b>4.350</b>		<b>672</b>		

The percentages of participation in the survey were like those of the sample universe. The views of the different professional profiles, gender, and areas of research were expressed in the survey and considered for the identification of the actual gaps. The participation of males and females were consistent with the total population. The R1 profile did not participate as much as the remaining professional profiles. Finally, the general participation of Agro-forestal and ICT areas was higher than the others.

#### 4.1.1 PERCEPTION OF THE RESULTS OF IMPLEMENTATION OF THE C&C CRITERIA

As it is mentioned in Section 2.3.2, the survey included the possibility for the respondent to answer their awareness of the implementation of the criterion. During the analysis of the survey, it was clear that a significant number of participants were unaware that some of the following criteria were applied at the Institution: 34. Complaints/appeals (50,89%), 21. Postdoctoral appointments (Code) (38,39%), 19. Recognition of qualifications (Code) (38,10%), 17. Variations in the chronological order of CVs (Code)(37,65%), 30. Access to career advice (36,16%), 20. Seniority (Code) (35,57%).

FIGURE 1. NUMBER OF "NOT AWARE OF THE IMPLEMENTATION" ANSWERS BY CRITERION



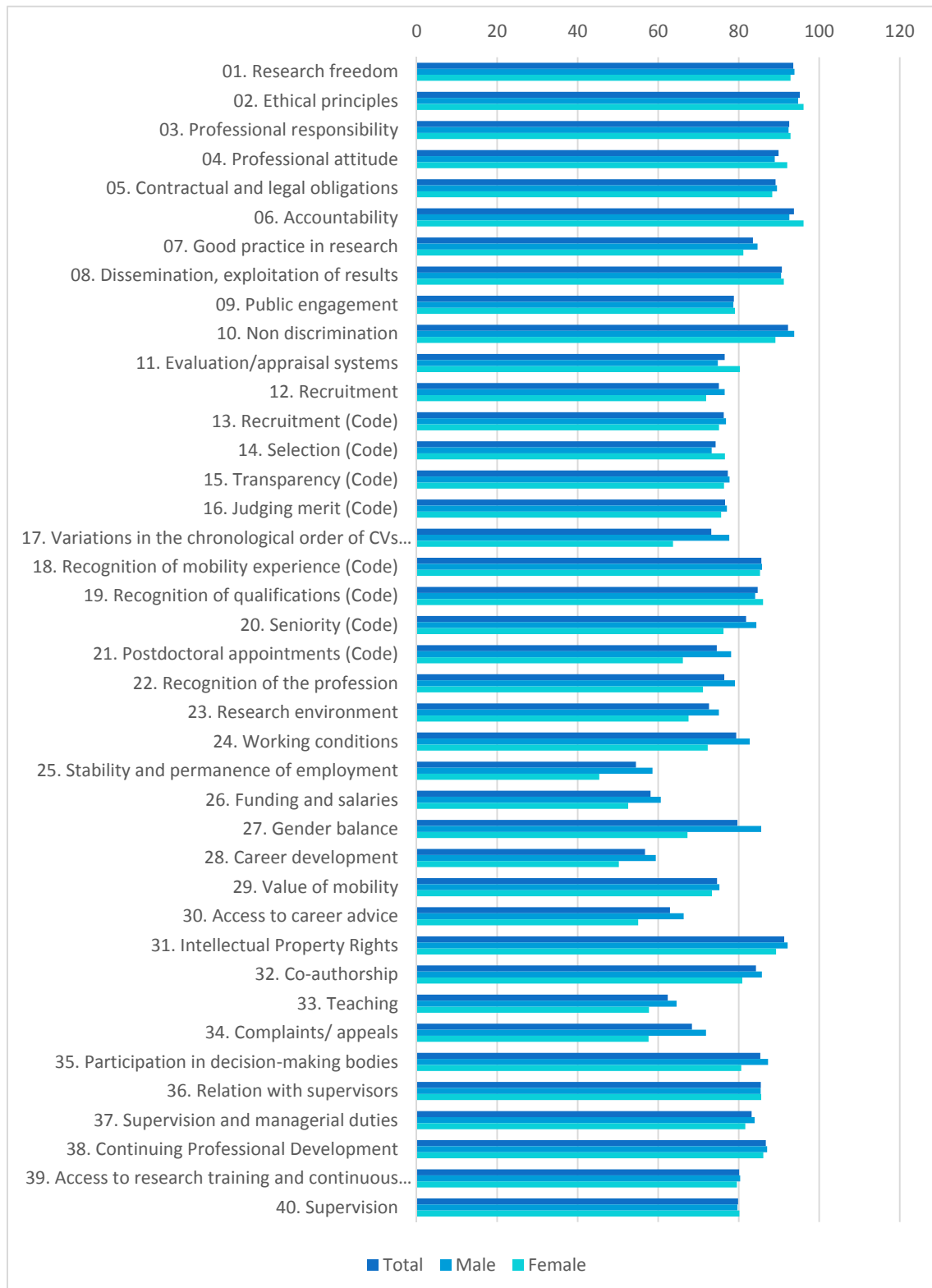
#### 4.1.2 RESULTS OF THE SURVEY

To represent graphically the perception of the relevance and the degree of implementation of the C&C principles obtained in the survey, the qualitative estimations were transformed into quantitative values using the following algorithms:

$$\text{Implementation} = \frac{(\# \text{Fully implemented} \times 3) + (\# \text{almost but not fully implemented} \times 2) + (\# \text{partially implemented})}{\# \text{respondents} \times 3}$$
$$\text{Relevance} = \frac{(\# \text{Very important} \times 3) + (\# \text{Quite important} \times 2) + (\# \text{slightly important})}{\# \text{respondents} \times 3}$$

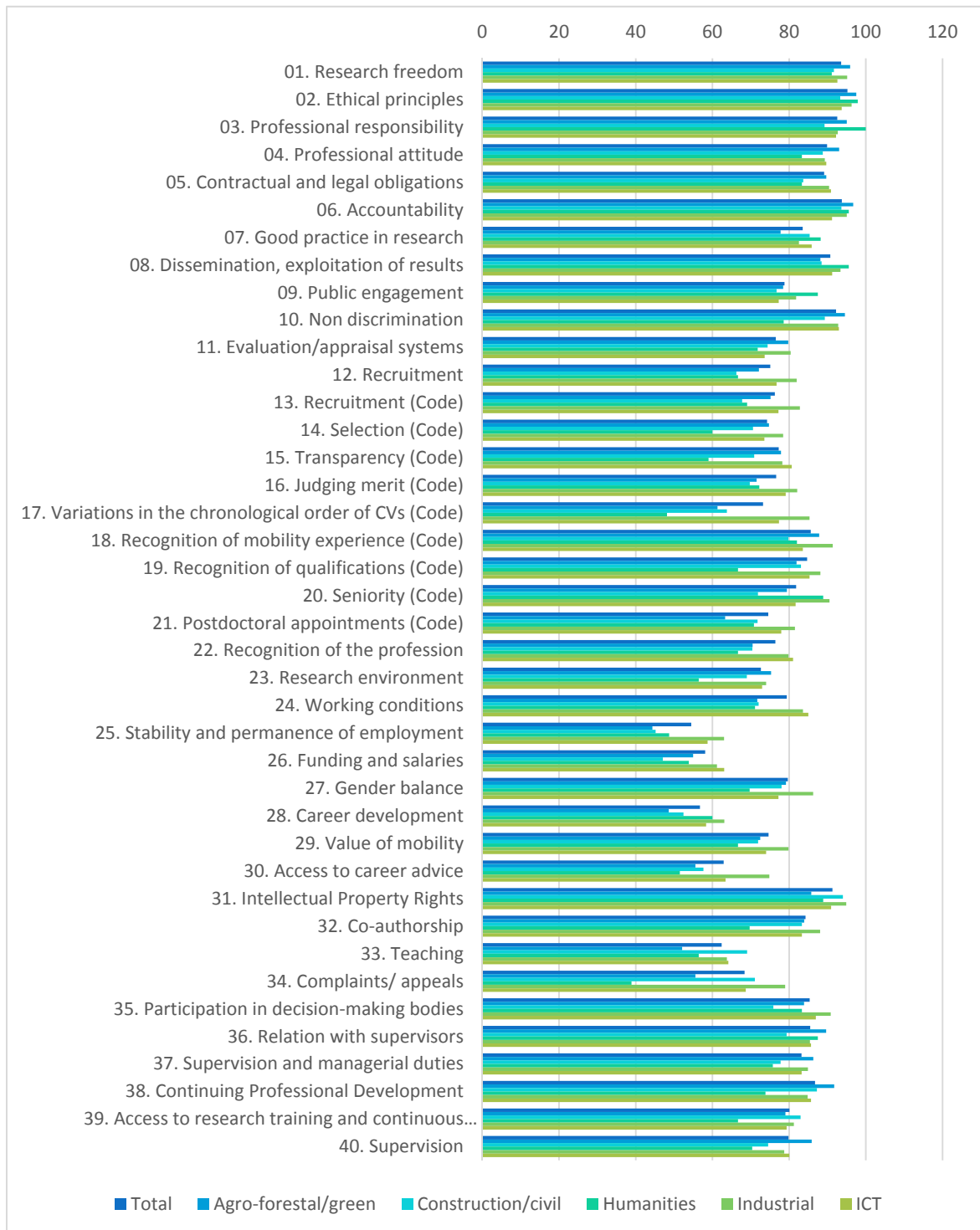
An analysis of the results obtained by applying these algorithms to the different segmentations of the survey sample is presented, in comparison with the consolidated results of all the researchers.

FIGURE 2. PERCEPTION OF THE IMPLEMENTATION OF THE CRITERIA BY GENDER



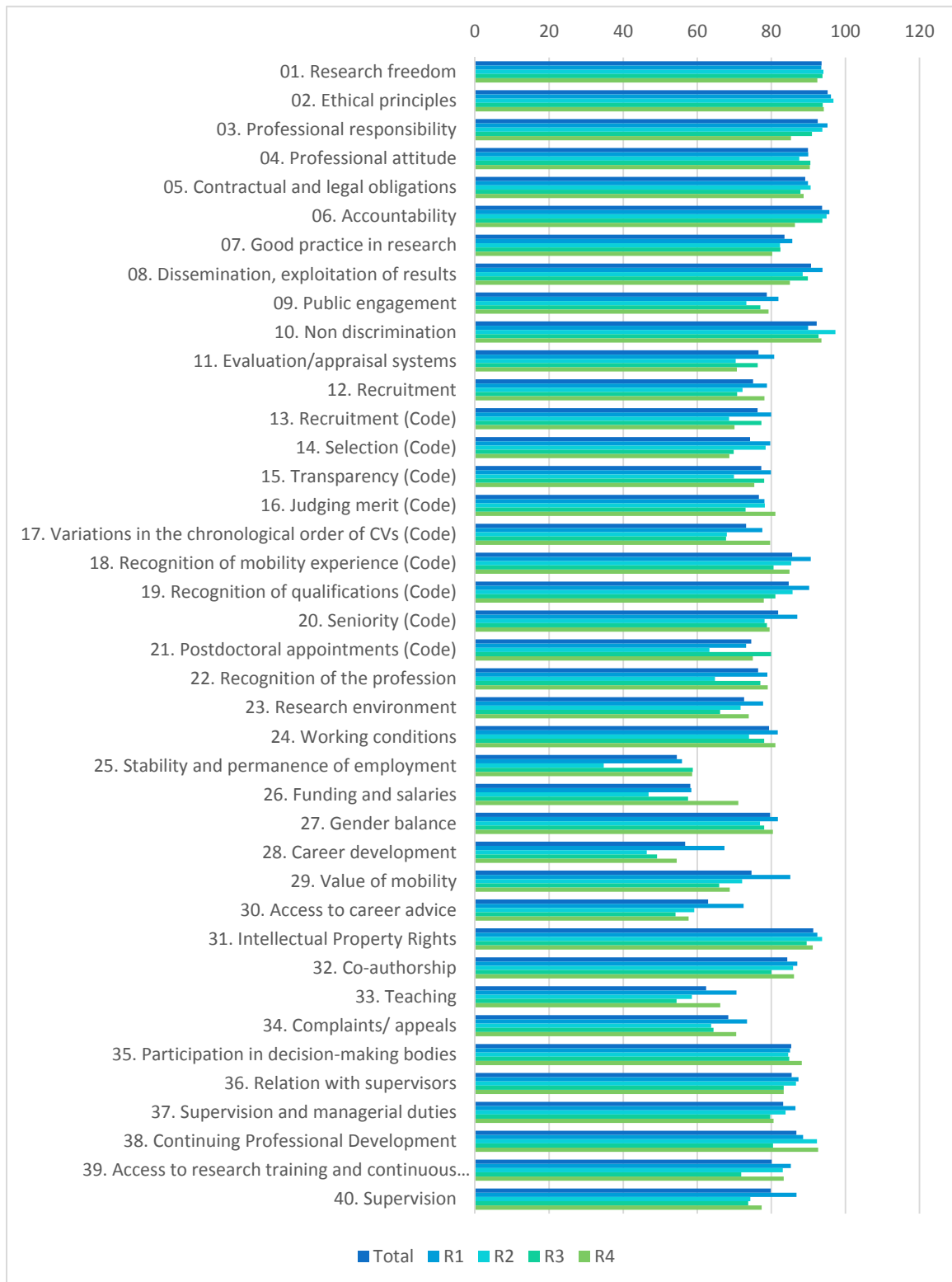
As shown, in general terms, the vision of the male and female researchers is very similar regarding the implementation of the principles. Major differences were found in criteria “17. **Variations in the chronological order of CVs** and principles numbered from 24 to 30, in which females considered the principles less implemented.

FIGURE 3. PERCEPTION OF THE IMPLEMENTATION OF THE CRITERIA BY RESEARCH AREA



In general terms, researchers in Humanities perceived a lower implementation of the principles than those working in other research areas.

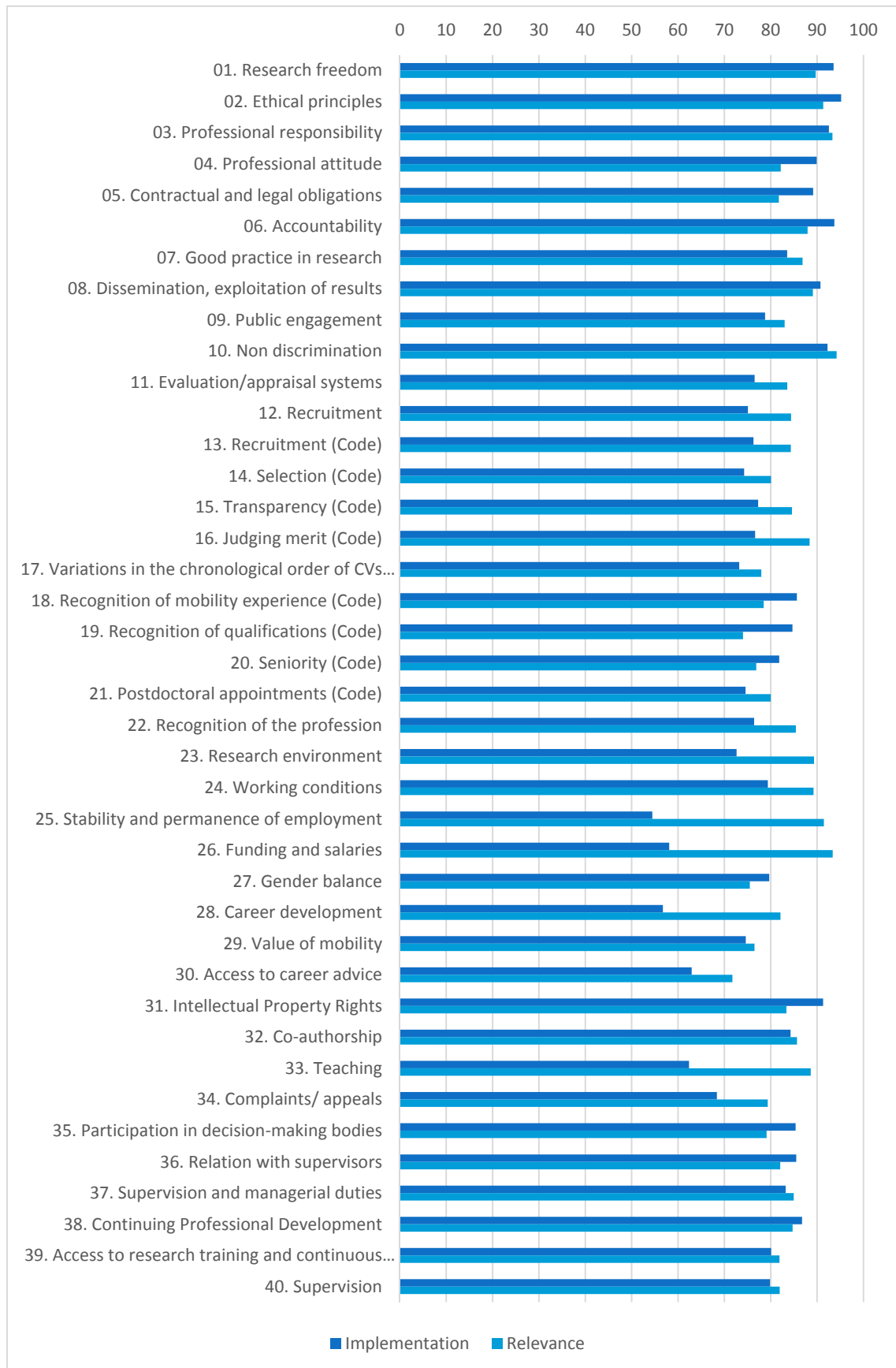
FIGURE 4. PERCEPTION OF THE IMPLEMENTATION OF THE CRITERIA BY PROFESSIONAL PROFILE.



R2 researchers perceive, in general, a lower implementation of the C&C principles than the rest of the researchers.



FIGURE 5. PERCEPTION OF THE IMPLEMENTATION AND RELEVANCE OF THE CRITERIA (CONSOLIDATED SAMPLE).



The difference between the degree of implementation and relevance is higher in the following principles: **16. Judging merits, 24. Working conditions, 25. Stability permanence, 26. Funding, 28. Career development and 33. Teaching**

The aspects in which higher levels of agreement in their lack of implementation were shown below, from lowest to highest:

**TABLE 5 HIGHER LEVELS OF AGREEMENT OF THEIR LACK OF IMPLEMENTATION**

Criteria	Ranking
25. Stability and permanence of employment	37,34
28. Career development	38,80
26. Funding and salaries	43,57
33. Teaching	47,57
30. Access to career advice	47,09
34. Complaints/ appeals	57,27
23. Research environment	54,91
17. Variations in the chronological order of CVs (Code)	58,95
14. Selection (Code)	57,46
21. Postdoctoral appointments (Code)	59,90
29. Value of mobility	60,53

Meanwhile, the perception of the criteria with highest levels of implementation were:

**TABLE 6 HIGHEST LEVEL OF IMPLEMENTATION**

Criteria	Ranking
02. Ethical principles	90,13
10. Non discrimination	88,12
01. Research freedom	87,41
06. Accountability	86,7
03. Professional responsibility	85,26
31. Intellectual Property Rights	82,69
08. Dissemination, exploitation of results	81,57
05. Contractual and legal obligations	79,82
04. Professional attitude	79,82
38. Continuing Professional Development	75,63
36. Relation with supervisors	75,36

The perception of the importance and implementation of each criterion given by the survey was used to assess those aspects that needed to be approached. The chronology of the implementation of the actions derived from these criteria will be independent of these results and will obey the strategy designed by the Steering Committee.

#### 4.1.3 PERCEPTION OF THE DEGREE OF IMPLEMENTATION OF THE CRITERIA AFTER THE PERSONAL INTERVIEWS AND THE WORKING GROUP'S DEBATE.

**TABLE 7: PERCEPTION OF THE IMPLEMENTATION OF THE CRITERIA AFTER THE DEBATE.**

Fully implemented	Almost but not fully implemented
<ul style="list-style-type: none"> <li>1. Research Freedom</li> <li>2. Ethical principles</li> <li>3. Professional responsibility</li> <li>4. Professional attitude</li> <li>5. Contractual and legal obligations</li> <li>6. Accountability</li> <li>7. Good practice in research</li> <li>8. Dissemination, exploitation of results</li> <li>20. Seniority (Code)</li> <li>22. Recognition of the profession</li> <li>24. Working conditions</li> <li>27. Gender balance</li> <li>29. Value of mobility</li> <li>31. Intellectual Property Rights</li> <li>34. Complaints/ appeals</li> <li>35. Participation in decision-making bodies</li> <li>36. Relation with supervisors</li> <li>37. Supervision and managerial duties</li> <li>38. Continuing Professional Development</li> <li>39. Access to research training and continuous development</li> <li>40. Supervision</li> </ul>	<ul style="list-style-type: none"> <li>9. Public Engagement</li> <li>10. Non-discrimination</li> <li>11. Evaluation/ appraisal systems</li> <li>12. Recruitment</li> <li>13. Recruitment (Code)</li> <li>14. Selection (Code)</li> <li>15. Transparency (Code)</li> <li>16. Judging merit (Code)</li> <li>17. Variations in the chronological order of CVs (Code)</li> <li>18. Recognition of mobility experience (Code)</li> <li>19. Recognition of qualifications (Code)</li> <li>21. Postdoctoral appointments (Code)</li> <li>23. Research environment</li> <li>32. Co-authorship</li> </ul>
Partially implemented	Insufficiently implemented
<ul style="list-style-type: none"> <li>30. Access to career advice</li> <li>33. Teaching</li> </ul>	<ul style="list-style-type: none"> <li>25. Stability and permanence of employment</li> <li>26. Funding and salaries</li> <li>28. Career development</li> </ul>

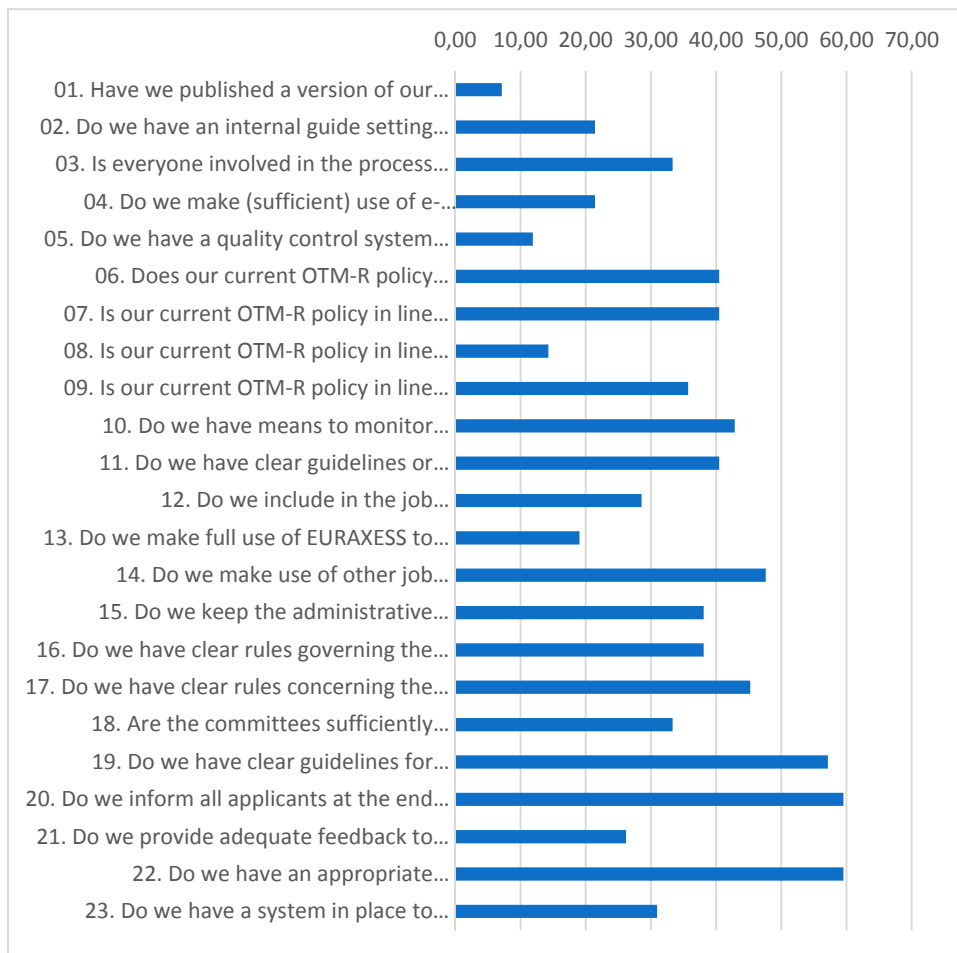
#### 4.1.4 OTMR

The survey was sent to 15 HR technicians involved in the recruitment and selection process; 14 of them answered the whole survey.

To evaluate the answers of the OTM-R survey, an algorithm like the one presented above was defined:

$$\text{Implementation} = \frac{(\# \text{Fully implemented} \times 3) + (\# \text{almost but not fully implemented} \times 2) + (\# \text{partially implemented})}{\# \text{respondents} \times 3}$$

FIGURE 6. IMPLEMENTATION OF OTMR PRINCIPLES (%)



Most of the OTM-R criteria were slightly implemented. The criteria that were more implemented were the following: “20. Do we inform all applicants at the end of the selection process? (59,52%), 22. Do we have an appropriate complaints mechanism in place? (59,52%), 19. Do we have clear guidelines for selection committees which help to judge ‘merit’ in a way that leads to the best candidate being selected? (57,14%), 14. Do we make use of other job advertising tools? (47,62%), 17. Do we have clear rules concerning the composition of selection committees? (45,24%).

## ANNEX 2: INFORMATIVE MEETINGS ABOUT THEHRS4R PROCESS

### 4.2.1 INTRODUCTION OF THE CHAIR AND GOVERNING COUNCIL TO MANAGERS OF RESEARCH CENTRES, TECHNICAL SCHOOLS AND INSTITUTES.

More than 25 people attended the meeting on January 13TH, 2018, 12AM, Rectorate UPM.

FIGURE 7. PEOPLE ATTENDING THE CHAIR AND GOVERNING COUNCIL



### 4.2.2 INTRODUCTION TO THE MANAGERS AND RESEARCHERS FROM RESEARCH CENTRES.

More than 40 people attended the meeting on January 24th, 2018 15:30 PM, Rectorate UPM.

FIGURE 8. PEOPLE ATTENDING THE INFORMATIVE MEETING IN CAMPUS MONCLOA.



#### 4.2.3 INTRODUCTION TO MANAGERS AND RESEARCHERS FROM CAMPUS SUR

More than 30 people attended the meeting on January 25th, 2018, 9:30 AM at Campus Sur.

FIGURE 9. PEOPLE ATTENDING THE INFORMATIVE MEETING IN CAMPUS SUR.



#### 4.2.4 INTRODUCTION TO MANAGERS AND RESEARCHERS FROM MONTEGANCEDO CAMPUS.

More than 20 people attended the meeting on January 25th, 2018, 16:30 PM at Campus Montegancedo.

FIGURE 10. PEOPLE ATTENDING THE INFORMATIVE MEETING IN MONTEGANCEDO CAMPUS.



## ANNEX 3: WORKSHOPS AND MEETINGS.

### 4.3.1 MEETING WITH HR MANAGERS OF RESEARCH CENTRES AND TECHNICAL SCHOOLS.

Half-day workshop, on January 23rd, 2018 at the Rectorate UPM, presenting main OTM-R concepts, survey and objectives.

Working Methodology: Fully participative meeting lead by members of the Working Group. To join the meeting it was necessary to revise the distributed documentation previously.

Eight people attended the meeting:

- Beatriz Díaz, Vice Rectorate of Economic Affairs
- Emma Cobo, Management and Research Teaching Staff
- Esperanza Luque, HR Manager at CEIGRAM
- Paula Barrera, HR Manager at CBGP
- Carmen Gascó, VR IID
- Carmen Perez, VR IID
- José Ángel Ramos (R2 and HR manager)
- Luis Cueto-Felgueroso (R2)
- Ramón Perea García-Calvo (R2)
- Andrés Mejía, Academic Observatory and Staff responsible of University Surveys

FIGURE 11. PEOPLE ATTENDING OTMR MEETING.



### 4.3.2 OTMR WORKSHOP

Half-day workshop evaluating and discussing part of the responses of the OTM-R survey with the goals of (1) To revise the general results obtained in the survey, (2) Jointly validate the Gap Analysis, assuring that the answers were consistent with the reality of the Institution.

Working Methodology: Fully participative meeting lead by members of the Working Group. To join the meeting, it was necessary to revise the distributed documentation previously.

Eight people attended the meeting:

- Beatriz Díaz, Vice Rectorate of Economic Affairs
- Emma Cobo, Management and Research Teaching Staff
- Esperanza Luque, HR Manager at CEIGRAM
- Paula Barrera, HR Manager at CBGP
- Carmen Gascó, VR IID

- Carmen Pérez, VR IID
- Jose Angel Ramos (R2 and HR manager)

FIGURE 12. PEOPLE ATTENDING OTMR WORKSHOP.



#### 4.3.3 1ST WORKSHOP: ANALYSIS AND INTERPRETATION OF THE SURVEYS.

Half-day workshop on 5th March evaluating and discussing part of the responses of the survey with the goals of (1) To revise the general results obtained in the survey, (2) Jointly validate the Gap Analysis, assuring that the answers were consistent with the reality of the Institution, (3) Identify the most outstanding improvement areas.

Working Methodology: Fully participative meeting lead by members of the Working Group. To join the meeting, it was necessary to revise the distributed documentation previously.

##### Agenda

11:00	Welcome message
11:00 - 11:15	Presentation of the survey conclusions, in terms of participation, and perception of implementation and importance of the C&C criteria
11:15 - 12:45	Validation of the survey answers and suggestions for improvement of the implementation of Charter & Code (C&C) ETHICAL and PROFESSIONAL ASPECTS (11) and SELECTION and RECRUITMENT (10)
12:45 - 13.00	Coffee break
13:00 - 14:15	Validation of the survey answers and suggestions for improvement the implementation of Charter & Code (C&C) WORKING CONDITIONS and PROFESSIONAL CAREER (14) and SUPERVISION and TRAINING (5)
14:15	Wrap-up and next steps

Twenty-one people attended the meeting:

##### **Vice Rectorate of Research, Innovation and Doctorate.**

- Asunción Gómez-Pérez (R4), Vice Chancellor of Research, Innovation and Doctorate.
- Carmen Perez Nadal, Research Area Supervisor
- Carmen Gascó, European Projects Office.

##### **Vice Rectorate of Quality and Efficiency**

- Alberto Garrido (R4), Vice Chancellor of Quality and Efficiency



- Juan Garbajosa (R4)
- Vice Rectorate of Economic Affairs**
- Beatriz Díaz
- Management and Research Teaching Staff**
- Emma Cobo
- Researchers**
- José Ramón Casar (R4)
  - Marta Patiño (R3)
  - Jose María López Martínez (R3)
  - Luis Cueto-Felgueroso (R2)
  - Ramón Perea García-Calvo (R2)
  - Guillermo Velázquez Romera (R1)
  - Virginia Raposo Pulido (R1)
  - Sergio Calonge Pascual (R1)
- HR Managers**
- Esperanza Luque (CEIGRAM)
  - Paula Barrera (CBGP)
  - Jose Angel Ramos (R2)

**FIGURE 13. WORKING GROUP ATTENDING THE 1ST WORKSHOP.**



During the workshop, the Working Group discussed the results obtained in the surveys. The information provided by the participants was the starting point of the discussions about the real degree of implementation of the OTM-RC criteria.

#### 4.3.4 2ND WORKSHOP: ACTION PLAN DEFINITION AND DEBATE.

Half-day workshop on 19th March evaluating and discussing part of the responses of the survey with the goals of (1) To identify actions to fill the gaps in the implementation of the C&C criteria, (2) Identify the most outstanding improvement areas.

Working methodology: Fully participative meeting lead by members of the working team. To join the meeting, it was necessary to revise the distributed documentation previously.

#### Agenda

9:30 - 10.45	Presentation of the Action Plan
10:45 - 11.00	Coffee break
11:00 - 13:15	Validation of the Action Plan

13:15 - 13:30 Conclusions and next steps

Participants: Working Group

**Vice Rectorate of Research, Innovation and Doctorate.**

- Asunción Gómez-Pérez (R4), Vice Chancellor of Research, Innovation and Doctorate.
- Carmen Perez Nadal, Research Area Supervisor
- Carmen Gascó, European Projects Office

**Vice Rectorate of Quality and Efficiency**

- Alberto Garrido (R4),
- Juan Garbajosa (R4)

**Vice Rectorate of Economic Affairs**

- Beatriz Díaz, Vice Rectorate of Economic Affairs

**Management and Research Teaching Staff.**

- Emma Cobo, (Management and Research Teaching Staff)

**Researchers**

- José Ramón Casar (R4)
- Marta Patiño (R3)
- Jose María López Martínez (R3)
- Luis Cueto-Felgueroso (R2)
- Ramón Perea García-Calvo (R2)
- Guillermo Velázquez Romera (R1)
- Virginia Raposo Pulido (R1)
- Sergio Calonge Pascual (R1)

**HR Managers**

- Esperanza Luque (CEIGRAM)
- Paula Barrera (CBGP)
- Jose Angel Ramos (R2)

**FIGURE 12. WORKING GROUP ATTENDING THE 2ND WORKSHOP.**



The text summarizing the diagnosis of each of the 40 C&C principles was debated and a consensus on common positions was reached, considering the qualitative and quantitative assessment shown in the surveys, the results of the personal interviews and the Working Group members' suggestions.

#### 4.3.5 MEMBERS OF THE STEERING COMMITTEE MEETING FOR THE ACTION PLAN LEADER ASSIGNMENT AND CHRONOGRAM DEFINITION.

Goals: A review of the Gap Analysis and its correlation with the Action Plan was made. An in-depth discussion about focus and scope for each of the actions was had.

Working methodology: Open discussion.

Participants:

##### **Vice Rectorate of Research, Innovation and Doctorate.**

- Asunción Gómez-Pérez (R4), Vice Chancellor of Research, Innovation and Doctorate.
- Carmen Perez Nadal, Research Area Supervisor
- Carmen Gascó, European Projects Office

##### **Vice Rectorate of Quality and Efficiency**

- Alberto Garrido (R4), Vice Chancellor of Quality and Efficiency

**FIGURE 13. CORE OF THE STEERING COMMITTEE.**



## ANNEX 4: INTERVIEWS

Goals: To complete information concerning the degree of implementation of the most controversial principles debated in the workshops.

Working methodology: Personal interviews of 60 minutes.

Date, people and major discussion themes:

- December 14th, 2017, Luis del Cerro and Silvia Muñoz, Vice rectorate Research, Innovation and Doctorate
- January 18<sup>th</sup>, 2018, Beatriz Díaz, Carmen Espada and Miguel Angel González, Tech Transfer Office,
- March 13<sup>th</sup>, 2018 Victor Robles Vicerrector Technological Services; Fernando Limón and José Rivero, Head of service.
- March 19<sup>th</sup>, 2018 Luis Garcia, Occupational Hazards.

## ANNEX 5: LEGAL FRAMEWORK OF THE C&C PRINCIPLES

Table 8 presents the legal framework that addresses the implementation of the HRS4R. No regional laws affect the proper adscription of the HRS4R criteria.

TABLE 8. LEGAL FRAMEWORK.

<b>European legislation</b>	
Royal Decree Law 8/2015, General Social Security Law. Consolidated text.	26
Royal Legislative Decree of April 1, 1996 approving the revised Intellectual Property Act, updated November 5, 2014.	3
Spanish Committee of Research Ethics. Ninth Additional Provision.	7
Article 20.1 CE: They recognise and protect rights: a) to freely express and disseminate thoughts, ideas and opinions through words, writing or any other means of reproduction; b) A production and literary, artistic, scientific and technical.	1
Article 20.4 EC: These freedoms are limited by respect for the rights recognised in Title Article 149. 15th EC: The State has exclusive power over the promotion and general coordination of scientific and technical research.	1
Article 35.1 EC.	10
Article 9.2 EC.	10
Directive 1999/70/CE regarding Framework agreement of CES, UNICE and CEEP about Fixed- Term Work.	25
<b>National legislation</b>	
Directorate General for Labour November 3, 2009 unique national collective agreement for the entire General State Administration.	26
Law 10/2002, 29 April adapting the Law of Patents to EU Directive related to legal protection of biotechnology inventions.	31
Law 11/1986, of 20 March, Research Patent and utility models.	3,5,6,31,32
Law 14/2007 of Biomedical Research.	1, 5, 6, 7, 8, 9, 18, 19, 20, 23, 28, 29
Law 14/2011, of 1 June, of Science, Technology and Innovation.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 31, 33, 38, 39

Law 31/1995 (Preventing Work Risks).	7, 23
Law 38/2003 (General Subsidies).	6, 8, 11, 16
Organic Act 3/2007 (Effective Equality for Men and Women).	2, 7, 10, 12, 14, 15, 16, 17, 21, 24, 27, 28, 30
Co Law 15/1999, of December 13, Personal data protection.	2, 7
Organic Law 2/2012, of April 27, Budget stability and financial sustainability, updated July 20, 2013.	25
Royal Decree 1837/2008, of November 8, which is incorporated into Spanish law the Directive 2005/36/EC of the European Parliament and the Council, of September 7, 2005 and Directive 2006/100/EC, Council of November 20, 2006, on the recognition of professional qualifications.	19,20
Royal Decree 2/2015 (Workers' Statute, ET).	5, 10, 11, 12, 13, 14, 15, 18, 22, 24, 25, 26, 27 ,34, 39
Royal Decree 55/2002 of exploitation of inventions by public research institutions.	32
Royal Decree 63/2006 Researchers at training stages.	4, 5, 12, 19, 20, 21, 26
Royal Decree 887/2006 of 21 July, approving the regulations of the Law 38/2003 of November 17, General Grant Management. Article 60 1. Evaluation criterion.	11, 16
Royal Decree 99/2011 (Regulation of Ph. D Studies).	40
Royal Decree Law 1/1996, Intellectual Property Law (Book I. art.7 and art.10).	31, 32
Royal Decree law 5/2006 9 June.	25
Spanish Constitution 1978.	1, 7, 10, 16, 27
UNESCO Deontological codes of conduct.	2