Research Methodology

Composition of project and consultative groups

A project group has been established, comprised of experts in the field provided by the strategic policy departments and faculties. The project group, which will be the driving force behind the process and which drew up the current project proposal, is made up of:

- 1. HR recruitment & internationalization policy advisor (project manager)
- 2. HR adviser
- 3. R&D/ internationalization strategy policy adviser
- 4. HR policy adviser (tasked with terms of employment)
- 5. HR officer, tasked with research tools support
- 6. HR officer, to help out with the interviews and the drawing-up of a plan of action
- 7. If communications advice is required, we may consult a communications adviser.

In order to optimize the incorporation of the project scope and the research method into the organization, we have established a consultative group comprised of:

- 1. HR director
- 2. Strategy & policy director
- 3. Dean
- 4. Full professor
- 5. Tenure track candidate
- 6. PhD student

1.1 Policy Analysis

The first step towards drawing up a project plan was an analysis of papers pertaining to the state of play with regard to the 40 principles. All Dutch universities have agreed to endorse the Charter for Researchers and Code of Conduct for the Recruitment of Researchers and to apply for the HR Excellence in Research award. To this end, they have analyzed Dutch legislation and the provisions of the collective agreement for Dutch universities to see how they relate to all 40 principles. UT has chosen to use this analysis as a basis on which to build its policy, and has added local arrangements.

General outcomes of the policy analysis:

- Generally, the 40 principles were found to be properly upheld within the university.
- Another general outcome of the policy analysis is the advice of the project group to make policies easier to find on the UT website. Presently, Information, regulations and policies are presented fragmented.

1.2 Practical Analysis

The practical analysis involved presenting academic staff with the 40 principles underlying the Charter for Researchers and the Code of Conduct for the Recruitment of Researchers.

The practical analysis was comprised of two components:

- 1. Survey of academic staff
- 2. Interviews

The researchers used both qualitative analysis (interviews) and quantitative analysis (survey).

Survey of academic staff (including PhD students)

Focus groups

<u>PhD</u>	Post-	Tenure track	University managers	<u>Associate</u>
<u>students</u>	<u>doctoral</u>	<u>candidates</u>	 Full professors 	<u>professors</u>
	<u>researchers</u>		 Scientific 	/ Assistant
			directors	<u>professors</u>
			• <u>Deans</u>	
			In-depth interviews	

Fig.1. Schematic representation of research methodology

1.2.1 Survey of Academic Staff

As part of the survey, a cross section of academic staff members (n=300) representing all five focus groups were presented with the 40 principles. The five focus groups surveyed were university managers (full professors, scientific directors, deans); associate and assistant professors; tenure track candidates; post-doctoral researchers; and PhD students. For the qualitative analysis, scientific directors, deans and full professors were interviewed and asked about the gaps identified in the policy analysis and survey.

A questionnaire was circulated among academic staff members, who were allowed to answer questions anonymously. The 40 principles were divided into four sub-categories. Each definition of a principle was briefly summarized in one sentence. Every principle was followed by a question: 'To what extent does the university support you on these principles?' or 'How would you rate the university's compliance with these principles?' . The type of question used depended on the content of the principle. Both questions were answered on a five-point Likert scale (5= fully supports/complies. 1= doesn't support/comply) (Appendix 2. Survey)

General survey findings:

- Survey of 300 academics, with an even spread across positions and faculties
- Number of respondents: 83 (i.e. a 28% response rate)
- Gender: 25% female, 75% male
- Respondent spread across positions:
 - o PhD students: 40%;
 - post-doctoral researchers: 10%;
 - o assistant professors: 30%;
 - associate professors: 5%;
 - o full professors: 15%;
 - tenure track candidates: 20%.

Refer to Appendix No. 1: 'The Survey'

1.2.2 Interviews

The results of the policy analysis and the outcomes of the survey (listed by focus group) were used to analyze the gaps identified in more depth in the interviews.

Any score under 3.5, on a five-point scale, was marked as an item requiring attention. Even if relatively few respondents answered the questions, the items in question were addressed during the interviews.

The following principles were discussed in the confidential interviews:

- 4. Professional attitude
- 5. Contractual and legal obligations
- 11. Evaluation/Appraisal systems
- 12/13. Recruitment
- 14. Selection
- 15. Transparency
- 16. Judging Merit
- 28.Career development
- 29. Value of mobility
- 30. Access to career advice
- 32. Co-authorship
- 33. Teaching

Training

The interviewees were all academic managers at UT, chosen in such a way as to obtain input from several faculties and research institutes.

Appendix 1 Survey

Survey HRS4R - HR Excellence in Research

Introduction of the survey

The "HR Strategy for Researchers" supports research institutions and funding organisations in the implementation of the Charter & Code in their policies and practices. The concrete implementation of the Charter & Code by research institutions will render them more attractive to researchers looking for a new employer or for a host for their research project as well as researchers already affiliated with the research institutes. The logo "HR Excellence in Research" will identify the institutions and organisations as providers and supporters of a stimulating and favourable working environment. The logo also conveys to researches their commitment to fair and transparent recruitment and appraisal procedures. The first step in acquiring the logo is to do an internal analysis. This survey is part of this internal analysis.

The survey

This survey is one of the methods we use to gain insight in the perception of researches with regard to the principles depicted in the Charter & Code. The survey is divided into four themes:

- 1. Ethical and professional aspects,
- 2. Recruitment,
- 3. Working conditions and social security,
- 4. and Training.

The survey starts with a few general questions regarding your background. We would like to emphasize that your answers to the questions of this survey will be treated confidentially and will only be used for the before mentioned purpose. After each theme is completed there will be an opportunity to write down remarks and/or suggestions.

If you have any questions or additional comments, please send an email to Mette Strubbe (m.strubbe@utwente.nl)

General questions

What is your current position? PhD-candidate, Post-doc, Tenure track, Assistant Professor, Associate Professor, Professor, Scientific Director or Dean

For which department are you working? CTW, EWI, GW, ITC, MB or TNW.

Gender? Female or male.

Age? ... years

Ethical and professional aspects

To what extent does the university support you on these principles?

Likert scale: 1 (not supported) – 5 (fully supported) and not applicable.

1. Research freedom

Researchers ensure that their research is focussed for the good of mankind and for expanding the frontiers of scientific knowledge, while enjoying the freedom of thought and expression (with limitations that could arise as a result of particular research circumstances or operational constraints).

2. Ethical principles

Researchers should adhere to the recognised ethical practices and fundamental ethical principles appropriate to their discipline(s) as well as to ethical standards as documented in the different national, sectoral or institutional Codes of Ethics.

3a. Professional responsibility I

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

3a. Professional responsibility II

Researchers must avoid plagiarism of any kind and abide by the principles of intellectual property and joint data ownership.

4a. Professional attitude I

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

4b. Professional attitude II

Researchers seek all necessary approvals before starting their research or accessing the resources provided and keep other parties informed on the progress of the research project.

5. Contractual and legal obligations

Researchers should, in the provision of required results (e.g. publications, reports, patents), comply with laws and regulations around working conditions (such as intellectual property rights and financing conditions).

6. Accountability

Researchers need to be aware that they are accountable towards the university, funders or other related parties as well as, on more ethical grounds, towards society as a whole. In particular, researchers funded by public funds are also accountable for the efficient use of taxpayers' money.

7a. Good practice in research I

Researchers adopt safe working practices at all times, including taking the necessary precautions for health and safety and for recovery from information technology disasters.

7b. Good practice in research II

Researchers are familiar with the current national legal requirements regarding data protection and confidentiality protection requirements, and undertake the necessary steps to fulfil them at all times.

8. Dissemination, exploitation of results

Researchers disseminate and exploit the results of their research (e.g. communicated to other research settings and made accessible to the public and/or exploited commercially).

9. Public engagement

Researchers ensure that their research activities are made known to society at large, thereby improving the public's understanding of science.

How would you rate the university's compliance with these principles?

Likert scale: 1 (not agree) – 5 (fully agree) and not applicable.

11. Evaluation systems

The university has adequate evaluation systems for assessing professional performance of researchers on a regular basis and in a transparent manner by an independent (international) committee.

If you have any remarks or suggestions regarding the principles presented in 'Ethical and professional aspects', please write them down in the field below.

Recruitment

How would you rate the university's compliance with these principles?

Likert scale: 1 (not agree) – 5 (fully agree) and not applicable.

13. Recruitment II

Recruitment procedures are open, efficient, transparent, supportive and internationally comparable, as well as tailored to the type of positions advertised.

14a. Selection I

Selection committees bring together diverse expertise and competences and have an adequate gender balance with relevant experience to assess the candidate.

14b. Selection II

During the selection process a wide range of selection practices is used, such as external expert assessment and face-to-face interviews.

15a. Transparency I

Candidates are informed, prior to the selection, about the recruitment process and the selection criteria, the number of available positions and the career development prospects.

15b. Transparency II

Candidates are informed after the selection process about the strengths and weaknesses of their applications.

16. Judging merit

The selection process should take into consideration the whole range of experience of the candidates. Merit should focus on outstanding results within a diversified career path and not only on the number of publications.

17. Variations in the chronological order of CV's

Career breaks or variations in the chronological order of CVs should not be penalized, but regarded as a potentially valuable contribution to the professional development of researchers towards a multidimensional career track.

18. Recognition of mobility experience

Any mobility experience is considered as a valuable contribution to the professional development of a researcher.

20. Seniority

The levels of qualifications required are in line with the needs of the position. Recognition of qualifications focuses on the achievements of researchers rather than their circumstances or the reputation of their institution.

21. Postdoctoral appointments

The university has established clear rules and guidelines for the recruitment and appointment of postdoctoral researchers, including the maximum duration and the objectives.

If you have any remarks or suggestions regarding the principles presented in 'Recruitment', please write them down in the field below.

Working conditions and social security

How would you rate the university's compliance with these principles? Likert scale: 1 (not agree) - 5 (fully agree) and not applicable.

22. Recognition of the profession

Researchers are recognized as professionals and treated accordingly.

23a. Research environment I

The university ensures a stimulating research environment, which offers appropriate equipment, facilities and opportunities.

24. Working conditions

The university ensures flexible working conditions that allow researchers to combine family and work, including flexible working hours, part-time working, teleworking and sabbatical leave.

25. Stability and permanence of employment

The performance of researchers is ensured by stability of employment contracts.

27. Gender balance

The university ensures a representative gender balance at all levels of staff, including supervisory and managerial level, based on an equal opportunity policy at recruitment and at the subsequent career stages.

28. Career development

The university ensures a specific career development strategy for researchers at all stages of their career, including the availability of mentors.

29. Value of mobility

The university recognizes the value of mobility by building mobility options into its career development strategy and acknowledges any mobility experience within its appraisal system.

30. Access to career advice

Career advice and job placement assistance is offered to researchers at all stages of their careers, regardless of their contractual situation.

31. Intellectual property rights

Researchers reap the benefits of the exploitation of their R&D results through legal protection and protection of intellectual property rights. Policies and practices specify what rights belong to researchers, the university and/or other parties.

32. Co-authorship

Co-authorship is viewed positively when evaluating researchers, as evidence of a constructive approach to the conduct of research.

33a. Teaching I

The university provides suitable training for teaching and coaching activities as part of the professional development of researchers.

33b. Teaching II

The university considers teaching as a valuable option within the researchers' career paths.

33c. Teaching III

Teaching duties do not prevent researchers from carrying out their research activities.

33d. Teaching IV

The university ensures that teaching duties are adequately remunerated and taken into account in the appraisal systems.

34. Complaints/appeals

The university has appropriate procedures, possibly in the form of an impartial (ombudsman-type) person to deal with complaints/appeals of researchers. These procedures provide researchers with confidential and informal assistance in resolving work-related conflicts, disputes and grievances.

35. Participation in decision-making bodies

Researchers are represented in the relevant information, consultation and decision-making bodies of the university.

If you have any remarks or suggestions regarding the principles presented in 'Working conditions and social security', please write them down in the field below.

Training

To what extent does the university support you on these principles?

Likert scale: 1 (not supported) – 5 (fully supported) and not applicable.

36. Relation with supervisors

PhD students establish a structured and productive relationship with their supervisor(s).

37. Supervision and managerial duties

Senior researchers devote particular attention to their multi-faceted role as e.g. supervisors, mentors, leaders or project coordinators, in order to set the conditions for efficient transfer of knowledge and for the further successful development of the researchers' careers.

38. Continuing professional development

Researchers seek to continually improve themselves by regularly updating and expanding their skills and competencies.

How would you rate the university's compliance with these principles?

Likert scale: 1 (not agree) – 5 (fully agree) and not applicable.

39. Access to research training and continuous development

Researchers are given the opportunity for professional development and for improving their employability.

40. Supervision

PhD students have a supervisor to whom they can refer to and who is sufficiently expert in supervising research to offer the appropriate support.

If you have any remarks or suggestions regarding the principles presented in 'Training', please write them down in the field below.