

ANALYSIS FOR NORWAY

The European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers has been reviewed by a committee appointed by the Norwegian Association for Higher Education Institutions. The committee’s objective was to compare the recommendations in these documents with Norwegian acts, regulations and practice.

Section 1: The European Charter for Researchers

1.1. Research freedom

Research Freedom

Researchers should focus their research for the good of mankind and for expanding the frontiers of scientific knowledge, while enjoying the freedom of thought and expression, and the freedom to identify methods by which problems are solved, according to recognised ethical principles and practices.

Researchers should, however, recognise the limitations to this freedom that could arise as a result of particular research circumstances (including supervision/guidance/management) or operational constraints, e.g. for budgetary or infrastructural reasons or, especially in the industrial sector, for reasons of intellectual property protection. Such limitations should not, however, contravene recognised ethical principles and practices, to which researchers have to adhere.

The committee’s assessment: Acceptable.

The principle of research freedom is well-established in Norway. The committee refers to the University and University Colleges Act, section 1-5, which establishes this principle in legislation. The limitations stated in the second paragraph of this article are also in keeping with the Act. Legislation, approved guidelines and established practice in the area of research ethics support this principle as well.

1.2. Ethical principles

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.

The committee’s assessment: Acceptable.

The duty to comply with ethical principles derives in part from employment terms and conditions laid down in legislation or by other means, as well as from rules pertaining to specific professions (e.g. the Health Personnel Act, ethical guidelines for the profession concerned, etc.) and from guidelines and operational norms developed by key authoritative bodies, including the National Committees for Research Ethics in Norway.

In recent years, issues of research ethics have received increasing attention. This has led to, for example, the passage of the Act relating to ethics and integrity in research, which provides a stronger formal basis for the existing national committees on research ethics (the National Committee for Research Ethics in the Social Sciences and the Humanities (NESH), the National Committee for Medical and Health Research Ethics (NEM), and the National Committee for Research Ethics in Science and Technology (NENT)). This also applies to the Regional Committees for Medical and Health Research Ethics (REK). Another important initiative is the new Health Research Act (Official Norwegian Report 2005:1 and Proposition No. 74 (2006-2007) to the Odelsting, Resolution to the Odelsting No. 83 (2007-2008)) that was adopted by the Storting in June 2008. It is not known when the legislation will take effect.

Moreover, the institutions have strengthened their own efforts on research ethics by establishing or enhancing their research ethics committees, and not least by expanding and systematising their efforts related to information about research ethics.

1.3. Professional responsibility

Professional responsibility

- i. Researchers should make every effort to ensure that their research is relevant to society and does not duplicate research previously carried out elsewhere.
- ii. They must avoid plagiarism of any kind and abide by the principle of intellectual property and joint data ownership in the case of research carried out in collaboration with a supervisor(s) and/or other researchers. The need to validate new observations by showing that experiments are reproducible should not be interpreted as plagiarism, provided that the data to be confirmed are explicitly quoted.
- iii. Researchers should ensure, if any aspect of their work is delegated, that the person to whom it is delegated has the competence to carry it out.

The committee's assessment: Point i. is acceptable, provided it is interpreted broadly. Point ii. should be amended slightly. Point iii. is acceptable.

Point i. is acceptable under certain conditions. Firstly, the term "relevant" must be interpreted broadly, as it could be interpreted to mean that greater emphasis should be placed on the capacity of research to produce direct, tangible (economic) benefits. Such an interpretation would be short-sighted and could have negative consequences. The primary task of research is to generate new insight. This requires extensive basic research whose utility value, e.g. in the form of new technology, is difficult to foresee.

Likewise, a broad interpretation of the point on duplicating research conducted elsewhere is also needed. Duplication within reasonable parameters is often necessary or desirable in order to validate research conducted by others. (This is mentioned indirectly under point ii.)

Point ii. on plagiarism and intellectual property rights is acceptable in general if it is understood to mean that the rights of others must be respected. According to the

Copyright Act, “an issued work may be quoted, in accordance with proper usage and to the extent necessary to achieve the desired purpose”, cf. section 22 of the Act. Non-published works may be quoted only with the consent of the author. Furthermore, the Patents Act states that an invention for which a patent has been sought or approved may not be copied as long as the patent is in force. Also, if several parties share the copyright or other intellectual property rights, none of the rights-holders may act in a manner that violates the rights of others.

Taken literally, however, point ii. could be interpreted to mean that the principle of joint data ownership, joint copyright and the like applies in all cases involving a collaborative research effort. This is often the case, but there are many nuances that the Charter does not address. It might be appropriate, therefore, to amend the statement in the Charter from “...the principle of intellectual property and joint data ownership...” to “the principles...”. In Norway’s case, copyright legislation is well-established, and an amendment of this nature would downplay the impression that a new principle is being introduced and instead emphasise that the rights of others established under legislation, in contracts and by other means must be respected.

It is also important to note that achieving satisfactory compliance with the Charter on these points will require extensive effort not only on the part of individual researchers but by research leaders as well.

Point iii, which requires a researcher who delegates work to ensure that the person to whom the work is delegated has the competence to carry it out, is established research practice in Norway and therefore acceptable.

1.4. Professional attitude

Professional attitude

- i. Researchers should be familiar with the strategic goals governing their research environment and funding mechanisms, and should seek all necessary approvals before starting their research or accessing the resources provided.
- ii. They should inform their employers, funders or supervisor when their research project is delayed, redefined or completed, or give notice if it is to be terminated earlier or suspended for whatever reason.

The committee’s assessment: Acceptable overall, but improvements in follow-up are needed.

These principles are already in force today. In practice, however, they are not always followed, especially with regard to handling deviations in research plans. What action should be taken when approvals that should have been obtained are lacking, and how should delays, changes and the like be reported and dealt with? In such cases, better operationalisation of prevailing norms and routines, and possibly also more suitable norms and routines, is needed. The most productive way to achieve this could be to develop and improve “best practice”. One example – on a rather general level – is the

University of Oslo's handbook on good research practice, which among other things describes the stages of a research project from development to establishment, implementation, conclusion and publication (available in Norwegian only): <http://www.uio.no/forskning/hverdag/forskningsetikk/handbok/index.html>

Another example is the website of the Norwegian Social Science Data Services (NSD), which provides extensive information on how privacy protection issues are dealt with in research. Please refer specifically to the webpages on the Privacy Ombudsman for Research: <http://www.nsd.uib.no/nsd/english/pvo.html>

In the committee's view, individual institutions and projects benefit from permanent, simple routines for documenting and reporting on the various phases of a project, and not least from effective routines for identifying and addressing deviations. Routines in this context encompass not only written rules and guidelines, but also the actual response to reported deviations.

1.5. Contractual and other legal obligations

Contractual and legal obligations

Researchers at all levels must be familiar with the national, sectoral or institutional regulations governing training and/or working conditions. This includes Intellectual Property Rights regulations, and the requirements and conditions of any sponsor or funders, independently of the nature of their contract. Researchers should adhere to such regulations by delivering the required results (e.g. thesis, publications, patents, reports, new products development, etc) as set out in the terms and conditions of the contract or equivalent document.

The committee's assessment: Acceptable overall, but improvements in follow-up are needed.

The necessary legislation is in place, and researchers are believed to be familiar with the legal basics. Also, most of the necessary contracts exist, at least for the largest funders such as the EU, the Research Council of Norway and large commercial enterprises.

Also in this context, deficiencies may occur in many areas and during many phases of a research project. It is essential that research leaders are familiar with the obligations that arise from legislation and contracts. If these obligations are not fulfilled or there are delays in doing so, the research project may experience schedule delays, budget overruns and, in the worst case, unnecessary conflicts both externally and internally.

1.6. Accountability

Accountability

i. Researchers need to be aware that they are accountable towards their employers, funders or other related public or private bodies 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. Consequently, they should adhere to the principles of sound, transparent and efficient financial management and cooperate with any authorised audits of their research, whether undertaken by their employers/funders or by ethics committees.

Measures regarding accountability towards public funders and employers are generally set out in contracts of employment or conditions of the funding agencies, which outlines their reporting and auditing requirements. Private and charitable funders have similar requirements.

ii. Methods of collection and analysis, the outputs and, where applicable, details of the data should be open to internal and external scrutiny, whenever necessary and as requested by the appropriate authorities.

The committee's assessment: Acceptable overall, but further development of data storage regulations and practice is needed.

Point i. is acceptable, and the specific details are clarified in employment contracts, legislation and contracts with funders.

In Norway, the issue of legal and ethical obligations in connection with data storage is relatively unsettled and undergoing change.

The storage of data and the potential for others to use and control these data are fundamental to many areas. When a research project leads to an academic degree, such as a master's or doctoral degree, the examiners/members of the assessment committee must have the opportunity to verify the data. The same applies to relevant authorities, such as those mentioned in the Charter. In any case, it is essential to have satisfactory regulations that govern which data are to be stored, by what means, for how long, and who will have access under what conditions. This will provide good support for researchers. The committee notes that these matters are regulated in some key, widely available documents, namely the standard terms of contract for research projects funded under the EU or the Research Council of Norway. The Research Council's contract states that data are to be stored in a safe manner for a minimum of ten years following completion of the project, while the EU has reserved the comprehensive right to revise the data at any time during the project period and up to five years following completion of the project.

For research involving the use of personal data, the Personal Data Act applies, including the principle that data is not to be stored "longer than is necessary for the purpose of the processing", cf. section 11, subsection 1 e, of the Act. The length of time may vary, but it will often be less than five years although sometimes it may be much longer.

Data in the form of human biological material is currently regulated by the Biobank Act, and in the future will also be regulated largely by the Health Research Act. Both of these acts stipulate provisions for when and under what circumstances the material in biobanks may be destroyed or the biobanks may be closed down, cf. Health Research Act, section 30, and the Biobank Act, section 8.

The issue of accountability is also addressed in the “OECD Principles and Guidelines for Access to Research Data from Public Funding”, as are a number of other crucial issues. Please see <http://www.oecd.org/dataoecd/9/61/38500813.pdf>

It appears that many research groups follow the practice of storing research data in a safe manner for at least ten years following completion of a project, unless a different decision has been expressly taken. As a default rule, this seems to be a sound, practical solution. Assuming necessary adjustments are made for any special rules pertaining to the scientific field in question, etc., it will be possible to design schemes that address the need to verify data but that are not too expensive or burdensome in other ways.

To ensure compliance with current and future regulations on data storage, an introduction to the relevant regulations must be included in the foundational segment of PhD programmes.

Additionally, it is crucial to ensure the proper, long-term storage of various types of objects from all research fields, not least objects acquired by and stored in the university museums. These objects have considerable intrinsic value in a research context as well as from a cultural and socio-economic perspective, and there is a need to greatly enhance efforts in this area.

1.7. Good practice in research

Good practice in research

Researchers should at all times adopt safe working practices, in line with national legislation, including taking the necessary precautions for health and safety and for recovery from information technology disasters, e.g. by preparing proper back-up strategies. They should also be 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.

The committee's assessment: Acceptable.

The regulatory framework is satisfactory, follow-up by researchers and employers is systematic and sound, and awareness of the issue is high.

In the Norwegian version of this document, the heading *God forskningspraksis*, which corresponds to “Good practice in research”, is taken from the Danish translation. In Norwegian, however, this phrase is often interpreted as, for example, “in keeping with good ethical practice in research” on a broad basis, whereas the point addressed by the Charter is much narrower. The committee therefore recommends using a different heading if the Charter is translated into Norwegian.

1.8. Dissemination and exploitation of research results

Dissemination, exploitation of results

All researchers should ensure, in compliance with their contractual arrangements, that the results of their research are disseminated and exploited, e.g. communicated, transferred into other research settings or, if appropriate, commercialised. Senior researchers, in particular, are expected to take a lead in ensuring that research is fruitful and that results are either exploited commercially or made accessible to the public (or both) whenever the opportunity arises.

1.9. Public engagement

Public engagement

Researchers should ensure that their research activities are made known to society at large in such a way that they can be understood by non-specialists, thereby improving the public's understanding of *science*. Direct engagement with the public will help researchers to better understand public interest in priorities for science and technology and also the public's concerns.

The committee's assessment: Acceptable overall, but more and better dissemination is needed. In particular, efforts to establish criteria for awarding credit for dissemination activity must be continued.

The committee has chosen to assess articles 1.8 and 1.9 in conjunction since they tend to overlap.

Research findings and results are disseminated to the research community primarily through publication in journals and books as well as through open institutional archives, which so far have been established at several universities but only at a few university colleges. For more information, see the website of the Norwegian Open Research Archives (NORA) (Norwegian language only): <http://www.ub.uio.no/nora/>.

The situation with regard to public outreach is multifaceted. Several evaluations show that Norwegian research projects do not perform well in this area. At the same time, there are several positive dissemination initiatives, some well-established and well-functioning. These include the National Science Week in Norway, the research news website forskning.no, and several TV and radio programmes, as well as permanent series such as "Schrödingers katt" on the Norwegian Broadcasting Corporation (NRK) and other, one-time programmes and series.

Good, broad-based dissemination has great intrinsic value, whether results are communicated in the form of popular science, through active participation in the public debate or by other means. However, dissemination is time-consuming, and it is crucial that effective schemes are established to award credit for dissemination efforts in various contexts. Attempts have been made to create such schemes, but considerable difficulties have arisen. In the committee's view, it is essential that the sector continues to develop criteria for awarding credit for dissemination activity and for weighing this in relation to other relevant factors in situations involving appointment, promotion, allocation of funding, etc.

In connection with dissemination, it is also appropriate to discuss the open access debate. The committee does not intend to make specific recommendations for open access policies at the institutions, but it notes that some of the measures included in such policies, not least the establishment of open institutional archives (cf. the discussion above), would also be well-suited for dissemination activity. In addition, the open access debate is one of the more urgent debates on research policy and research ethics currently taking place, and one which the institutions in the sector must take a stand on.

Please also see the new report to the Storting on language policy (cf. the discussion under article 1.14 on "Non-discrimination") which recommends, among other things, that all doctoral dissertations written in English be required

to include a thorough abstract in Norwegian. This is an outcome of the principle of parallel language use which is currently practiced to some extent within the sector.

With regard to commercialisation, the committee notes that the exception for instructors and academic personnel in the Act respecting the right to employees' inventions has been repealed, that the duty to contribute to innovation and value creation has been included in the University and University Colleges Act (cf. section 1-3 e), and that Technology Transfer Offices (TTO) have been established in several locations. Conditions are therefore favourable for utilising commercialisable inventions. Moreover, although in some contexts the Charter addresses dissemination and commercialisation as one topic, in reality commercialisation gives rise to so many special issues that it is often beneficial to treat these as separate topics.

1.10. Relations with supervisors and others in leadership roles

Relation with supervisors

- i. Researchers in their training phase should establish a structured and regular relationship with their supervisor(s) and faculty/departmental representative(s) so as to take full advantage of their relationship with them.
- ii. This includes keeping records of all work progress and research findings, obtaining feedback by means of reports and seminars, applying such feedback and working in accordance with agreed schedules, milestones, deliverables and/or research outputs.

1.11. Supervisory, monitoring and managerial duties

Supervision and managerial duties

Senior researchers should devote particular attention to their multi-faceted role as supervisors, mentors, career advisors, leaders, project coordinators, managers or science communicators. They should perform these tasks to the highest professional standards. With regard to their role as supervisors or mentors of researchers, senior researchers should build up a constructive and positive relationship with the early-stage researchers, in order to set the conditions for efficient transfer of knowledge and for the further successful development of the researchers' careers.

The committee's assessment: Acceptable. The Charter corresponds well with the debate and developments in Norway.

As above, the committee has assessed these two points in conjunction because they largely address the same topic from two different perspectives.

With regard to researcher recruitment, the committee finds no significant problems with Norwegian institutions adhering to the Charter on this point. All master's and PhD students have a right as well as an obligation to engage in a supervisory relationship. In the committee's view, the system of supervision has improved and now functions for the most part in a structured, effective manner.

As for the relationship of supervisors and others in senior-level positions with their students, the Charter explains in a clear, concise manner how complex relationships

may become when the same person plays different roles in relation to various co-workers, and often “wears different hats” in relation to the same person. For example, a PhD candidate’s supervisor may also serve as leader of the project in which the candidate is participating. Situations of this type can be demanding, and it is positive that the Charter so clearly points out the responsibility that accompanies these roles.

This also fits well with the recent trend in Norway that puts greater focus on academic leadership. Of special note in this context is the increasing use of supervisory groups that combine the expertise of several supervisors. Achieving good cooperation within such a group may be a challenge, but the rewards are often substantial. Research schools often provide a good framework for supervisory cooperation of this nature, and it may be appropriate to stipulate the use of supervisory committees in the regulations, although cultural variation among the disciplines must be taken into account. Furthermore, several institutions have introduced the use of performance review meetings between supervisors and PhD students and have had positive experience with these. To the best of the committee’s knowledge, such meetings are not required for everyone, but the committee believes that they should be used as much as possible.

1.12. Continuing professional development

Continuing Professional Development

Researchers at all career stages should seek to continually improve themselves by regularly updating and expanding their skills and competencies. This may be achieved by a variety of means including, but not restricted to, formal training, workshops, conferences and e-learning.

The committee’s assessment: Acceptable as written, but the employer’s responsibility is not clarified.

The Charter focuses on the individual researcher’s responsibility, and the committee has no difficulty agreeing with this. It should be noted, however, that the employer has a responsibility for ensuring that conditions support good, effective professional development for the individual. This requires adequate resources and the systematic use of these. For the higher education sector, sabbatical leave plays an especially important role and must be utilised in an even more strategic and systematic manner than it is today.

1.13. Professional recognition

Recognition of the profession

All researchers engaged in a research career should be recognised as professionals and be treated accordingly. This should commence at the beginning of their careers, namely at postgraduate level, and should include all levels, regardless of their classification at national level (e.g. employee, postgraduate student, doctoral candidate, postdoctoral fellow, civil servants).

The committee’s assessment: Acceptable for post-doctoral research fellows and regular PhD candidates in appointed posts. PhD candidates funded under the Quota Scheme

face special challenges, but the committee is still able to support this article of the Charter.

Currently in Norway, the status of the majority of research recruits is clear and unambiguous. Master's students are students, most PhD candidates are employees, and all post-doctoral research fellows are employees.

An exception to this general rule is the group of PhD candidates funded under the Quota Scheme and other similar programmes. These candidates have student status, which creates differences in some areas that may, but not always, be problematic. As a result, they have fewer rights to benefits than employees, and they are not covered by the occupational injury insurance scheme. The regulations on residence permits may sometimes be less favourable for Quota students than for employed fellowship-holders. The reason for these differences is that the Quota students' participation in PhD programmes is funded in a different way; they receive educational support from the Norwegian State Educational Loan Fund instead of a salary (cf. section 2-4 of the regulations on the Act relating to educational funding (*Utdanningsstøtteleven*)). This relates in turn to the Quota Scheme's development cooperation policy objective which emphasises that Quota students are not to settle in Norway but must return to their home countries when they complete their degrees.

The number of Quota students admitted to the institutions varies. For example, the University of Bergen has a long-standing tradition of admitting Quota students, including at the doctoral level, and in some fields Quota students represent a rather large percentage of the research community. Experiences are generally positive, and considerable effort is devoted to recruiting Quota students. The University of Oslo is in a similar situation, whereas the University of Tromsø has chosen not to admit Quota students at the doctoral level based on the opinion that the differences between Quota students and other PhD students are too great.

In the committee's view, the Quota Scheme represents a vital resource for Norwegian institutions as it facilitates broad-based, international recruitment and the establishment of valuable cooperative relationships with institutions in Asia, Africa, Latin America and Eastern Europe. The Quota Scheme's legal and financial framework, however, could be simplified and improved, and the institutions must follow this up on a systematic, regular basis. It is not easy to identify specific measures in this context, but the committee recommends that at least some type of occupational injury insurance be made available to Quota students to the extent it has not been available before.

1.14. Non-discrimination

Non-discrimination

Employers and/or funders of researchers will not discriminate against researchers in any way on the basis of gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition.

The committee's assessment: Acceptable.

The various forms of discrimination mentioned in the Charter are prohibited in Norway. Monitoring authorities have been established to ensure that regulations are complied with and that violations are censured, possibly by imposing appropriate disciplinary measures. All employers are required to work systemically to promote equal treatment.

For decades Norway has allocated major resources to creating a family-friendly labour market, and great strides have been made. This area has become increasingly important for researcher recruitment, especially for recruitment to

research training. It is crucial that institutions are able to develop the instruments needed to facilitate the recruitment of new researchers, senior-level researchers as well as recruits, and to simplify daily life for those who have chosen a career in research.

It is also appropriate here to comment briefly on language policy since the Charter mentions discrimination on the basis of language. Several institutions have been working towards their own language policies, as have the Norwegian Association of Higher Education Institutions (UHR) and the Norwegian Language Council. Recently the Ministry of Culture and Church Affairs prepared a national language policy (Report no. 25 (2007-2008) to the Storting "Language and meaning: A comprehensive Norwegian language policy" (*Mål og mening. Ein heilskapleg norsk språkpolitikk*) that addresses a number of issues related to research and education, not least the duty to promote the use of Norwegian in addition to foreign languages in research. There has not been time to delve more deeply into this, but the issues raised in this context will surely play a central role in the debate and daily activities within the sector.

Please see Report No. 25 (2007-2008) to the Storting (Norwegian language only):
<http://www.regjeringen.no/nb/dep/kkd/dok/regpubl/stmeld/2007-2008/stmeld-nr-35-2007-2008-.html?id=519923>

1.15. Research environment

Research environment

Employers and/or funders of researchers should ensure that the most stimulating research or research training environment is created which offers appropriate equipment, facilities and opportunities, including for remote collaboration over research networks, and that the national or sectoral regulations concerning health and safety in research are observed. Funders should ensure that adequate resources are provided in support of the agreed work programme.

The committee's assessment: It is difficult to interpret this article, and it is unclear whether the current situation in Norway corresponds with or deviates from the Charter.

It is not easy to grasp the substance of this article. It is not difficult to agree that research is dependent on adequate infrastructure and other types of funding. However, the Charter does not clearly specify the degree to which employers and funders are obligated to provide such resources, nor is it clear whether employers and funders are equally responsible.

Infrastructure and access to good equipment are dependent on sound basic funding as well as full financing of individual projects. They are also essential for recruiting researchers, both recruits and senior-level researchers.

Full funding of research entails not only salaries for researchers but also adequate allocations for equipment, infrastructure, technical and administrative support and other operations. A charter, legislation or other type of regulation may be complied with only if the financial resources are sufficient and are provided in a manner that enables research groups, research communities or institutions to devise long-term strategies and measures. This is too seldom the case in Norway today.

1.16. Working conditions

Working conditions

Employers and/or funders should ensure that the working conditions for researchers, including for disabled researchers, provide where appropriate the flexibility deemed essential for successful

research performance in accordance with existing national legislation and with national or sectoral collective-bargaining agreements. They should aim to provide working conditions which allow both women and men researchers to combine family and work, children and career. Particular attention should be paid, inter alia, to flexible working hours, part-time working, tele-working and sabbatical leave, as well as to the necessary financial and administrative provisions governing such arrangements.

The committee's assessment: Acceptable overall.

Working conditions are relatively well-regulated in Norway today through, for example, the Civil Servant Act, Working Conditions Act, Universities and University Colleges Act, collective bargaining agreements and the basic agreement for the civil service with the national government. Employees' rights are also extensive and well-established. In all these contexts emphasis is placed on cooperation and reciprocity between employee and employer, but this aspect receives perhaps too little attention in the Charter, which focuses on the employers' obligations vis-à-vis their employees. It might therefore be beneficial to give more attention to the obligations of employees. Otherwise, this article is acceptable to the committee.

1.17. Stability and permanence of employment

Stability and permanence of employment

Employers and/or funders should ensure that the performance of researchers is not undermined by instability of employment contracts, and should therefore commit themselves as far as possible to improving the stability of employment conditions for researchers, thus implementing and abiding by the principles and terms laid down in the EU Directive on Fixed-Term Work.

The committee's assessment: Acceptable overall, but consistent follow-up may be difficult to achieve. This, however, is not a new situation.

The circumstances under which temporary appointments may be made are stipulated in detail in the Civil Servant Act with corresponding regulations and in the Universities and University Colleges Act. The institutions within the higher education sector are among those state institutions with the greatest latitude to make temporary appointments. This applies first and foremost to doctoral and post-doctoral research fellows and to researchers appointed to specific projects.

The wide latitude to make temporary appointments gives employers great flexibility, which is desirable because this increases the institutions' economic and strategic room to act. This flexibility is also utilised in many ways. There is a danger of misuse, however, both in individual cases and if structures are established that rely too heavily on temporary appointments. This presents a challenge in many situations, especially when not only individual posts but entire units are temporary. One example is the Centres of Excellence (CoE), which by definition are temporary but are expected to yield benefits far beyond the period in which the centres receive funding as CoEs.

All in all, there are many considerations to weigh in relation to each other. As mentioned, flexibility is valuable, but so are stability, continuity and taking a long-term perspective. The temporary nature of the appointment must also be genuine, and both the employee and employer must want the transition from a temporary to permanent appointment. However, there are some formal and informal mechanisms that tend to turn a temporary post into a permanent one, whether or not this is the result of a conscious decision. Temporary employment relationships may also place considerable stress on the individual, and finally, it is important to note that the danger of misuse by the employer must not be overlooked.

However, the Charter is targeted mainly at ensuring that employers reliably adhere to the applicable regulations and do not use temporary appointments more than is legal and advisable. The committee finds that Norwegian legislation is in keeping with the EU's regulations on the use of temporary appointments, and it has no major difficulties with supporting this article.

1.18. Funding and salaries

Funding and salaries

Employers and/or funders of researchers should ensure that researchers enjoy fair and attractive conditions of funding and/or salaries with adequate and equitable social security provisions (including sickness and parental benefits, pension rights and unemployment benefits) in accordance with existing national legislation and with national or sectoral collective bargaining agreements. This must include researchers at all career stages including early-stage researchers, commensurate with their legal status, performance and level of qualifications and/or responsibilities.

The committee's assessment: Acceptable overall, but clarification and better information is needed on several points, especially regarding rights to benefits and insurance for foreign researchers.

Salary terms are stipulated in part through general wage negotiations, in institutional wage policies, in relation to specific appointments, and through institutional wage negotiations. These agreements and policies apply to all researchers in appointed posts, and in the committee's view the wage framework satisfies the Charter.

Concerning rights to benefits and insurance, the main problem is the complexity of the situation, at least for those employees who are not Norwegian citizens or had no established residency in Norway before they obtained employment. Information from and cooperation with the national social insurance authorities (especially the Norwegian Labour and Welfare Administration (NAV)) should be greatly improved.

Please refer to the discussion of article 1.13 above regarding PhD students in the Quota Scheme, which in the committee's view should offer more favourable funding terms.

This article is otherwise acceptable.

1.19. Gender balance

Gender balance

Employers and/or funders should aim for a representative gender balance at all levels of staff, including at supervisory and managerial level. This should be achieved on the basis of an equal

opportunity policy at recruitment and at the subsequent career stages without, however, taking precedence over quality and competence criteria. To ensure equal treatment, selection and evaluation committees should have an adequate gender balance.

The committee's assessment: Acceptable overall, but the follow-up presents some challenges that cannot be addressed by regulation alone.

Norway is an international leader in efforts to achieve gender balance through legislation as well as through action plans and the like at the national and institutional level. A great deal has been achieved, but much work remains since many segments of the sector still have a considerable gender imbalance. As a general rule, the percentage of women in the sector as a whole is high, including at the PhD level, but above this level the percentage of women decreases and is quite low at the professor level. This presents a major challenge, and legislation, regulations and the like can probably achieve only limited results; other measures must be used as well.

The requirement for gender-balanced assessment and selection committees is satisfied, as the University and University Colleges Act stipulates that both genders must be represented on committees that decide cases of new appointments, while the same is required "to the extent possible" in cases involving promotion. In reality, many fields lack women with sufficient expertise, and the women who are qualified feel pressured into taking on large amounts of assessment work. The committee does not wish to underestimate the value of gender-balanced representation on evaluation and selection committees, but it does note that strict requirements may sometimes be counter-productive to women's career development.

Since the Charter only requires that employers and funders "aim for a representative gender balance at all levels", the committee has no difficulty with supporting this article.

For valuable data on this topic, please see the NIFU STEP Report No. 19/2008: Career paths in academia: Statistical report prepared for the Committee for Mainstreaming – Women in Science (*Karriereløp i akademia: Statistikkgrunnlag utarbeidet for Komité for integreringstiltak – Kvinner i forskning*) by Hebe Gunnes and Elisabeth Hovdhaugen.

http://www.nifustep.no/norsk/publikasjoner/karriereloep_i_akademia (Norwegian language only)

1.20. Career development

Career development

Employers and/or funders of researchers should draw up, preferably within the framework of their human resources management, a specific career development strategy for researchers at all stages of their career, regardless of their contractual situation, including for researchers on fixed-term contracts. It should include the availability of mentors involved in providing support and guidance for the personal and professional development of researchers, thus motivating them and contributing to reducing any insecurity in their professional future. All researchers should be made familiar with such provisions and arrangements.

The committee's assessment: This article is rather difficult to interpret and may be problematic. Consideration should be given to whether the entire article should be contested.

The committee is uncertain whether it can fully support this article in its current form. Taken literally, the Charter seems to entail an obligation that is more extensive than is desirable, as it imposes a comprehensive duty on the employer to follow up each individual researcher. The committee cannot support this.

Nonetheless, some of the measures mentioned in the article are being used. The role of a supervisor or project manager often involves a mentoring function, and supervisors are being increasingly expected to contribute to their recruits' career development, which on the whole is positive. Moreover, mentoring schemes for women have been established at many institutions. Performance reviews and formal, individualised meetings between supervisors and students are also used, and it would be beneficial to make even greater use of such measures.

If "career development strategy" is defined as measures such as those discussed in the paragraph above, the committee recommends support of this point. Clarification to this effect should be stated in the declaration of support.

1.21. Value of mobility

Value of mobility

Employers and/or funders must recognise the value of geographical, intersectoral, inter- and transdisciplinary and virtual mobility as well as mobility between the public and private sector as an important means of enhancing scientific knowledge and professional development at any stage of a researcher's career. Consequently, they should build such options into the specific career development strategy and fully value and acknowledge any mobility experience within their career progression/appraisal system.

This also requires that the necessary administrative instruments be put in place to allow the portability of both grants and social security provisions, in accordance with national legislation.

The committee's assessment: Acceptable in principle, but in practice the article presents some difficulties, especially with regard to the portability of some pension rights. This issue cannot be addressed unilaterally, but instead requires pan-European solutions.

Implementing this article may be difficult, especially with regard to the portability of research funding and rights to benefits.

Concerning the "portability of (..) social security provisions", it seems that rights to a basic pension may usually be transferred between countries without great difficulty, although researchers should not have to wait before earning rights in the new country as is the case today. For public and private occupational pensions, the situation is less satisfactory and major improvements are needed.

With regard to “grants”, the committee assumes that if funding is awarded to one or more specific individuals (“personal grants”), the recipients have the right to retain these when they move. If a grant is awarded to an institution or project, the individual does not have an unconditional right to the grant, but given the circumstances it should be possible to negotiate a solution. In this context, please refer to EUROHORC’s report from 2004, which was approved by the Research Council of Norway.

However, it is not difficult to agree in general that mobility is valuable, and the committee supports the objective of developing a balanced framework that promotes mobility.

1.22. Access to research training and continuous development

Access to research training and continuous development

Employers and/or funders should ensure that all researchers at any stage of their career, regardless of their contractual situation, are given the opportunity for professional development and for improving their employability through access to measures for the continuing development of skills and competencies.

The committee’s assessment: See article 1.12.

This article seems to overlap extensively with article 1.12 above on continuing professional development. Please refer to the discussion of that article.

1.23. Access to career advice

Access to career advice

Employers and/or funders should ensure that career advice and job placement assistance, either in the institutions concerned, or through collaboration with other structures, is offered to researchers at all stages of their careers, regardless of their contractual situation.

The committee’s assessment: Acceptable overall.

A growing percentage of PhD candidates will seek employment outside the research and higher education sector. This policy is desirable, but it is not always made clear to students when they begin their doctoral studies. PhD programmes that offer sound career advice from the outset will result in a course of study that is more tailored to and motivating for the individual student.

In the committee’s view, career advice should be an integral part of the employer’s personnel policy. Such advising services should cooperate closely with the private and public sectors in order to identify the range of society’s needs for high-calibre labour.

Career advisement services are increasingly being established for bachelor and master’s students, and such services will likely be expanded to include PhD candidates as well. In addition, the network developed through positive supervisor-student relations and integration into a research community may also serve as one aspect of career

advisement, cf. the discussion of article 1.20 above regarding supervisors as career mentors and the use of supervisor-student meetings.

Please also see the NIFU STEP publication on PhD candidates and their career opportunities (Norwegian language only):

http://www.nifustep.no/norsk/publikasjoner/doktorgradsutdanning_og_karrieremuligheter

1.24. Administration of intellectual property rights

Intellectual Property Rights

Employers and/or funders should ensure that researchers at all career stages reap the benefits of the exploitation (if any) of their R&D results through legal protection and, in particular, through appropriate protection of Intellectual Property Rights, including copyrights.

Policies and practices should specify what rights belong to researchers and/or, where applicable, to their employers or other parties, including external commercial or industrial organisations, as possibly provided for under specific collaboration agreements or other types of agreement.

The committee's assessment: Acceptable, provided it is not interpreted too broadly.

The committee views this article first and foremost as an obligation on the part of employers, funders and other parties to establish IPR policies and not as a requirement stipulating the content of such policies. Norwegian research institutions have begun to develop IPR policies although they have not come far in the process.

The development of an IPR policy has probably come furthest in connection with the commercialisation of inventions through the establishment of Technology Transfer Offices (TTO) and associated routines for reporting on inventions, standard contracts regulating the distribution of income, etc.

This article is probably acceptable, provided it is interpreted as set out here.

1.25. Co-authorship

Co-authorship

Co-authorship should be viewed positively by institutions when evaluating staff, as evidence of a constructive approach to the conduct of research. Employers and/or funders should therefore develop strategies, practices and procedures to provide researchers, including those at the beginning of their research careers, with the necessary framework conditions so that they can enjoy the right to be recognised and listed and/or quoted, in the context of their actual contributions, as co-authors of papers, patents, etc, or to publish their own research results independently from their supervisor(s).

The committee's assessment: Acceptable.

The basic principle is that the person who satisfies the legislative requirements to be regarded as the author always has the right to be designated as such, either alone or

together with others. A master's or PhD student has a clear right to be listed as an author; if the student's contribution was not substantial enough to give the student the status of author, he or she would not have contributed enough to obtain a degree either.

This article is also viewed primarily as a requirement to promote co-authorship within the current framework and not as a new substantive regulation regarding who has the right to participate as a co-author on a specific work.

The committee notes that there are significant cultural differences regarding co-authorship. Within the humanities, law and many of the social sciences, single authorship or co-authorship in small groups is the tradition and general rule. Within mathematics, the natural sciences and health sciences, however, several or even many co-authors are much more common. Of course, this explanation is oversimplified and lacks nuance, but it does highlight important realities.

The Charter makes a good point that cooperation as the foundation of co-authorship can be valuable, and the committee has no difficulty agreeing with this.

1.26. Supervision and monitoring

Supervision

- i. Employers and/or funders should ensure that a person is clearly identified to whom early-stage researchers can refer for the performance of their professional duties, and should inform the researchers accordingly.
- ii. Such arrangements should clearly define that the proposed supervisors are sufficiently expert in supervising research, have the time, knowledge, experience, expertise and commitment to be able to offer the research trainee appropriate support and provide for the necessary progress and review procedures, as well as the necessary feedback mechanisms.

The committee's assessment: Acceptable.

The necessary regulations are in place. All PhD candidates have the right and obligation to receive supervision, including the right to have one or more specific persons appointed as supervisor. The use of more than one supervisor is increasing, which is a positive trend. Greater focus is also being placed on supervisor training as well as on supervising techniques, for example, in ethics and other fields. This is also positive, and more resources should be allocated to these activities.

1.27. Teaching

Teaching

Teaching is an essential means for the structuring and dissemination of knowledge and should therefore be considered a valuable option within the researchers' career paths. However, teaching responsibilities should not be excessive and should not prevent researchers, particularly at the beginning of their careers, from carrying out their research activities.

Employers and/or funders should ensure that teaching duties are adequately remunerated and taken

into account in the evaluation/appraisal systems, and that time devoted by senior members of staff to the training of early stage researchers should be counted as part of their teaching commitment. Suitable training should be provided for teaching and coaching activities as part of the professional development of researchers.

The committee's assessment: Probably acceptable, but clarification is needed on whether supervision of PhD candidates is regarded as teaching.

The number and types of duties required of both PhD candidates and post-doctoral research fellows varies considerably. For PhD candidates with required duties, the total work period is normally four years, of which one is set aside for teaching and other duties, with teaching usually being the most important of these. The committee agrees that it may be highly beneficial for research recruits to teach, but it recommends that there continue to be flexibility in the duties that comprise the work period.

For senior-level researchers, it is unclear whether supervision of PhD candidates is regarded as teaching. Because the usual practice is not clear cut, the committee is unsure whether it can recommend full support of this article. The situation should be clarified, and the various institutions should adopt more similar practices.

1.28. Evaluation and appraisal systems

Evaluation/appraisal systems

Employers and/or funders should introduce for all researchers, including senior researchers, evaluation/appraisal systems for assessing their professional performance on a regular basis and in a transparent manner by an independent (and, in the case of senior researchers, preferably international) committee.

Such evaluation and appraisal procedures should take due account of their overall research creativity and research results, e.g. publications, patents, management of research, teaching/lecturing, supervision, mentoring, national or international collaboration, administrative duties, public awareness activities and mobility, and should be taken into consideration in the context of career progression.

The committee's assessment: Acceptable, provided that the article refers to evaluation at the group level, but highly problematic if it refers to evaluation at the individual level.

Evaluation of research groups and research communities in general is used systematically today and is very valuable. If it is this type of evaluation that the Charter is referring to here, the committee has no difficulty with recommending Norwegian support.

However, the article could also be interpreted as a requirement to conduct regular evaluations of the individual researcher. This would be too burdensome and would not be an efficient use of resources in relation to the benefits gained. The same is true for the follow-up efforts required. If this is the case, the committee cannot recommend that Norwegian institutions support the article.

1.29. Complaints/appeals

Complaints/appeals

Employers and/or funders of researchers should establish, in compliance with national rules and regulations, appropriate procedures, possibly in the form of an impartial (ombudsman type) person to deal with complaints/appeals of researchers, including those concerning conflicts between supervisor(s) and early-stage researchers. Such procedures should provide all research staff with confidential and informal assistance in resolving work-related conflicts, disputes and grievances, with the aim of promoting fair and equitable treatment within the institution and improving the overall quality of the working environment.

The committee's assessment: Acceptable overall. Norwegian institutions do not totally satisfy the Charter on this point, but the trend is moving in the right direction.

At present, there is no ombudsman scheme in place, but several institutions have considered, or are considering, establishing such a scheme. Many institutions are updating and improving their regulations and routines for notification and conflict management, and ombudsman schemes and the like will probably be part of this. It should be emphasised, however, that a well-functioning scheme should focus primarily on offering guidance and mediation at the earliest stage possible.

In the committee's view, Norwegian institutions do not satisfy the requirements in the Charter on this point, but they are moving in a direction that will bring them into compliance with the Charter.

In contrast to other countries such as Sweden, Norway does not allow the appeal of appointment decisions, cf. the Public Administration Act, section 3, second paragraph, second sentence. This is nonetheless viewed as acceptable because the Charter clearly assumes that schemes for complaints and appeals will comply with national legislation.

1.30. Participation in decision-making bodies

Participation in decision-making bodies

Employers and/or funders of researchers should recognise it as wholly legitimate, and indeed desirable, that researchers be represented in the relevant information, consultation and decision-making bodies of the institutions for which they work, so as to protect and promote their individual and collective interests as professionals and to actively contribute to the workings of the institution.

The committee's assessment: Acceptable.

Representation of researchers on decision-making bodies, including on the boards of institutions, is established under Norwegian law in addition to being a long-standing tradition.

1.31. Appointment and recruitment

Recruitment

Employers and/or funders should ensure that the entry and admission standards for researchers, particularly at the beginning of their careers, are clearly specified and should also facilitate access for disadvantaged groups or for researchers returning to a research career, including teachers (of any level) returning to a research career.

Employers and/or funders of researchers should adhere to the principles set out in the Code of Conduct for the Recruitment of Researchers when appointing or recruiting researchers.

The committee's assessment: Acceptable.

The minimum requirements and criteria for ranking applicants are stipulated in legislation and regulations, and are also stated in vacancy announcements. These criteria may be adapted according to the type of individual sought for a specific post – for example, a person with prior experience from working life versus a younger applicant. It is acceptable that this will vary based on the institution's research and recruitment strategy. To carry out a targeted recruitment strategy, though, it is not enough to have regulations in place; a thoroughly prepared recruitment policy is also needed. Formulating such a policy requires great effort, but can yield great rewards. Progress made in this area appears to vary among institutions.

The main problem for recruitment in Norway, however, is that the application process is far too time-consuming. Too much time is used for each stage of the process, and the stages are not adequately integrated with one another, which leads to downtime. This is a major problem, and a broad-based, coordinated effort is needed to improve the situation. This applies to the process of assessment and selection as well as to administrative procedures.

In spite of this, the committee finds this article to be acceptable.

Section 2: The European Code of Conduct for the Recruitment of Researchers

2.1. Recruitment

Recruitment

Employers and/or funders should establish recruitment procedures which are open, efficient, transparent, supportive and internationally comparable, as well as tailored to the type of positions advertised.

Advertisements should give a broad description of knowledge and competencies required, and should not be so specialised as to discourage suitable applicants. Employers should include a description of the working conditions and entitlements, including career development prospects. Moreover, the time allowed between the advertisement of the vacancy or the call for applications and the deadline for reply should be realistic.

The committee's assessment: Acceptable on most, but not all, points. In general, Norway has difficulties with the effectiveness of the appointments process. The

committee does not recommend that it be made standard practice to include information about career development opportunities in vacancy announcements or job descriptions.

Research and teaching posts are usually announced through public channels, and often outside of Norway as well. Information about vacant posts is easily accessible, and in many cases is written in English as well as Norwegian. Established, well-known national and international portals are used actively.

Vacancy announcements follow designated templates, and along with the job description they provide detailed information about job requirements, etc. Application deadlines are set according to fixed schedules and allow adequate time for response. In addition, it is always possible to contact a person who can provide additional information.

The Charter also states that recruitment procedures must be “efficient”. The committee has already discussed the difficulties in this regard and refers to its comments under article 1.31 above.

“Career development prospects” are generally not mentioned in vacancy announcements or in other information given to applicants. The committee sees no reason to include such information as there is no precedence for doing so and there is little reason to believe that it would work well. One possible exception might be in the case of tenure-track posts. At present, this procedure is not in active use, but some institutions are considering the matter.

2.2. Selection

Selection

Selection committees should bring together diverse expertise and competences and should have an adequate gender balance and, where appropriate and feasible, include members from different sectors (public and private) and disciplines, including from other countries and with relevant experience to assess the candidate. Whenever possible, a wide range of selection practices should be used, such as external expert assessment and face-to-face interviews. Members of selection panels should be adequately trained.

The committee’s assessment: Acceptable overall.

The term “selection committee” may give the impression that a committee selects the person who will be appointed to a post. Traditionally in Norway, an evaluation committee makes a recommendation as to which applicant is the best qualified, but the actual selection is made by the recruiting institution, which bases its decision on several grounds – the evaluation committee’s statement traditionally being the most important of these. In recent years, the process following the evaluation has been strengthened. A common procedure is that the academic department, after reviewing the evaluation committee’s statement, selects one or more applicants for a trial lecture and interview, and the department is responsible for managing this part of the process. An overall recommendation is then submitted to the appointing authority.

The procedure described above applies to appointments to permanent posts. For doctoral and post-doctoral research fellowships, the process is often simpler. Nevertheless, the main point is that process consists of two stages, in which the initial assessment is followed by the final selection. The committee therefore recommends that the Charter be amended somewhat on this point.

Otherwise, the committee agrees that it is good practice to ensure broad-based representation on assessment committees. The requirement for gender balance is stipulated by law, and is discussed under article 1.19 above. International committee members are used when it is deemed beneficial, is not too costly and will not unnecessarily delay the process. In recent years, the use of trial lectures (or trial concerts and the like in some fields) and interviews has become more common. This is normally not handled by the assessment committee but is carried out at a later stage, cf. the discussion above.

Instructions for assessment committees have been drawn up, but no other training is given in how to conduct assessments of this kind. In the committee's view, the benefits gained from such training would not justify the resources required. It is enough that the committee's chair or administrator is an experienced person who is able to offer guidance to the other members. Members of assessment committees are selected on the basis of their professional reputation. It is not common, or desirable, to expand the committees or to replace the academic members with persons from the public and private sector. Aside from the two exceptions mentioned in this paragraph, which the committee does not support, the guidelines for appointments are acceptable.

2.3. Transparency

Transparency

Candidates should be informed, prior to the selection, about the recruitment process and the selection criteria, the number of available positions and the career development prospects. They should also be informed after the selection process about the strengths and weaknesses of their applications.

The committee's assessment: Some points are problematic and should not be accepted in their current form.

The statement in the first sentence is acceptable, but the committee does not support the content of the second sentence.

Those applicants regarded as best suited for a permanent post within the higher education system receive feedback from the assessment committee on their applications. This is done by providing the applicants with a copy of the assessment committee's recommendation to the institution, which includes a deadline for comments from the applicant. Informing all applicants – and there may be many – of the strengths and weaknesses of their applications would be too costly in terms of time as well as money, and the committee can therefore not support such a scheme. Information about

subsequent procedures, interviews, trial lectures, assessments of personal suitability for the post in question, etc. is often sensitive and must be handled with discretion.

2.4. Evaluation of qualifications

Judging merit

The selection process should take into consideration the whole range of experience of the candidates. While focusing on their overall potential as researchers, their creativity and level of independence should also be considered.

This means that merit should be judged qualitatively as well as quantitatively, focusing on outstanding results within a diversified career path and not only on the number of publications. Consequently, the importance of bibliometric indices should be properly balanced within a wider range of evaluation criteria, such as teaching, supervision, teamwork, knowledge transfer, management of research and innovation and public awareness activities. For candidates from an industrial background, particular attention should be paid to any contributions to patents, development or inventions.

The committee's assessment: Acceptable.

The committee also regards this as good practice for the process of assessing applicants. At the University of Bergen, regulations require the use of the following criteria when applicants are assessed for appointment to professorships:

- Scientific qualifications
- Pedagogical qualifications
- Dissemination activities
- Other professional qualifications
- Administrative qualifications

In general, these criteria are also appropriate for other institutions and other job categories although the process must be adapted to the post concerned. For appointments to doctoral research fellowships, for example, the applicant's qualifications from a master's degree programme and the quality of the project description usually comprise the most important basis for evaluation.

The main point, however, is that the applicant's overall qualifications must undergo a broad-based evaluation that is adapted to the nature of the post. According to long-standing practice in Norway, it would be clearly inadequate to conduct a strictly quantitative assessment in which, for example, the applicant with the most articles in peer-reviewed journals is judged to be the best researcher.

2.5. Variations and deviations in the chronological order of entries on CVs

Variations in the chronological order of CVs

Career breaks or variations in the chronological order of CVs should not be penalised, but regarded as an evolution of a career, and consequently, as a potentially valuable contribution to the professional development of researchers towards a multidimensional career track. Candidates should therefore be allowed to submit evidence-based CVs, reflecting a representative array of achievements and

qualifications appropriate to the post for which application is being made.

The committee's assessment: Acceptable.

Also in this context, it is important to note that the evaluation and selection process must be built on a broad-based assessment in which there is latitude to give priority to a number of different factors – expertise of both a formal and an experiential nature. However, an applicant's non-traditional background, such as experience from business or industry, will not necessarily be seen as an advantage in the evaluation process. Put simply: Such experience is advantageous only if it is relevant. In other words, it is the discretionary assessment of the applicant's overall qualifications that counts.

2.6. Recognition of mobility experience

Recognition of mobility experience

Any mobility experience, e.g. a stay in another country/region or in another research setting (public or private) or a change from one discipline or sector to another, whether as part of the initial research training or at a later stage of the research career, or virtual mobility experience, should be considered as a valuable contribution to the professional development of a researcher.

The committee's assessment: Acceptable.

The committee agrees with the principle stated here. It seems to us that mobility is highly valued in many research communities and that it is viewed in a positive light when applicants are assessed, although this is not automatically the case. When applying for a vacant post, applicants must document the relevance and value of a stay in another country or other instance of mobility, including "virtual mobility".

2.7. Recognition of qualifications

Recognition of qualifications

Employers and/or funders should provide for appropriate assessment and evaluation of the academic and professional qualifications, including non-formal qualifications, of all researchers, in particular within the context of international and professional mobility. They should inform themselves and gain a full understanding of rules, procedures and standards governing the recognition of such qualifications and, consequently, explore existing national law, conventions and specific rules on the recognition of these qualifications through all available channels.

The committee's assessment: Acceptable.

All qualifications deserve to be recognised, and the committee regards the description here as good practice and a goal for how far-sighted and informed those who "hold the purse strings" should be. However, each institution cannot be responsible for carrying out all efforts in this area.

2.8. Qualifications

Seniority

The levels of qualifications required should be in line with the needs of the position and not be set as a barrier to entry. Recognition and evaluation of qualifications should focus on judging the achievements of the person rather than his/her circumstances or the reputation of the institution where the qualifications were gained. As professional qualifications may be gained at an early stage of a long career, the pattern of lifelong professional development should also be recognised.

The committee's assessment: Acceptable.

This article corresponds with what is regarded in Norway as good practice.

2.9. Post-doctoral appointments

Postdoctoral appointments

Clear rules and explicit guidelines for the recruitment and appointment of postdoctoral researchers, including the maximum duration and the objectives of such appointments, should be established by the institutions appointing postdoctoral researchers. Such guidelines should take into account time spent in prior postdoctoral appointments at other institutions and take into consideration that the postdoctoral status should be transitional, with the primary purpose of providing additional professional development opportunities for a research career in the context of long-term career prospects.

The committee's assessment: Norwegian institutions do not satisfy the requirements of the Code on this article, and improvements are needed.

The overall statutory framework for this area consists of the Civil Servant Act with corresponding regulations and the "Forskrift om ansettelsesvilkår for stillinger som postdoktor, stipendiat, vitenskapelig" ("Regulations governing employment terms for post-doctoral posts, research fellowships, research assistants, residents, etc.") (<http://www.lovdato.no/for/sf/kd/kd-20060131-0102.html>). These statutes provide only a formal framework; it is the responsibility of the institutions to formulate their own policies and to establish guidelines for implementing these policies. This is only partially the case today, and some work is needed before the sector is able to fulfil the requirements of this article. In general, however, the committee finds the article to be acceptable.