



United Nations  
Educational, Scientific and  
Cultural Organization

Ref.: CL/4181

Subject: **Second consultation on the implementation of the  
Recommendation on the Status of Scientific Researchers (1974)**

Dear Minister,

Further to 200 EX/Decision 16 (II) on the monitoring of the 1974 Recommendation on the Status of Scientific Researchers, I am now launching the second consultation, which will result in a consolidated report covering the period from 2013 to 2016 to be submitted to the 202nd session of the Executive Board, and subsequently to the 39th session of the General Conference in 2017.

The monitoring of the 1974 Recommendation can help ensure that scientific communities in all countries contribute effectively to sustainable development and peace for present and future generations. The 2030 Agenda for Sustainable Development, foresees the strengthening of the science policy-society interface and, in its SDG Targets 17.6 and 17.8 respectively, envisages to “enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing” and to “fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least-developed countries by 2017... ”.

In order to facilitate the preparation of reports by Member States on the implementation of the 1974 Recommendation, the Executive Board approved, at its 200th session, the attached guidelines containing a questionnaire, which will be circulated to Member States in English and French through this circular letter. The guidelines and a questionnaire will be available for download (in Word and PDF formats) in Arabic, Chinese, English, French, Russian and Spanish here: <http://en.unesco.org/themes/ethics-science-and-technology>.

It is recommended that the questionnaire be filled in and submitted by the ministry responsible for scientific research, training and technological development, or equivalent. Only one questionnaire per country should be submitted, and it will represent the official country report.

I invite you kindly to complete your answers in a participatory manner, in coordination with relevant national stakeholders including scientific societies, scientists, UNESCO UNITWIN Chairs, UNESCO Centres and Clubs, non-governmental organizations working in these areas and all those taking action to carry out the principles of this Recommendation, as well as your National Commission for UNESCO, with as much information as there is available.

You are kindly requested to transmit the original hard copy of your responses, in English or French, to Ms Nada Al-Nashif, Assistant Director-General for the Social and Human Sciences, by post to: UNESCO, 7 place de Fontenoy 75352 Paris 07 SP, France.

To optimize the handling of the questionnaires, you are requested also to send the advance copy of your completed questionnaire by electronic mail to: [Monitor.questionnaire.1974rec.scientificresearchers@unesco.org](mailto:Monitor.questionnaire.1974rec.scientificresearchers@unesco.org).

The deadline for the receipt of submissions by post and by e-mail is **22 May 2017** (midnight, Paris time).

Should you have any questions, I would invite you to contact the Section of Bioethics and Ethics of Science, in the Division of Ethics, Youth and Sport of the Social and Human Sciences Sector at the e-mail address, indicated above.

Accept, Sir/Madam, the assurances of my highest consideration.

Irina Bokova  
Director-General

Enclosure: guidelines including questionnaire

cc: National Commissions for UNESCO  
Permanent Delegations to UNESCO  
UNESCO Field Offices  
United Nations Office of the High Commissioner for Human Rights

# **GUIDELINES FOR THE PREPARATION OF REPORTS BY MEMBER STATES ON THE IMPLEMENTATION OF THE RECOMMENDATION ON THE STATUS OF SCIENTIFIC RESEARCHERS (1974)**

(Approved by the Executive Board of UNESCO, at its 200th session in October 2016 by 200 EX/Decision 16(II))

## **I. Introduction**

### **A. About the 1974 Recommendation on the Status of Scientific Researchers**

1. The UNESCO Recommendation on the Status of Scientific Researchers (1974 Recommendation) aims at advancing the objectives of international peace and of the common welfare of mankind. It combines, in one normative statement, considerations on science ethics and on science policies that sketch a strong framework to support science for society. It promotes a fair and appropriate status of scientific researchers and informs adequate national science, technology and innovation policies, which “encourage and assist the capacity of scientific researchers to perform research and experimental development in an enhanced spirit of responsibility towards man and his environment” and which ensure that societies use knowledge from all scientific fields in a responsible manner. It was adopted on 20 November 1974 by the General Conference of UNESCO at its 18th session (18 C/Resolution 40). The General Conference, at its 37th session in November 2013, underlining the importance and full relevance of the 1974 Recommendation, decided to revise it by 2017 (37 C/Resolution 40) in order to reflect the challenges for scientific researchers which emerged over the forty years since its adoption, and to improve its effectiveness and monitoring.

2. The General Conference “recommends that Member States should apply” the provisions included in the 1974 Recommendation “by taking whatever legislative or other steps that may be required”, including bringing “this recommendation to the attention of the authorities, institutions and enterprises responsible for the conduct of research and experimental development and the application of its results, and of the various organizations representing or promoting the interests of scientific researchers in association, and other interested parties”. While setting common approaches, standards and practical measures, the 1974 Recommendation leaves significant latitude for local adjustments in its application, fully taking into account “the great diversity of the laws, regulations and customs which, in different countries, determine the pattern and organization of research work and experimental development in science and technology”.

3. The 1974 Recommendation is applicable to all scientific researchers, irrespective of: (a) the legal status of their employer, or the type of organization or establishment in which they work; (b) their scientific or technological fields of specialization; (c) the motivation underlying the scientific research and experimental development in which they engage; (d) the kind of application to which that scientific research and experimental development relates most immediately (paragraph 2). This point is important with respect to the application of the principles enshrined in the 1974 Recommendation to researchers working in the private sector.

4. The 1974 Recommendation covers such areas as: the role of science in national policy-making (paragraphs 4-9); scientific education and training (paragraphs 10-12); the professional rights and responsibilities of scientific researchers (paragraphs 13-19); and employment and career development of scientific researchers (paragraphs 20-42). The topics closely related to these areas include: science for peace, development and international cooperation; education in scientific ethics; inculcating

scientific integrity and ethical principles of scientific practice; material and moral support for science and technology (based on public interest, accountability and transparency); the creation of material and moral conditions beneficial to the work of all those who are professionally involved in science, in particular young scientists; and respect for universal human rights and fundamental freedoms, in particular the principle of non-discrimination and freedoms of thought, opinion and expression, movement, association, and authors' rights. Over time, the rapid development of science and technology has added other topics, which are also closely related to the original principles of the 1974 Recommendation, such as: the new conditions of scientific research and its funding in the context of globalization; the increasing role of science for sustainable development, the struggle against environmental degradation and climate change, as well as for prevention of technological and natural disasters; the preservation of life-support systems on Earth to ensure its survival; the relationship between science and society and the growing requirement to include civil society in public debate and decision-making on the use of new innovative technologies; ensuring non-discrimination and gender equality in scientific research and in sharing its benefits; the ethical use of traditional and indigenous knowledge. These topics are reflected in the questionnaire of the 2013-2016 monitoring exercise.

## **B. Reporting obligations**

5. The General Conference, at its 18th session, “recommends that Member States should report to it, on dates and in a manner to be determined by it, on the action they have taken to give effect to this recommendation”. Moreover, in accordance with Article VIII of UNESCO’s Constitution “Each Member State shall submit to the Organization [...] reports [...] on the action taken upon the recommendations and conventions referred to in Article IV, paragraph 4.”

6. All Member States, given the political commitment to, and moral force of the 1974 Recommendation and their reporting obligations, should provide information on legislative measures that have been taken pursuant to the 1974 Recommendation and the ways in which national Science, Technology and Innovation (STI), as well as other relevant policies and programmes, correspond to its provisions. Information supplied by Member States should demonstrate how laws and practices comply with the commitments under the 1974 Recommendation, describing legal norms, as well as actual implementation.

7. For the full text of the 1974 Recommendation please follow this link:  
[http://portal.unesco.org/en/ev.php-URL\\_ID=13131&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/en/ev.php-URL_ID=13131&URL_DO=DO_TOPIC&URL_SECTION=201.html)

## **II. How to fill in the questionnaire**

8. Member States are invited to complete Parts III and IV below and submit the monitoring questionnaire to UNESCO.

(a) Only one questionnaire, submitted by the officials of the organizations qualified to represent their government on this matter, will be considered as the official national report for each Member State. It is recommended that the questionnaire be filled in and submitted by the ministry responsible for scientific research, training and technological development, or equivalent, based on consultations with various stakeholders at the national level.

(b) Prior to completing the questionnaire, Member States are encouraged to organize the necessary consultations within and outside the ministry responsible for scientific research and training and technological development/government, including with key scientific research institutions, scientific societies, scientists, relevant civil society partners, such as non-governmental organizations, UNESCO UNITWIN Chairs, UNESCO Centres and Clubs, the National

Commissions for UNESCO and all those taking action to realize the principles of the 1974 Recommendation, to collect the information/data.

- (c) The questionnaire, to be circulated to Member States in English and French through the Circular Letter of the Director-General of UNESCO, can be downloaded (in Word or PDF format) here: <http://en.unesco.org/themes/ethics-science-and-technology>. The questionnaire is available in English, French, Arabic, Chinese, Russian and Spanish.
- (d) The questionnaire should be filled in **either in English or French**, which are the working languages of the UNESCO Secretariat, so that the provided replies could be duly reflected in the consolidated report on the implementation of the 1974 Recommendation in 2013-2016, which the Director-General was invited to submit to the 202nd session of the Executive Board prior to its transmission to the 39th session of the General Conference in 2017.
- (e) Member States are requested to submit the questionnaire as follows:
  - (i) To optimize the handling of the questionnaires, all respondents are requested to send the questionnaire by electronic mail to:  
**Monitor.questionnaire.1974rec.scientificresearchers@unesco.org**  
or by fax + 1 33 45 68 55 52.
  - (ii) The officials of the organizations of Member States, qualified to submit the questionnaire on behalf of their governments, are requested, when sending the questionnaire by electronic mail to the UNESCO Secretariat, to copy the National Commission for UNESCO and the Permanent Delegation to UNESCO of their countries, whose email addresses may be found here: <http://en.unesco.org/countries>.
  - (iii) The original typewritten paper copy of the questionnaire should be sent to: **The Assistant Director-General of UNESCO for Social and Human Sciences, 1974 Recommendation on the Status of Scientific Researchers, UNESCO, 7 place Fontenoy, 75352 Paris 07 SP, France.**
  - (iv) All respondents must submit the questionnaire to UNESCO **before midnight (Paris time) of Monday 22 May 2017**. This is the final submission deadline, which is not subject to extension.
  - (v) All queries related to the submission of the questionnaire should be addressed to the UNESCO Secretariat:  
Ms Dafna Feinholz, Chief, Section of Bioethics and Ethics of Science, Social and Human Sciences Sector (SHS/BIO);  
Email: [Monitor.questionnaire.1974rec.scientificresearchers\(at\)unesco.org](mailto:Monitor.questionnaire.1974rec.scientificresearchers(at)unesco.org);  
Tel.: +33 1 45 68 38 57.

### III. Information about the respondent

1. Country:

2. Name and title of the respondent:

3. Institution/Department:

4. Email address:

5. Full postal address:

6. Telephone:

7. Date of submission:

8. Signature: Minister of scientific research, training and technological development or other designated official (e.g. Director-General of STI, Secretary-General of the UNESCO National Commission or other)

### IV. Questionnaire

**(to be submitted to UNESCO before midnight (Paris time) of Monday 22 May 2017)**

1. **Are the guiding principles of the 1974 Recommendation (e.g. non-discrimination, freedom and autonomy of scientific researchers, respect for their human rights and fundamental freedoms) reflected in your constitution or domestic legislation?** (Reference: Preamble; Section I. Scope of Application (paragraphs 1-3); Section II. Scientific researchers in the context of national policy-making (paragraphs 4-9); Section VI. Utilization and exploitation of the present

recommendation (paragraphs 43-45; Final provision (paragraph 46); Annex: International instruments and other texts concerning workers in general or scientific researchers in particular)

No  Yes

2. **If the answer is Yes, please provide the extract from your constitution or domestic legislation where you think these guidelines are reflected.**

3. **If the answer is No, please provide any additional information if any measures have been taken, or are under consideration by your country, to incorporate the guiding principles of the 1974 Recommendation in constitutional, legal and policy frameworks.**

4. **In the last four years, has there been any specific taskforce, working group, office or other mechanism set up within the government to facilitate the implementation of the above-mentioned principles/topics within the system responsible for scientific research and technological development?**

(a) Yes. Please specify below (e.g. name, department, topic, tasks, etc.)

(b) No

(c) No information available

5. **In the last four years, have any steps been taken to raise awareness about the 1974 Recommendation, with regard to the authorities, institutions and enterprises responsible for the conduct of research and experimental development and the application of its results, and the various organizations representing or promoting the interests of scientific researchers in association, and other interested parties? Below are some possible answers:**

(i) Production of communication materials

(ii) Organization of information sessions at different levels

(iii) Organization of thematic meetings and side-events

(iv) Undertaking surveys and collecting information on the existing policies and mechanisms for the implementation of the 1974 Recommendation, as well as on obstacles and restrictions, and making such information available to the responsible authorities, as well as scientists, scientific societies and all those taking action to realize the principles of the recommendation and counter the

existing obstacles

- (v) Encouraging different stakeholders in the areas of scientific research to develop principles of professional conduct and to establish policies, procedures and educational activities to encourage scientists to implement the principles of the 1974 Recommendation in relations to their professional and ethical obligations as scientific researchers with regard to the integrity of science, promotion of human rights, peace and human wellbeing. Please provide details below.

- (vi) To what extent have the entities mentioned in Question 5 been informed about the 1974 Recommendation?

Not at all  1  2  3  4  5 Fully

- (vi) Other. Please specify below and/or provide additional comments on your choice.

**6. In the last four years, has there been an increased emphasis on the principles of the 1974 Recommendation in any policy concerning the evaluation of scientific research, training programmes and institutions, or of science research funding agencies?**

- (a) Yes. Please specify below in Question 7:
- (b) No

**7. Please indicate all the principles and topics of the 1974 Recommendation on which there has been increased emphasis in the last four years, and how it has been achieved: (please tick all that apply)**

- (i) Promotion of the respect for the autonomy and freedom of research (Reference: Preamble; II. Scientific researchers in the context of national policy-making, paragraph 8; Section IV. The vocation of the scientific researcher, "The civic and ethical aspect of scientific research", paragraphs 14 and 15; Appraisal, paragraphs 35-37)
- (a) *freedom of inquiry* (paragraph 14 (a) and Preamble)
  - (b) *respect for autonomy* (paragraph 14(b))
  - (c) *freedom of opinion and expression, freedom to challenge conventional thought, and freedom from institutional censorship* (paragraph 14 (c))



- (i) Preparation and publication of reports with general assessment of significant developments that affect freedom and responsibility related to the conducting of science and their public discussion
- (ii) Existing or planned legislative instruments to guarantee freedom of inquiry, respect for autonomy, freedom of opinion and expression, freedom to challenge conventional thought, and freedom from institutional censorship of scientific researchers (please provide details below)
- (iii) Existing derogations or exceptions from legislation, regulations or by-laws, which limit freedom of enquiry, respect for autonomy, freedom of opinion and expression, freedom to challenge conventional thought, and freedom from institutional censorship of scientific researchers (please provide details below)
- (iv) Considering cases of individual scientists whose human rights may be infringed
- (v) Establishing institutions to protect the freedom of expression of scientific researchers, such as ombudspersons or equal opportunities officials in science
- (vi) Introducing or enhancing calls for funding scientific research proposals open to all qualified scientific researchers in the country, evaluated by panels of leading independent domestic and non-domestic experts (peer review)
- (vii) Establishing mechanisms for validating the methods adopted in scientific research, such as ethics committees
- (viii) Other. Please specify below and/or provide additional comments on your choice

(d) *the right to disseminate research results and the protection of publications by copyright law* (Preamble; paragraphs 35-37)

- (i) Elaborating public policies (including legislative measures) to ensure the realization of scientists' right to publish research results in a transparent and timely way, including establishing open access repositories

- (ii) Elaborating public policies (including legislative measures) to ensure that the copyright on scientific research publications does not impede open and timely exchange of scientific information and knowledge
- (iii) Other. Please specify below and/or provide additional comments on your choice

(e) Other principles/topics. Please specify below.

(ii) The initial education and training of scientific researchers (Reference: Section III, paragraphs 10 - 12)

(a) *guarantees of equal opportunities for all without discrimination of any kind for initial education and training needed to qualify for scientific research work* (paragraph 11(a))

- (i) Establishing legislation, regulations or by-laws guaranteeing equal opportunities in science, technology, engineering and mathematics (STEM) education and training
- (ii) Existing derogations or exceptions from legislation or regulations, which limit equal opportunities in STEM education and training
- (iii) Elaborating public policies to guarantee equal opportunities by tackling unconscious biases or other aspects of limitations against women or any other group in STEM education and training
- (iv) Other. Please specify below and/or provide additional comments on your choice

(b) *guarantees of equal access to available employment in scientific research for all those who are qualified without any discrimination* (paragraph 11(a))

- (i) Establishing legislation, regulations or by-laws

guaranteeing equal opportunities in access to employment in scientific research

- (ii) Existing derogations or exceptions from legislation or regulations, which limit equal opportunities in access to employment in scientific research
- (iii) Other. Please specify below and/or provide additional comments on your choice

(c) *encouragement of the spirit of community service as an important element in such education and training for scientific workers* (paragraph 11(b))

- (i) Elaborating public policies to encourage community service through material or other incentives
- (ii) Elaborating public policies to incorporate community service in the curricula of STEM higher education careers
- (iii) Other. Please specify below and/or provide additional comments on your choice

(d) *incorporation in the curricula and courses concerning the natural sciences and technology, of elements of social and environmental sciences* (paragraph 12 (a))

- (i) Yes. Please specify (e.g. new pedagogy/ies introduced, in which subject, cross-curriculum themes/projects, etc.)

- (ii) No
- (iii) No information available

(e) Are there any programmes and practices implemented that allow students to experience the scientific integrity, scientific responsibility, freedom in the pursuit of scientific truth, interdisciplinary and scientific international cooperation? *(please tick all that apply)*

- (i) Theoretical science ethics course on research ethics
- (ii) Case studies in science ethics

- (iii) An ethics practicum with emphasis on topics of peer review and human/animal experiments
- (iv) Combination of (i), (ii) and (iii) above
- (v) Participation in international scientific research seminars, lectures, voluntary work/internships in international research institutions;
- (vi) Other. Please specify below

(f) If there are such programmes, has there been an increase in the number of these programmes and practices implemented in the last four years?

- (i) Yes. Please specify (e.g. new pedagogy/ies introduced, in which subject, cross-curriculum themes/projects, etc.)

- (ii) No
- (iii) No information available

(g) Please indicate whether the principles and topics mentioned earlier are reflected in programmes provided outside the higher education system. *(please tick all that apply)*

- (i) Non-formal education
- (ii) Informal education
- (iii) Adult education
- (iv) Media-based education
- (v) No information available
- (vi) Additional information

(iii) Encouragement of the vocation of scientific researchers, in particular among young women and men (Reference: Section IV. The vocation of the scientific researcher (paragraphs 13, 16-19))

(a) *science for peace* (paragraphs 13 and 16)

(i) Yes. Please specify

(ii) No

(iii) No information available

(b) *science for survival and well-being of humankind* (paragraphs 13 and 17)

(i) Fostering research, innovation and knowledge exchange on environmental security issues, including regional environmental problems and human-made disasters

(ii) Other. Please specify below and/or provide additional comments on your choice

(c) *science for socio-economic and cultural development at the national and global levels* (paragraphs 18 and 19)

(i) Yes. Please specify

(ii) No

(iii) No information available

(d) Other principles/topics. Please specify below.

(iv) Provision of conditions for success on the part of scientific researchers (Reference: Section V, paragraph 20)

(a) *moral and material support/funding of scientific research* (paragraph 20(a) and (b))

(i) Developing and implementing measures to increase overall financial support of scientific research, both from public and private funds

- (ii) Developing and implementing measures to increase the number of scientific researchers
- (iii) Defining national and regional criteria and practices, in terms of access to: research funding, mobility, lifelong training, salary and social security in national directives and monitoring their implementation;
- (iv) Creating environment conducive to mobility of scientific researchers, as well of students, scientists and university teaching staff
- (v) Developing measures aimed at individual-oriented funding for different forms of mobility, including short-term mobility options, such as setting up joint (public-private financed) doctoral programmes, shared positions, flexible remuneration schemes, and research institutions operating at the borders between sectors;
- (vi) Other. Please specify below and/or provide additional comments on your choice

(b) *provision of satisfactory and adequate working conditions by all employers of scientific researchers without any kind of discrimination* (paragraph 20(c))

- (i) Elaborating and implementing a set of common standards for working conditions of scientific researchers
- (ii) Other. Please specify below and/or provide additional comments on your choice

(c) Other principles/topics. Please specify below.

(v) Adequate career development prospects and facilities (paragraph 21)

(a) *Providing challenging opportunities for young scientific researchers to develop their research or other scientific careers* (paragraph 21(a) and (d))

- (i) Developing measures to employ young scientific researchers

- (ii) Enabling the availability of medium-range and long-term funding for researchers and projects with strong emphasis on the evaluation of results
- (iii) Encouraging open access to knowledge and open innovation and fostering scientific excellence
- (iv) Promoting mutual recognition of qualifications
- (v) Raising awareness and improving the preparation of mentors, supervisors and scientific advisors to form a 'community of learners' with early-career researchers, making particular efforts to integrate women into research networks
- (vi) Other. Please specify below and/or provide additional comments on your choice

(b) *Ensure that scientific researchers are not subjected, merely by the nature of their work, to avoidable hardship (paragraph 21(b))*

- (i) Elaborating public policies to ensure that scientific researchers are not subjected to avoidable hardship
- (ii) Establishing ombudspersons to defend the interests of scientific researchers *vis-à-vis* hardship and the nature of their work
- (ii) Other. Please specify below and/or provide additional comments on your choice

(c) *Ensure re-adaptation and redeployment facilities as part of planning of careers of scientific researchers (paragraph 21(c))*

- (i) Yes. Please specify

- (ii) No
- (iii) No information available

(d) Other principles/topics. Please specify below.

(vi) Encouragement of the mobility of scientific researchers (Reference: Part V. Conditions for success on the part of scientific researchers "Mobility in general and the civil service in particular" (paragraphs 23-25), "Participation in international scientific and technological gatherings" (paragraphs 26-27), "Access by scientific researchers to positions of greater responsibility with corresponding rewards" (p 28))

(a) *optimum utilization of scientific researchers within the framework of a comprehensive national policy for highly-qualified manpower* (paragraphs 23 and 24(a))

(b) *provision of adequate career development prospects in public research bodies; as well as the need to give scientifically or technologically qualified researchers the option of transferring from scientific research and experimental development positions to administrative and other relevant positions* (paragraphs 24(c), 25 and 28)

(c) *ensuring participation of scientific researchers in international scientific and technological gatherings and their travelling abroad* (paragraphs 26 and 27)

- (i) Developing and implementing measures and programmes aimed at enhancing public-private research collaborations and inter-sectoral mobility between public academia and industry (understood in the widest sense)
- (ii) Developing e-facilities for virtual mobility and networking
- (iii) Providing support for short-term mobility to participate in conferences and workshops
- (iv) Other. Please specify below and/or provide additional comments on your choice

(d) *the periodic review of the material conditions of scientific researchers to ensure that they remain equitably comparable with those of other workers having equivalent experience and qualifications and in keeping with the country's standard of living* (paragraph 24(b))

- (i) Yes. Please specify below



- (ii) No
- (iii) No information available

(e) In the last four years, have new policy initiatives been put in place in your country to encourage the mobility of scientific researchers?

- (i) Yes. Please specify below

- (ii) No
- (iii) No information available

(vii) Protection of scientific researchers in their working environment (Reference: "Protection of health; social security" (paragraphs 29-30))

(a) *Enforcement of biosafety laws in research laboratories* (paragraph 29)

(b) *Adequate and appropriate social security* (paragraph 30)

- (i) Yes. Please specify below

- (ii) No
- (iii) No information available

(c) Other principles/topics. Please specify below.

(viii) Provision of the guarantees for scientific researchers' right to associate, and their organizations' right to support their claims ("The advancement of their various interests by scientific researchers in association" (paragraph 42); Annex: international instruments and other texts concerning workers in general or scientific researchers in particular)

(a) *right to professional associations and learned societies*

(b) *the right to associate in trade unions*

Within the last four years, have any measures been taken concerning the guarantees of: scientific researchers' right to associate, and their organizations' right to support their claims?

- (i) Yes. Please specify below

- (ii) No

- (iii) No information available

(ix) Promotion, appraisal, expression and recognition of creativity (Reference: paragraphs 31 – 41)

- (a) *stimulation of creative performance in the field of science and technology by all scientific researchers* (paragraph 31)
- (b) *appraisal practices designed to stimulate creativity and assist in career development* (paragraph 32)
- (c) *open scientific communication and publication of research results* (paragraphs 34–37)
- (d) *written provisions to be included in the terms and conditions of employment of scientific researchers, stating clearly what rights (if any) belong to them (and, where appropriate, other interested parties) in respect of any discovery, invention, or improvement in technical know-how* (paragraph 40)

- (i) Revising the policies and regulations for assessing scientific research.
- (ii) Elaborating guidelines on open access to scientific publications and research data
- (iii) Other. Please specify below and/or provide additional comments on your choice

(e) Other principles/topics. Please specify below.

8. **Are any prizes or prestigious accolades conferred on scientific researchers in your country?** (*moral support and material compensation for creative effort, prizes and prestigious accolades conferred on scientific researchers (paragraphs 38-39)*)

(a) Yes. Please specify the main 5 prizes below

(b) No

(c) No information available

9. **Compared to four years ago, if there has been little or no progress with relation to the implementation of the 1974 Recommendation, what have been the major obstacles?** (*please tick all that apply*)

(a) No political/policy priority

(b) Insufficient resources (financial, technical human)

(c) Competing demands

(d) Lack of education /pedagogical materials

(e) Other and/or additional comments on your choice:

10. **Compared to four years ago, if progress has been made, what have the enabling factors been?** (*please tick all that apply*)

(a) Political/policy priority

(b) Availability of resources (financial, technical, human)

(c) Increased demand (by the scientific community, policymakers, etc.)

(d) Education/pedagogical materials produced

(e) Other and/or additional comments on your choice:

- 11. Please enter below any other information on the country's implementation of the 1974 Recommendation that you would like to report on.**

You may provide additional information on any question or include any other issue that has not been covered by this questionnaire.

- 12. In the context of the on-going revision of the 1974 Recommendation, please enter below any of your ideas about how the monitoring of it may be reinforced in future.**

Thank you for your kind collaboration.