

NTNU's Action Plan for the Implementation of the Charter and Code - practice and improvement measures 2010-2011



On 19 November 2008, NTNU signed the European Charter for Researchers (the Charter) and the European Code of Conduct for the Recruitment of Researchers (the Code). In this way, NTNU wishes to support the European initiatives to promote researcher mobility in Europe (Euraxess). At the same time, we regard the Charter and Code as instruments for increasing awareness and quality in NTNU's internal work in recruitment, working conditions and career development for researchers.

The 40 principles from the Charter and Code concern four areas:

- I. The researcher's ethical and professional responsibility
- II. Recruitment
- III. Working conditions
- IV. Research training and career development

NTNU's action plan was approved by the Board on 23 February 2010. The document shows the status for the implementation of the Charter and Code at the beginning of 2010. The principles for the Charter and Code are summarized in the introduction of each of the four areas. This is followed by a brief description of NTNU's practice and some of the challenges that the University wishes to address through specific improvement measures at institutional level in 2010-2011.

I. The researcher's ethical and professional responsibility

A researcher's academic and scientific responsibility is one of the main themes in the Charter for Researchers. Researchers are expected to expand the frontiers of scientific knowledge and, through dissemination, help to make it possible for the results to benefit the community at large. Researchers must comply with legislation, regulations and established codes of research ethics; they must ensure that their data are secure and respect intellectual property. Researchers must satisfy the contractual and legal obligations of their employer and contractor, and must cooperate with the employer and contractor in the evaluation of the research that is done. The institution can assist the researcher through facilitation and quality assurance.

Research ethics¹

Section 1-5 of the Act relating to Norwegian Universities and University Colleges is based on the same principles as the Charter for Researchers regarding academic freedom and responsibility. Transparency and a high level of ethical awareness are to characterize all aspects of NTNU's activities.

Researchers will sometimes face difficult ethical dilemmas in their work. NTNU's Ethics Portal is intended to meet some of the needs for information and serve as an interactive meeting place for discussion and reflection on ethical dilemmas in research. The extensive

¹ In the standard template published on the European Commission Euraxess website, the 40 principles in the Charter and Code are numbered. Research ethics are discussed in clauses 1, 2, 3 and 6 in the standard template. NTNU applied the standard template in its self-assessment process in autumn 2009.

legislation and guidelines that exist should help to ensure best practice in terms of research ethics. Supervision by experienced researchers and discussions in the groups of researchers will also be important. In addition, for certain types of research, there will be requirements for prior approval from the data privacy authorities, the Norwegian Data Inspectorate or the regional committee for ethics in medical and health research. It must be possible to verify methods, and data must be stored securely for future use or checking. There are institutional and national procedures for dealing with breaches of the standards and regulations governing research ethics.

Improvement measure:

- As an element in improving the quality of the organized research training programme and preparing candidates for work in and outside academia, NTNU will strengthen the competence of PhD candidates with respect to research ethics.

Deadline: 2011

Contractual and legal obligations²

Each researcher has the independent responsibility to ensure that his or her own research is conducted in compliance with legislation, guidelines, and contractual obligations in effect. Quality assurance and the handling of non-conformances is a managerial responsibility in NTNU's internal quality control system. The researcher will often take part in externally funded research projects. The project manager is then responsible for ensuring compliance with the regulations in force and fulfilment of the terms of the contract. NTNU's line manager at the relevant level will be responsible for the commitment of resources to such externally funded projects.

For researchers, large externally funded projects may involve many challenges. These include the capacity for project management. In addition to reduced teaching duties for a period, various forms of project support in the application and implementation phases may be important for the researcher. Researchers may also need training and skills development to master new roles as project managers or line managers.

Improvement measures:

- NTNU's skills development programmes include goal-oriented measures for new line managers at department level, as well as more general courses in project management/project methodology.

Deadline: annual.

- It is desirable to strengthen the support network around researchers in large externally funded projects. The choice of actions to be taken is to be adapted to the needs of the academic environments.

Deadline: ongoing process.

Relevance to society, dissemination and innovation³

The University's social responsibility is reflected in the strategy "NTNU 2020 – internationally outstanding" and in the way that the university perceives its three primary responsibilities to:

- develop and manage knowledge in interaction with society

² Cf. clauses 4, 5 and 6 in the standard template.

³ Cf. clauses 3, 8, 9, 31 and 32 in the standard template.

- offer research-based education that is of high quality and relevance to the individual and society at large
 - promote the renewal of society and contribute to creating value and well-being
- NTNU has wide-ranging externally funded activities in which many projects have user participation.

Great emphasis is placed on publishing research results in international and national refereed journals. However, dissemination to the general public is also valued by the University. Students frequently participate in publications, often as co-authors with their supervisors.

The University has a long tradition of innovation, but it was only in 2003 that it could assume the right of ownership of research-based inventions. Clarification of the University's IP policy internally and externally will be a high-priority task in the future.

Improvement measure:

- To create a predictable framework for managing the intellectual property from publicly funded research, NTNU will further develop its IP policy.
Deadline: 2010.

II. Recruitment

The Code of Conduct for the Recruitment of Researchers emphasizes a comprehensive and quality-driven recruitment process with requirements for clear and well-defined announcements of positions, a transparent and effective process with ongoing information to the applicants, emphasis on assessment and clear requirements for the position, as well as recognition of the value of qualifications such as mobility experience and other background experience.

Recruitment⁴

NTNU wishes to recruit excellent researchers from Norway and abroad to researcher training positions, research projects, and permanent academic positions. NTNU recognizes the value of collaborative skills as well as individual creativity. NTNU's Regulations for Academic Positions stipulate the procedures for announcement of positions, candidate selection and appointments in accordance with the Code of Conduct. The general rule is that all positions are publicly advertised. In addition to the academic assessment, a trial lecture, interview, and check of references are part of the basis for the recommendation of candidates. Through NTNU's HR project, the entire recruitment process will be reviewed in terms of development, simplification and procedural revisions.

Improvement measures:

- To avoid the loss of talented candidates during the recruitment process, efforts are being made to introduce revisions and simplifications that will speed up the appointment process.
Deadline: 2010

⁴ Cf. clauses 12, 13, 14, 15 and 16 in the standard template.

Researcher mobility⁵

NTNU recognizes the value of researcher mobility in its recruitment processes, but there may be practical and social barriers for international researchers. For incoming researchers, language proficiency is one of these barriers. There are opportunities to teach in English at NTNU, but researchers in permanent academic positions need to master a Scandinavian language within three years. NTNU offers language training for international researchers.

NTNU is strengthening its welcome programme and support services for international researchers (Euraxess Mobility Services). A centre for researcher mobility and introduction of international researchers to the University is being established to support the work of the faculties and departments. The centre will contribute to assisting the professional arrangements at the administrative and practical levels for incoming international staff and their families. The work includes dealing with national regulations, and local and internal support at NTNU.

Improvement measures:

- NTNU's support service for international researchers has completed the planning stage and the centre will be established in 2010. In the initial phase, focus will be on the immigration processes, accommodation, careers for partners, and the publication of relevant information in English on NTNU's website.
Deadline: 2009-2013.

III. Attractive working conditions

The Charter for Researchers provides recommendations about how institutions can create attractive working conditions for researchers. The research environment should be stimulating with a good research infrastructure. Those providing the funding must ensure that adequate resources are made available for completion of the research project. As far as possible, researchers are to be given long-term employment contracts with salary and pension entitlements in compliance with national law. Institutions should offer a good working environment with flexible work arrangements adapted to individual needs. Non-discrimination and equal opportunity should characterize the workplace. Researchers should participate in codetermination and decision-making processes at the institution, but should also have access to procedures to resolve conflicts.

Employment contract, salary, and incentives⁶

In accordance with the Working Environment Act, all researchers at NTNU have a written employment contract. PhD candidates and postdoctoral fellows are appointed for a fixed term of years. Researchers may be appointed temporarily for a project or for activities that are not organized on a permanent basis. Academic staff who are engaged for permanent teaching or management tasks are entitled to tenured employment. Researchers have contractual salaries and the same attractive social benefits as public-sector employees in Norway.

The Charter for Researchers provides for a system of rewards based on regular evaluation of the researcher's efforts by the employer. Independent evaluation committees are normally used in Norway in connection with appointment to a position or applications for promotion (see Chapter IV.). Evaluation and reward of researchers also take place through negotiations

⁵ Cf. clauses 17, 18, 19, and 29 in standard template.

⁶ Cf. clauses 11, 22, 25, and 26 in standard template.

between the social partners. NTNU provides for a differentiated pay policy in connection with appointments as well as throughout the researcher's career. Academic staff are to be given priority. NTNU's personnel policy gives individual managers the opportunity to reward their most highly skilled staff through exceptional pay increases and special arrangements for infrastructure as well as other incentives.

Improvement measures:

- The personnel policy allows for a greater degree of differentiation with respect to rewarding the most highly skilled researchers. To exploit these opportunities to a greater extent than at present there is to be increased awareness among managers and the concept needs to mature in the academic environments.

Deadline: ongoing process.

Non-discrimination and equal opportunity⁷

Our value statement stipulates that NTNU is to promote tolerance irrespective of gender, philosophy of life, and culture. Norwegian working life is characterized by flexible work arrangements adapted to the functional capacity and life stage of the individual. There are good schemes for parental leave, and employees with children can have reduced working hours. Older employees have at least an extra week of holiday leave. After the age of 70, it is possible to be associated with NTNU as a professor emeritus. As a party to the agreement with the social partners on Inclusive Working Life, NTNU has focused on reducing absence through illness. Equal opportunity initiatives have high priority at NTNU.

Improvement measures:

- The action plan for gender equality 2007-2010 includes start-up packages, qualification fellowships, and mentor programmes for females in academic positions. An objective for 2010 is 50% females among new employees in positions that require a doctoral degree.

The results are to be evaluated and the new action plan is to be adopted in 2010.

Deadline: 2010

Participation and codetermination⁸

Temporary and permanent academic staff are represented in governing bodies/management teams at all levels at NTNU. The University will also strengthen employee involvement and promote good internal communication between the staff and management.

Improvement measures:

- In 2009, NTNU prepared action plans for codetermination and internal communication at institution and faculty level, which will now be implemented.

Deadline: annual audit.

Research and work environment⁹

NTNU offers researchers a satisfactory research infrastructure and has a variety of laboratories that have crucial importance for research and education. There is systematic work with health, safety, and the environment issues in all laboratory activities. NTNU wishes to have a working and learning environment that combines creative interaction, constructive

⁷ Cf. clauses 20, 24, and 27 in the standard template.

⁸ Cf. Clause 35 in the standard template.

⁹ Cf. clauses 7, 23, and 34 in the standard template.

problem-solving and critical assessment. Researchers and managers have a common responsibility to create an environment that is based on these values. Employee development and appraisal interviews as well as working environment surveys are among the tools used to create a good working environment for the individual and for the academic unit. In conflict resolution the principle of subsidiarity is emphasized, but NTNU has also introduced notification routines to be used if local conflict resolution does not function.

Improvement measures:

- Follow-up of NTNU's working environment survey from the autumn of 2009.
Deadline: spring 2010.
- All employees, including temporarily appointed researchers and PhD candidates, are to be offered an annual performance appraisal.
Deadline: annual.

IV. Research training and career development

To make researcher careers more attractive, the Charter for Researchers and the Code of Conduct recommend that institutions provide organized research training, that the position of post-doctoral research fellow is used for academic development, and that researchers' career development is included in human resources work. Career counselling, mentoring, and supervision arrangements should be included in the HR strategy for researchers. Researchers should make a continual effort to stay up to date in their field. Supervision and teaching should be given priority and recognition in the researcher's career development.

Organized research training and supervision¹⁰

NTNU offers an organized research training programme that leads to the degree of PhD. The objective of the PhD programme is to educate independent researchers at an international level in cooperation with national and international research groups. NTNU's organized research training is intended to meet current and future needs for a high level of expertise in academia and society at large. The organized research training programme consists of active research under supervision, and includes planning and completing an independent PhD project resulting in a thesis and taking a number of courses at doctoral level.

With few exceptions, candidates in organized research training at NTNU are appointed as PhD candidates. In an international context, they have relatively good salaries and terms of employment with the right to social benefits in line with other public-sector employees in Norway.

The faculties are responsible for the PhD education in their subjects, and have the academic and administrative responsibility for their own PhD programmes. The quality of the organized research training is based on selection of the best candidates, good academic supervision and follow-up during the PhD project period, dealing with expressions of concern and non-conformances, providing high-quality courses at PhD level, and high quality in the assessment and completion of the disputation. NTNU will develop and enhance quality in all aspects of the PhD programme. This initiative will include the implementation of the qualifications

¹⁰ Cf. clauses 33, 36, 37, and 40 in the standard template.

framework and quality assurance of courses. The quality of research projects remains the most important factor and must continue to have the greatest focus.

Improvement measures:

- NTNU will develop and enhance the quality of the organized research training throughout the PhD programme: improving the visibility of the education, selection of PhD candidates and supervisors, supervision, implementation, the course component, completion, and disputation. A separate follow-up plan sets out responsibilities and deadlines for the various parts of the programme.
Deadline: 2010.

Career development¹¹

An objective of the personnel policy is that NTNU's employees will develop their academic and social skills. Competence and career development should be a natural topic to discuss in researchers' annual performance appraisal with their immediate superior. Many people are concerned with finding solutions that will provide more uninterrupted time for research. Participation in international conferences and projects will normally advance the careers of researchers. The offer of a research sabbatical every 5 to 7 years is a priority for academic staff with tenure. As a rule, academic staff will divide their work time between research and teaching/supervision. For academic staff without formal teaching qualifications, training in university teaching is compulsory. Many PhD candidates are offered one year of required teaching duties to provide a variety of relevant experience for a future academic career. Researchers are also encouraged to take managerial responsibility. NTNU's academic managers at department and faculty level are regularly offered managerial training. NTNU also provides internal training to enhance more general competence and skills, such as courses in project management or in media training.

In Norway, the "promotion system" provides an opportunity for advancement through the academic ranks without the need to apply for an advertised position. Associate professors can submit an application for promotion to professor and have their competence assessed by a national committee with Norwegian and international peers. An applicant who is considered competent will have the right to the title and salary of a professor.

Improvement measures:

- Performance appraisals are to be used as a basis for skills and career development.
Deadline: ongoing process.
- NTNU wishes to improve the opportunities for researchers who want to take sabbatical leave.
Deadline: 2011.
- To encourage more females to apply for promotion in their academic careers, NTNU will offer internal training and guidance in writing applications for promotion.
Deadline: 2011.

¹¹ Cf. clauses 11, 21, 24, 28, 30, and 38 in the standard template.