

**THE EUROPEAN CHARTER FOR RESEARCHERS AND THE CODE
OF CONDUCT FOR THE RECRUITMENT OF RESEARCHERS
HUMAN RESOURCES STRATEGY FOR RESEARCHERS
GAP ANALYSIS AND ACTION PLAN**

August 2016

Institute of Nature Conservation, Polish Academy of Sciences

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1. INTRODUCTION

The Institute of Nature Conservation is an institution of Division II (Biological Sciences) of the Polish Academy of Sciences. The Institute carries out research in the fields of biology (especially conservation biology), ecology and geology. The main task of the Institute of Nature Conservation is to create the scientific basis for modern nature conservation and environmental protection. The Institute's work is centred around two integrating issues: 'Prospects for protection of the natural heritage through sustainable development' and 'Protection and conservation of the natural (biological and geological) biodiversity of Poland'. These issues are studied on species, population and ecosystem levels.

The Institute of Nature Conservation of the Polish Academy of Sciences is one of Europe's few highly specialised institutions working in these fields. The Institute's mission is to acquire scientific knowledge and implement it in the practical conservation of nature, to document biological diversity and the threats to it and to carry out environmental education.

The strategic aims of the Institute are:

- to enhance the role and position of the Institute through high-standard scientific research;
- to foster the professional development of new scientific teams;
- to set standards for monitoring and conservation of biological diversity;
- to popularise the Institute's research results.

There are 63 researchers and specialists employed in the Institute. The Institute is authorised to grant doctorates in the biological sciences.

The beginning of the Institute of Nature Conservation PAS dates back to 1919, when the then Minister of Education appointed the Temporary State Committee of Nature Conservation which was constituted and started its activity in Kraków. In 1925 the Temporary Committee was converted by a governmental decree into the State Council for Nature Conservation (PROP). In December 1952, the Committee was converted into the Research Centre for Nature Conservation, a research unit of the Polish Academy of Sciences. In February 1993, the Centre was upgraded to the Institute of Nature Conservation PAS.

Since 1952, more than 2,000 scientific and popular publications have been published in the Institute's own periodicals and in other journals in the country and abroad. These publications have contributed considerably to the development of knowledge of wildlife conservation, geoconservation and some branches of environmental conservation. The researchers working in the Institute have published their papers in many renowned journals, including: *Nature*, *Ecology*, *Freshwater Biology*, *Oikos*, *Oecologia*, *Biological Conservation*, *Journal of Avian Biology*, *Environmental Journal of Toxicology and Chemistry*, *Microbial Ecology*, *Condor*, *Vegetatio*, *Holarctic Ecology*, *Ekologia*, *Zhurnal Obshej Biology*, *Journal of Applied Entomology*, *Hydrobiologia* and many others, and also in the best national journals.

The Institute is composed of five Scientific Departments, and other units, including: the Centre for Research and Conservation of Mountains Plants, the Centre for Natura 2000 and the Library and Publishing division. There are two field stations belonging to the Institute: the Lower-Silesian Field Station and the Fish Biology Field Station.

The Department of Biodiversity

The Department of Biodiversity carries out research of biological diversity at the species and ecosystem levels concerning the following issues:

- factors affecting the conservation status of biodiversity in terrestrial and aquatic ecosystems;
- methods for population studies and environmental monitoring;
- measures and systems of biodiversity registry.

We follow global trends and directions of the development of biodiversity research and strive to ensure that our research will find an application in conservation biology. Our research is conducted primarily in the terrestrial ecosystems of southern Poland but also outside the country, including Antarctica.

The Department of Ecosystem Conservation

The main topic of the research conducted in the Department is implementation of the modern biology and earth sciences into nature conservation. Researchers study the influence of ecosystem functioning on the evolution of habitat requirements of organisms and the dynamics of their populations. They focus both on scientific research and practical implementation of active species protection (e.g. reintroductions and restitutions of species), behavioural aspects of nature conservation, phenotypic plasticity, population spatial structure (with implications for ecological networks and spatial planning) and ecosystem management (habitat restoration, compensation), especially in relation to areas of Natura 2000. The broad range of habitats (alpine, hydrogenic habitats, xerothermic) and broad range of organisms (birds, amphibians, insects, snails, bivalves and plants) are studied. Special attention is devoted to ecological mechanisms promoting invasive alien species.

The main topics are:

- the influence of habitat selection on population dynamics;
- the environmental effects on the character of biological invasions
(database: www.iop.krakow.pl/ias).

The Department of Geoconservation

The Department of Geoconservation performs complex studies on geodiversity as a principal value of the geoheritage of Polish territory that comprises geological structures and geomorphological elements, as well as anthropogenic transformations of geosystems. The scientific activity of the Department is focused both on the studies of geo(morpho)logical processes and phenomena, as well as on the formulation of scientific principles of geoconservation that provides the preservation of geological and geomorphological sites, and sites of historical mining and quarrying. The inventory and evaluation of geosites (geoheritage), as the fundamental elements of planning of the geoheritage protection, are two of the most important activities of the Department. The applied activity of the Department includes the planning of site formal and practical preservation, as well as the comprehensive geo-education. The documentation of geosites of high scientific/educational value, made in the Department, have been included into the two databases accessible via the website of the Institute of Nature Conservation, PAS, as well as into the digital Central Geological Database 'Geosites' of the Polish Geological Institute. A significant part of the activity of the

Department comprises interdisciplinary studies of the relationships between geodiversity (conditioned, for example, by extreme phenomena such as landslides and floods) and biodiversity that is constrained by hydrological, pedological and morphological transformations. These studies are performed in co-operation with specialists from the Institute (e.g. botanists) or other scientific centres (e.g. palynologists).

The Department of Fauna Conservation

The Department delivers a scientific background for the protection of animals, especially protected species, but also for those that cause ecological and social conflicts. It is involved in country-wide activities documenting and monitoring biodiversity and threats to Polish fauna.

The showcase of the Department's achievements are Red Data Books of animals (vertebrates and invertebrates) and Red Lists of animals i.e. the species deeply endangered by IUCN classification. Currently, researchers of the Department coordinate activities devoted to working out the atlas of distribution of mammals and the atlas of distribution of amphibians and reptiles in Poland. An important field of activity is its research on alien invasive species and their impact on native biocenoses and species.

Researchers of the Department are deeply involved in applied activities. They provide consultation to the Ministry of Environment, the Ministry of Agriculture, the General Directorate for Nature Protection and national parks on issues concerning law regulations, species protection, strategies of species management and conflict resolutions. The most important are national strategies for the protection of the wolf and Eurasian lynx.

Research is based on extensive field work, from classical inventory methodology to modern radiotelemetry and teledetection techniques. Laboratory techniques involve computer modelling and molecular analyses e.g. identifying wolf packs, hybridisation between closely related species or infection by parasites of threatened populations and species.

The Department of Freshwater Biology

The Department of Freshwater Biology focuses its research on the functioning and conservation of water habitats and water organisms. Its special interest focuses on the response of water habitats to anthropogenic pressure. Researchers conduct studies on streams, rivers, springs, dam reservoirs, lakes and oxbow lakes all around Poland, but also in the Antarctic, China, Lithuania and other countries.

Attention is paid to relationships between abiotic and biotic factors, mutual relationships between organisms e.g. within plankton communities, but also plankton-fish, plankton-water birds, fish-water birds, water plants-water animals, the effect of heavy metals on water organisms, contamination and pollution of waters etc. Special attention is paid to cyanobacterial blooms, cyanobacterial toxins and the effect of blooms and toxins on water habitats and animals.

The studies on oxbow lakes focus on the functioning of these ecosystems - which remain one of the most endangered landscape elements - disappearing due to river regulation, dam building and the alteration of rivers and floodplains.

The conducted studies cover different fields of science e.g.: taxonomy (especially diatoms taxonomy), ecology and the conservation of water habitats and organisms. The long-term studies on a deep dam reservoir (30 years of studies) cover different aspects of scientific problems and link them with the implementation of results in practice. The researchers are

actively involved in conservation programmes (e.g. Natura 2000, WFD), preparing the guidelines for the monitoring of water habitats and water organisms.

Field and laboratory work apply classical and new methods such as isotopes techniques.

The Centre for Research and Conservation of Mountains Plants

Researchers work on a practical basis on the variability of traits in the threatened population and the potential of reaction to environmental changes.

Centre for Natura 2000

Tasks of Centre for Natura 2000 are as follows:

- to set scientific standards for selection and functioning of the **Natura 2000** network and for biodiversity monitoring in Poland;
- to compile and analyse information on Natura 2000 species and habitats through a network of national and international experts;
- to cooperate with the government administration on nature conservation;
- to disseminate information on Natura 2000, including monitoring toolkits.

Publishing

The Institute of Nature Conservation publishes the journal *Let's protect Our Indigenous Nature*. This bi-monthly periodical is addressed to professional naturalists and to all parties interested in nature conservation. The aim of the periodical is to popularise the theory and practice of nature conservation by the publication of original studies concerning current issues. The papers are in Polish, with English abstracts.

The Teaching and Dissemination of Knowledge

Although researchers working in the Polish Academy of Sciences are not obliged to teach, they are involved in various activities focusing on the dissemination of knowledge to students, pupils and a public audience. Lectures are conducted for PhD students and classroom activities for schools. The Institute is also responsible for organising scientific meetings, conferences, workshops, science festivals and Earth Days.

2. IMPLEMENTATION PROCESS TIMELINE

June 2015 – the declaration of support for the Charter and the Code;

April 2016 - first meeting of the Working Group for European Charter Implementation;

April - August 2016 - internal gap analysis (template for internal gap analysis and staff survey)

June 2016 - sending the declaration of support to the European Commission;

August 2016 - approval of the action plan and its publication;

End of 2018 - self-assessment;

End of 2020 - external evaluation.

3. METHODS

A letter fully endorsing the principles of the *European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers* was submitted to the European Commission by the Director of the Institute of Nature Conservation Polish Academy of Sciences in June 2016.

Immediately after, in June 2016, the Working Group for European Charter Implementation (WGECI) was established in order to prepare the necessary documentation data. To ensure the bottom-up process, the group consisted of the Institute managers, representatives of scientists and representatives of other employees. Members of the WGECI, except the Institute managers, were designated via secret ballot by the staff of the Institute during the staff general meeting. During the meeting all employees were informed about endorsing the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers by the Director of the Institute of Nature Conservation Polish Academy of Sciences.

The Working Group for European Charter Implementation (WGECI) is as follows:
prof. Henryk Okarma – Director of the Institute
dr hab. Elżbieta Wilk-Woźniak – Deputy Director
dr Wojciech Solarz – scientists’ representative
dr Jan Urban – other employees’ representative

The WGECI has analysed the **Charter & Code (C&C)** principles in view of their implementation at the Institute of Nature Conservation Polish Academy of Sciences (INC PAS). Therefore, a list of all appropriate upgrade documents (national and internal) has been prepared and analysed. The preliminary analysis showed that most of the C&C principles are already applied at the INC PAS. A more detailed description is given in the internal gap analysis.

3.1. Internal analysis and Questionnaire survey

The internal analysis was conducted based on responses given by participants of an anonymous survey on existing rules and practices. The questionnaire survey was prepared by the WGECI strictly following the C&C principles and composed of 40 questions set forth in the following three areas:

- a) General Principles and Requirements applicable to Researchers;
- b) General Principles and Requirements applicable to Employers and Funders;
- c) The Code of Conduct for the Recruitment of Researchers.

Question no 18 was divided into “Salaries” (18a) and “Insurance” (18b). WGECI decided to do such a division because the budget of the INCPAS is the state granted annually, that is why the actual level of financing does not depend on the decision of Director.

Five additional questions about the organization, efficiency and work quality of the administration department were added to the questionnaire.

A sample of questionnaire is attached to the document submission.

After approval of the questionnaire by the WGECI, it was sent to all the institute's employees comprising:

- 1 full professor,
- 13 associated professors
- 13 adjuncts
- 5 research assistants
- 31 others (specialists)

Scores for the questions were counted according to the following scale:

- 5 - totally agree
- 4 - rather agree
- 3 - neither agree nor disagree
- 2 - rather disagree
- 1 - totally disagree

4. INTERNAL GAP ANALYSIS

4.1. Results of the questionnaire

The collected data were discussed within the WGECI and used as a basis for the preparation of the Internal Gap Analysis and the Action Plan. The strategy was developed in the form of a timetable for its practical implementation. The action map includes the gap areas and reasonable time schedules for a period of two years, describing in detail the different types of activities and the persons responsible for their implementation.

Who?

51 questionnaires were returned, which means that 81% of all the employees responded (Fig. 1). All the responses were used to evaluate the level of knowledge.

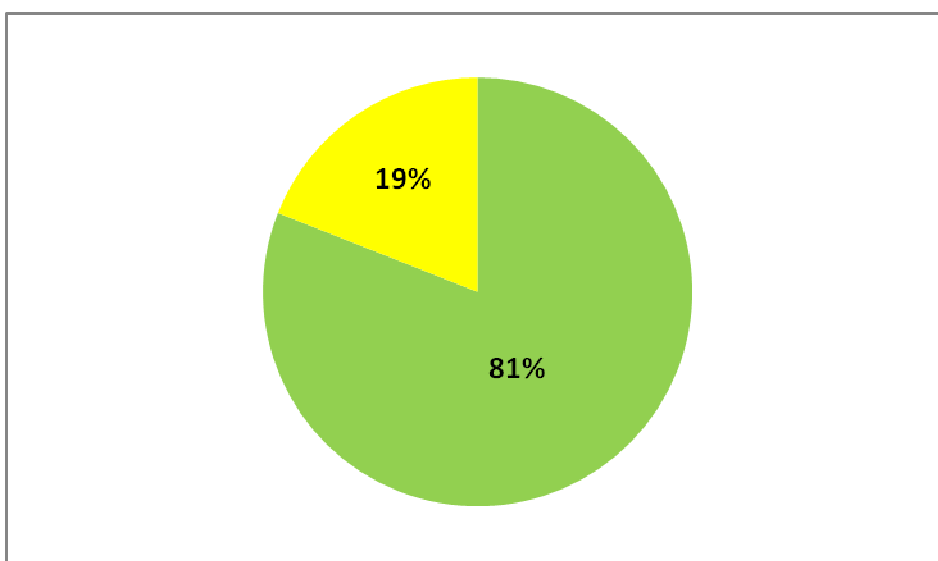


Fig. 1. Breakdown of the respondents (81% questionnaires were returned – green; 19% - questionnaires were not returned – yellow)

Gender

A total of 49% were women and 51% were men of all the respondents. (Fig. 2).

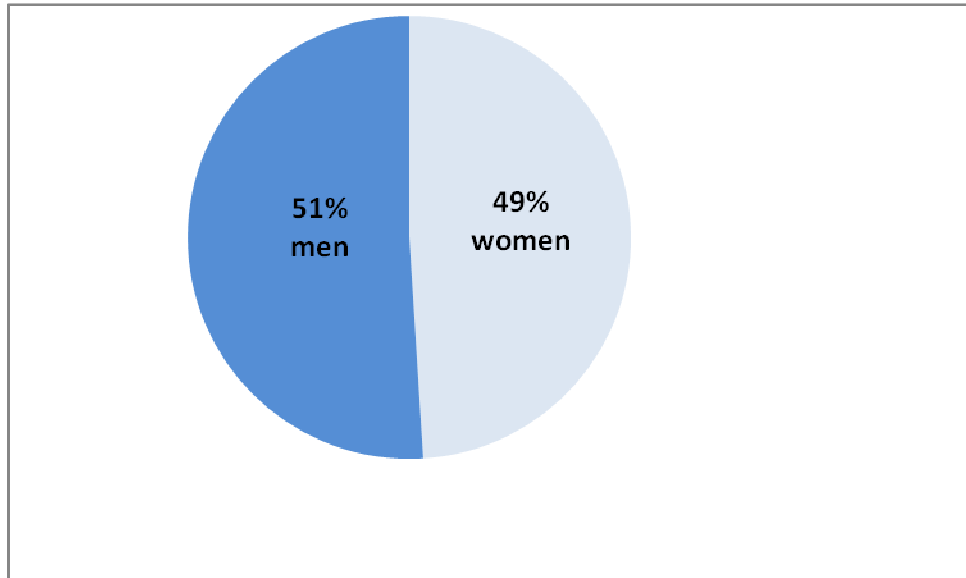


Fig. 2. Gender of the respondents

Profile of the respondents

Almost all the researchers responded. 52% of the respondents were scientific researchers and 47% other employees (specialists who are actively involved in scientific research). The largest groups of respondents were associated professors (22%) and adjuncts (18%). These were followed by research assistants (10%) and full professors (2%) (Fig. 3).

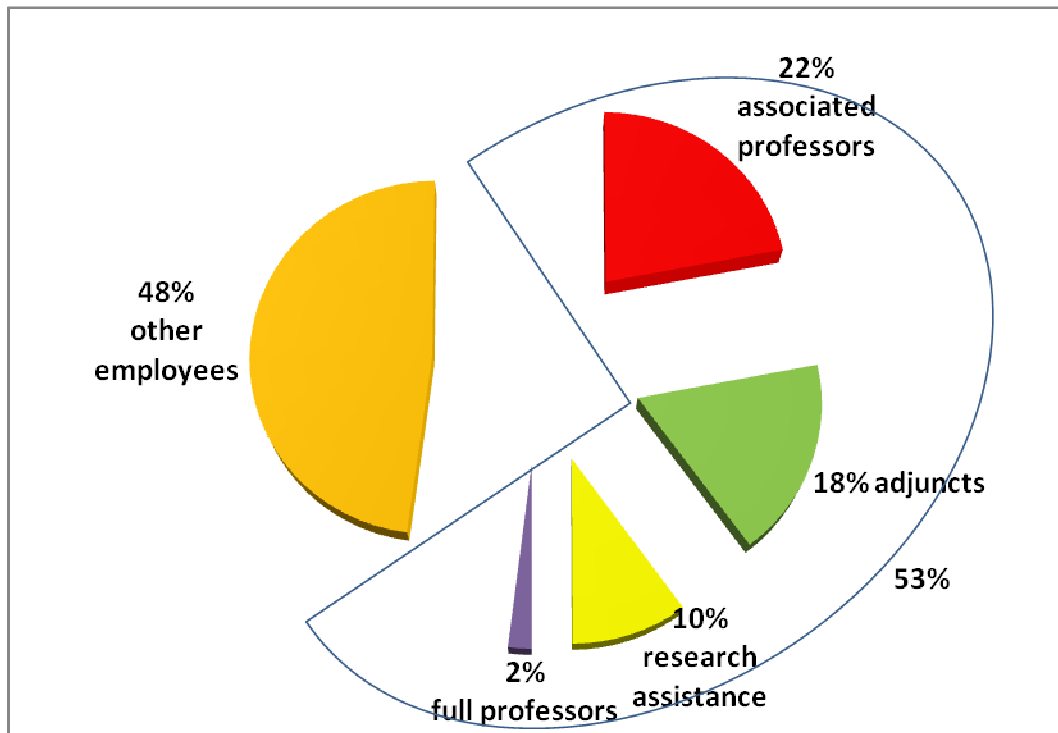


Fig. 3. Profile of the respondents

4.2. Results

The final results of the questionnaire were based on the five-score scale (1-5). Since scores 4 and 5 reflect a positive meaning, the WGECI decided that results ranked lower than 3.8 constitute a weakness and provide ground for the Action Plan (i.e. require action for the correction of rules and practices with regard to C&C principles), but results of 3.8 and higher are strengths of INC PAS and do not require action.

Since all five additional questions about the organization, efficiency and work quality of the administration department (questions 41-45) scored at least 4.0, WGECI decided that no actions are required concerning administration.

The first part ‘General Principles and Requirements applicable to Researchers’ are the most prominent item for INC PAS. In this part all the items except for one (Q11 *Supervision and managerial duties*) were ranked between 4.1-4.9 (Fig. 4).

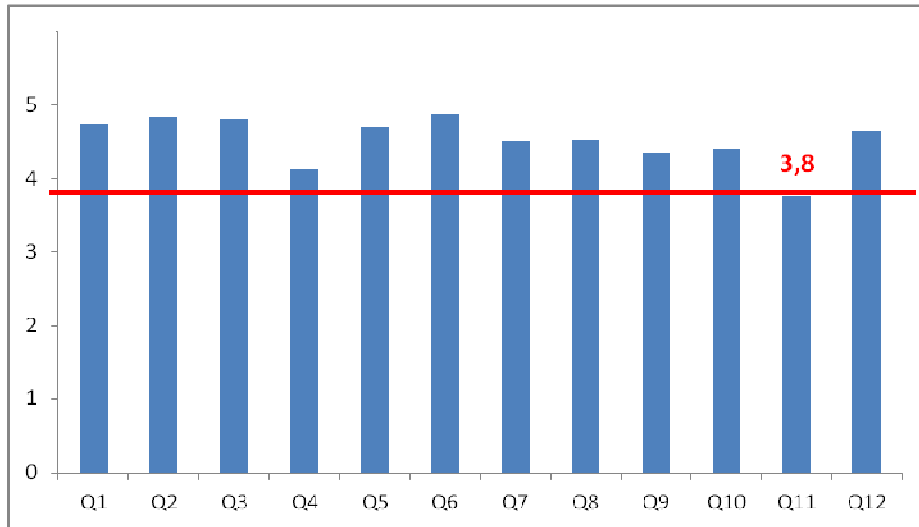


Fig. 4. Scores for questions of Part 1. General Principles and Requirements applicable to Researchers’

- Q1 - Research freedom
- Q2 - Ethical Principles
- Q3 - Professional responsibility
- Q4 - Professional attitude
- Q5 - Contractual and legal obligations
- Q6 - Accountability
- Q7 - Good practice in research
- Q8 - Dissemination, exploitation of results
- Q9 - Public engagement
- Q10 - Relation with supervisors
- Q11 - Supervision and managerial duties
- Q12 - Continuing Professional Development

In the **second part** ‘General Principles and Requirements applicable to Employers and Funders’ the following items were ranked as strengths: *Recognition of the profession, Non-discrimination, Working conditions, Insurance, Gender balance, Value of mobility, Co-authorship, Evaluation/appraisal systems, Recruitment*. Whereas the items: *Research environment, Stability and permanence of employment, Funding, Career development, Value of mobility, Access to research training and continuous development, Access to career advice, Intellectual Property Rights, Supervision, Teaching, Complaints/appeals, Participation in decision-making bodies* were ranked as weaknesses (Fig. 5).

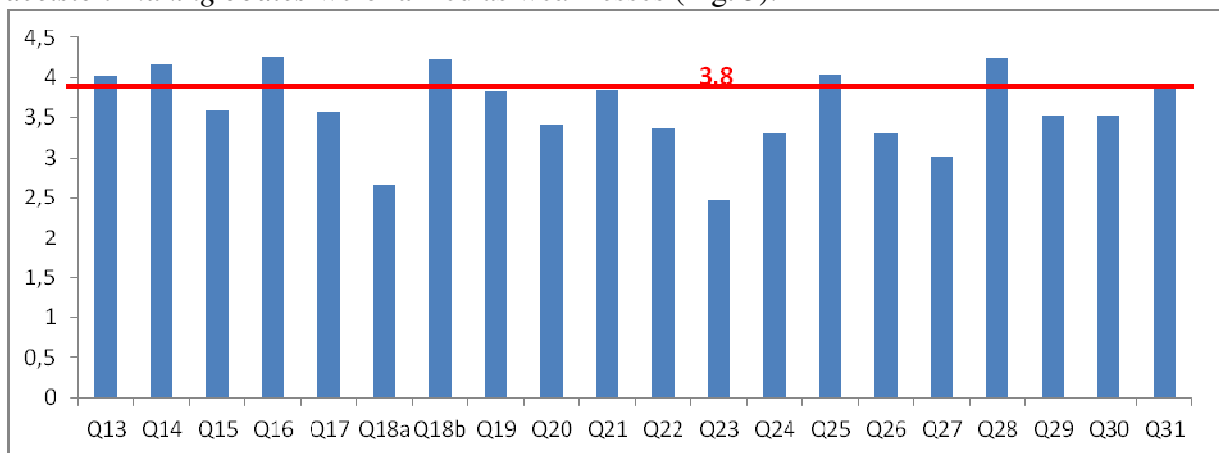


Fig. 5. Scores for questions of Part 2 ‘General Principles and Requirements applicable to Employers and Funders’

- Q13 - Recognition of the profession
- Q14 - Non-discrimination
- Q15 - Research environment
- Q16 - Working conditions
- Q17 - Stability and permanence of employment
- Q18 - Funding and salaries: Q18a – Fundings and salaries, Q18b - Insurance,
- Q19 - Gender balance
- Q20 - Career development
- Q21 - Value of mobility
- Q22 - Access to research training and continuous development
- Q23 - Access to career advice
- Q24 - Intellectual Property Rights
- Q25 - Co-authorship
- Q26 - Supervision
- Q27 - Teaching
- Q28 - Evaluation/appraisal system
- Q29 - Complaints/appeals
- Q30 - Participation in decision-making bodies
- Q31 - Recruitment

The third part ‘The Code of Conduct for the Recruitment of Researchers’ was evaluated positively. The items were ranked between scores 3.8-4.2, excepting two: *Variations in the chronological order of CVs* and *Recognition of qualifications* (Fig. 6).

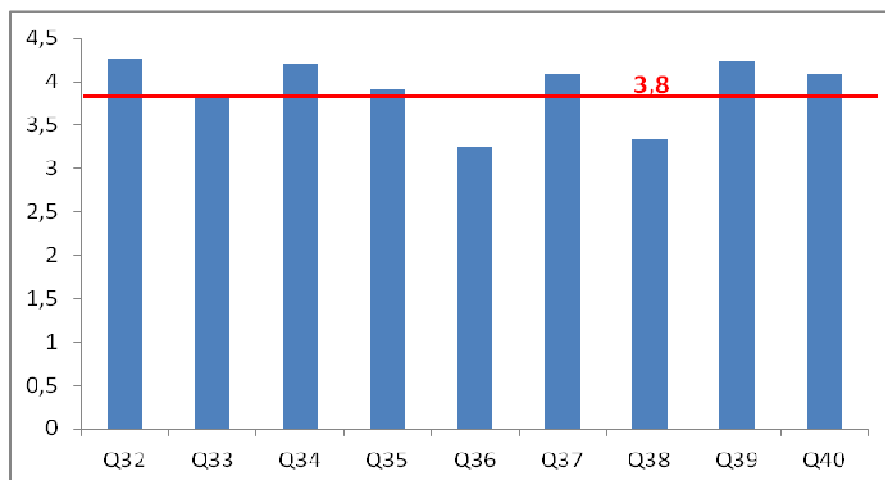


Fig. 6. Scores for questions of Part 3 ‘The Code of Conduct for the Recruitment of Researchers’

- Q32 - Recruitment
- Q33 - Selection
- Q34 - Transparency
- Q35 - Judging merit
- Q36 - Variation in the chronological order of CVs

- Q37 - Recognition of mobility experience
- Q38 - Recognition of qualifications
- Q39 - Seniority
- Q40 - Postdoctoral appointments

In general, the weakest items which were evaluated lower than 3 were *Salaries* and *Access to career advice* in part 2 ‘General Principles and Requirements applicable to Employers and Funders’. Other items were considered as a weakness but they achieved scores higher than 3, and often higher than 3.5.

4.3. Gap Analysis in Detail

Part 1. General Principles and Requirements Applicable to Researchers

1. 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 the recognised ethical principles and practices to which the researchers have to adhere.

Existing rules and practices/ legislation/action

Principles of research freedom are well recognised and respected in INC PAS. Researchers are free to express their opinion and scientific ideas; they are not limited in research topics. The annual research plan of statutory research is consulted with the researcher’s representatives and discussed and approved during the Meeting of Scientific Council of INC PAS. Researchers of INC PAS highly respect intellectual property.

Relevant permitting legislation: *Regulations of intellectual property protection.*

Action required: None. Average score 4.74.

100% answers were marked: *totally agree* (5) or *rather agree* (4).

2. Ethical principles

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

Existing rules and practices/legislation/action

The *Code of Ethics for Research Workers, the Polish Academy of Sciences* regulates the rules which are fully accepted, implemented and abided by INC PAS. The document is available in electronic form from the web site of INC PAS. All researchers understand and accept the *Code of Ethics*.

Relevant permitting legislation: *Code of Ethics for Research Workers, the Polish Academy of Sciences*

Action required: None. Average score 4.83.

100% answers were marked: *totally agree* (5) or *rather agree* (4).

3. Professional responsibility

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

Existing rules and practices/legislation/action

Researchers employed in INC PAS recognise ethical principles and fundamental ethical principles in science. They avoid plagiarism of any kind and joint data ownership in the case of collaboration with other researchers and scientific teams; they are professionals and responsible for the conducted research. Organisational regulations adopted and accepted by INC PAS specify all tasks, including the dissemination of knowledge within the scope of research activity and achievements in INC PAS.

Relevant permitting legislation: *Regulations of intellectual property protection, regulations of management of copyrights and industrial property rights and principles of commercialisation of results of scientific and development work in INC PAS (Resolution of Scientific Council of INC PAS RN 10/2015 4 March 2015).*

Action required: None. Average score 4.81.

100% answers were marked - *totally agree* (5).

4. Professional attitude

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. 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.

Existing rules and practices/legislation/action

The information about the strategic goals of the Ministry of Science and the funding agencies is launched via the intranet.

Researchers are obliged to report work progress both of statutory and grants/projects activities. Annual evaluation of the researchers is coordinated by the Deputy Director, discussed during meetings of the Scientific Council and approved by the members of the Scientific Council.

Relevant permitting legislation: *Act on the Polish Academy of Sciences, Statute of INC PAS, INC PAS Organisational Regulations.*

Action required: None. Average score 4.20.

82% answers were marked: *totally agree* (5) or *rather agree* (4), and 14% *neither agree nor disagree* (3), 4% - *rather disagree* (2), and no person marked *totally disagree* (1).

5. 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.

Existing rules and practices/ legislation/ action

Researchers are familiar with working conditions and national, regional and other founders' rules. The regulations are explained by the HR unit and supervisor before finalising the employment contract. In the case of external funding of grants/projects, researchers are supported by the Accounts Department and workshops organised by external funders. All reports must be approved and signed by the Director or Deputy and they are verified by funding agencies.

Relevant permitting legislation: *Act on the Polish Academy of Sciences, Regulations of intellectual property protection, regulations of management of copyrights and industrial property rights and principles of commercialisation of results of scientific and development work in INC PAS*

Action required: None. Average score 4.71.

100% answers were marked: *totally agree* (5) or *rather agree* (4).

6. Accountability

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. 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.

Existing rules and practices/legislation/action:

Researchers are obliged to follow good practices in research and effective management of finances. National law regulates accountability towards all kinds of funders. The annual report is discussed and approved by Scientific Council of INC PAS and by Polish Academy of Sciences. Moreover, funding agencies verify the final reports, also financial matters. All researches, supervisors, Director of the Institute, administration give all information to auditors.

Relevant permitting legislation: *National law, Act on the Polish Academy of Sciences.*

Action required: None. Average score 4.88.

100% answers were marked: *totally agree* (5) or *rather agree* (4).

7. 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.

Existing rules and practices/legislation/action:

Researchers are aware about safe working practices in accordance with national regulations and procedures for the protection of data. Safe working conditions are implemented by the employer. New employees are informed and trained at the beginning of work. The regulations are explained by the HR department, the Work Safety and Sanitation Inspector and by the supervisor. All employees attend obligatory in-house training concerning safe working practise at the beginning of work. Detailed training is carried out by the Work Safety and Sanitation Inspector, the Fire Control Inspector and the Plenipotentiary of the Director for Protection of Classified Information every 2 years for all employees.

Relevant permitting legislation: *Labour Code, INC PAS Work Regulations.*

Action required: None. Average score 4.50.

96% answers were marked: *totally agree* (5) or *rather agree* (4), and 4% answers were marked - *totally disagree* (1). No person marked answer *neither agree nor disagree* (3) nor *rather disagree* (2).

8. Dissemination, exploitation in 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 the research is fruitful and that the

results are either exploited commercially or made accessible to the public (or both) whenever the opportunity arises.

Existing rules and practices/legislation/action:

Disseminating knowledge and transferring of the results of the research is one of the obligatory tasks for every researcher employed in INC PAS. It contains the obligation of publishing results in scientific journals, and transferring knowledge into the public domain, actively participating in conferences, meetings, workshops, science festivals, public discussions, giving lectures for schools, students etc. The INC PAS website provides information about current scientific events and specific scientific activities (including dissemination, on-going projects, expertise, press release, publication of papers, special lectures, science festival organisation etc.).

Relevant permitting legislation: *Act on the Polish Academy of Sciences, Statute of INC PAS, Scopes of Duties for individual employees of INC PAS.*

Action required: None. Average score 4.52.

96% answers were marked: *totally agree* (5) or *rather agree* (4), and 4% - *neither agree nor disagree* (3). No person answered *rather disagree* (2) nor *totally disagree* (1).

9. 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 the priorities for science and technology and also the public's concerns.

Existing rules and practices/legislation/action:

Researchers promote science by taking part in TV and radio programmes, publishing information in popular journals and newspapers, organising open lectures for schools and adults audiences, organising science festivals (every year from 2013), organising activities for children and pupils (at all levels of school education) during the Earth Day, releasing information on the website of the Institute.

Relevant permitting legislation: *Act on the Polish Academy of Sciences, Statute of INC PAS, Scopes of Duties for individual employees of INC PAS.*

Action required: None. Average score 4.34.

96% answers were marked: *totally agree* (5) and *rather agree* (4), and 4% - *rather disagree* (2). No person marked answer: *neither agree nor disagree* (3) nor *totally disagree* (1).

10. Relation with supervisors

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. 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.

Existing rules and practices/ legislation/ action:

All rules and practices adopted are equal to the C&C principles.

Relevant permitting legislation: *Scopes of Duties for individual employees of INC PAS.*

Action required: None. Average score 4.40.

77% answers were marked: *totally agree* (5) and *rather agree* (4), and 14% - *neither agree not disagree* (3). **Answers *rather disagree* (2) and *totally disagree* (1), were marked - 4.5%, each of them.**

11. Supervision and managerial duties

Senior researchers should devote particular attention to their multifaceted 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.

Existing rules and practices/legislation/action:

Senior researcher are obliged to devote attention to younger researchers. The questionnaire showed that some gaps exist in the role of senior researchers. They require to be trained in how to be a good supervisor, career advisor etc., and how to build proper relationships with early stage researchers. Professional training is required.

Relevant permitting legislation: *Act on the Polish Academy of Sciences, Scopes of Duties for individual employees of INC PAS.*

Action required: Average score 3.77.

50% answers were marked: *totally agree* (5) and *rather agree* (4), and 32% - *neither agree not disagree* (3). **18% answers were marked: *rather disagree* (2) or *totally disagree* (1).**

Training how to be good supervisor, career advisor etc., and how to build proper relationships with early stage researchers. Professional training should be conducted. *Who and when? Director, Administration. Q4 2017*

12. 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.

Existing rules and practices/legislation/action:

INC PAS offers its employees many opportunities to participate in several trainings in Poland and the EU.

Relevant permitting legislation: *Act on the Polish Academy of Sciences, Ordinance of the Minister for Science and Higher Education on conducting proceedings for beginning a doctoral dissertation, a habilitation procedure and a procedure for obtaining a professor title.*

Action required: None. Average score 4.77.

100% answers were marked: *totally agree* (5) and *rather agree* (4). No person marked answers *neither agree not disagree* (3), *rather disagree* (2), nor *totally disagree* (1).

Part 2. General Principles and Requirements applicable to Employers and Funders

13. 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).

Existing rules and practices/legislation/action:

The rules are known to researches. The results of the questionnaire showed that employees feel that they are considered to be professionals.

Relevant permitting legislation: *Act on the Polish Academy of Sciences, INC PAS Work Regulations.*

Action required: None. Average score 4.02.

96% answers were marked: *totally agree* (5) and *rather agree* (4), and 4% as *neither agree not disagree* (3). No answers *rather disagree* (2) nor *totally disagree* (1) were marked.

14. 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.

Existing rules and practices/ legislation/ action:

INC PAS, acting in accordance with national laws and the Institute of Labour Regulations, ensures the equal treatment of employees and does not allow any discrimination on the basis of gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition.

Relevant permitting legislation: *INC PAS Work Regulations.*

Action required: None. Average score 4.12.

64% answers were marked: *totally agree* (5) and *rather agree* (4), and 18% *neither agree not disagree* (3). **Answers *rather disagree* (2) or *totally disagree* (1) were marked in 18% cases.**

15. 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.

Existing rules and practices/ legislation/ action:

INC PAS, by providing working conditions, stimulates scientific and research development.

In the last few years INC PAS extended a new laboratory with good equipment in the field station in Zakopane. The Institute is extending its research networks with domestic and international institutes and research centres. Researchers are encouraged to apply for all kinds of grants. Nevertheless, developing scientific careers are still encountering insufficient quantities of laboratories and scientific equipment.

Relevant permitting legislation: *INC PAS Work Regulations.*

Action required: Average score 3.58.

50% answers were marked: *totally agree* (5) and *rather agree* (4), and 18% as *neither agree not disagree* (3). **32% answers were marked: *rather disagree* (2) or *totally disagree* (1).**

The creation of list of available equipment and of new scopes of responsibility. Applying for grants focused on buying new equipment. Modernising the existing research environment by creating new laboratories. *Who and when? Director, Administration. Q1 2018*

16. 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 female and male researchers to combine their family and work, children and career. Particular attention should be paid, inter alia, to flexible working hours, part-time working, teleworking and sabbatical leave, as well as to the necessary financial and administrative provisions governing such arrangements.

Existing rules and practices/legislation/action:

Working conditions are provided according to the national regulations. Employees might use flexible working hours or part-time working but in line with the regulations. The Institute follows the Labour Code and adheres to principles of occupational health and safety.

Relevant permitting legislation: *Act on the Polish Academy of Sciences, INC PAS Work Regulations, Labour Code.*

Action required: None. Average score 4.27.

68% answers were marked: *totally agree* (5) and *rather agree* (4), and 18% - *neither agree not disagree* (3). 14% answers were marked - *rather disagree* (2). No person answered *totally disagree* (1).

17. 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.

Existing rules and practices/legislation/action:

Conditions of stability and permanence of employment are regulated by legal Acts such as the Act of the Polish Academy of Sciences and the Act on Academic Degrees and the Academic Title. Although instability of employment is linked to a scientific career, the INC PAS reduces to a minimum the risk of a non-permanent position .

Relevant permitting legislation: *Act on the Polish Academy of Sciences, Act on Academic Degrees and the Academic Title.*

Action required: Average score 3.57.

50% answers were marked: *totally agree* (5) and *rather agree* (4), and 23% - *neither agree not disagree* (3). 27% answers were marked - *rather disagree* (2). No person marked *totally disagree* (1).

Improve access to training for fixed-term employees and ensuring that fixed-term employees are informed about a permanent job during the maternity period and out of it. *Who and when? Director, Administration, Q4 2017*

18. Funding and salaries, insurance

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.

Existing rules and practices legislation/action:

All employees have a guaranteed base salary according to INC PAS Salary Regulations, INC PAS Reward Regulations and national regulations and also have guaranteed social insurance.

Relevant permitting legislation: *National Regulations, INC PAS Salary Regulations, INC PAS Reward Regulations, Act on the social insurance system.*

Action required: Average score 2.65 for funding and salaries but 4.24 for insurance. Action is required in the field of funding and salaries.

For salaries: No person marked answer - *totally agree* (5), 23% answers were marked: *rather agree* (4), and 9% as *neither agree nor disagree* (3). **68% answers were marked: *rather disagree* (2) or *totally disagree* (1).**

For insurance: 77% answers were marked: *totally agree* (5) and *rather agree* (4), and 23% - *neither agree nor disagree* (3). No answers *rather disagree* (2) nor *totally disagree* (1) were marked.

Encourage researchers to apply for different types of grants/ projects that allow for an increase of funding and salaries. Provide all types of information about looking for an external grant/project contractor. Improvement of a reward system for the best researchers and for publishing in quality scientific journals. *Who and when? Director, Administration, Q1 2017*

19. 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.

Existing rules and practices/legislation/action:

Equal opportunities at the level of recruitment and developing of a further career is complied with in INC PAS.

Relevant permitting legislation: *Labour Code, INC PAS Work Regulations.*

Action required: None. Average score 3.84.

68% answers were marked: *totally agree* (5) and *rather agree* (4), and 18% - *neither agree nor disagree* (3). **14% answers were marked: *rather disagree* (2) or *totally disagree* (1).**

20. 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 the 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.

Existing rules and practices/legislation/action:

All employees have equal opportunities for career development. The principles that apply in INC PAS are in accordance with the law. All regulations are known to employees. Employees are encouraged to develop by a system of rewards for special achievement (*Regulations of the Director of the INC PAS on Principles of award for scientific publications* – updated every year).

Relevant permitting legislation: *Ordinance of the Minister for Science and Higher Education on conducting proceedings for beginning a doctoral dissertation, a habilitation procedure and a procedure for obtaining a professor title; Statute of INC PAS; Regulations of the Director of the INC PAS on Principles of award for the scientific publications.*

Action required: Average score 3.40.

45% answers were marked: *totally agree* (5) and *rather agree* (4), and 30% - *neither agree nor disagree* (3). **25% answers were marked *rather disagree* (2) or *totally disagree* (1).**

Developing of a strategy for researchers at all stages and all kinds of employment. Special attention should be paid to young employees and fixed-term contracts. Familiarising all employees with the requirements and expectations for every career stage and working out clear consecutive steps for achieving the next career step. Adoption of Regulations for Course of Action for PhD in INC PAS. *Who and when? Director, Deputy Director, HR unit, Q2 2017*

21. Value of mobility

Employers and/or funders must recognise the value of geographical, intersectoral, inter- and trans-disciplinary 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.

Existing rules and practices/ legislation/ action:

Researchers are encouraged to take up temporary work out of the main registered office, in another research institution in Poland and abroad, collaborate with other interdisciplinary

teams or gain experience in the private and public sectors. Experience of mobility of researchers is important for scientific promotions and is added value during the process of gaining of a scientific title and during the scientific career. In justified cases the expenses of mobility are partly covered by the Institute.

Relevant permitting legislation: *Ordinance of the Minister for Science and Higher Education on conducting proceedings for beginning a doctoral dissertation, a habilitation procedure and a procedure for obtaining a professor title; INC PAS Work Regulations, INC PAS Organisational Regulations.*

Action required: None. Average score 3.85.

70% answers were marked: *totally agree* (5) and *rather agree* (4), and 20% - *neither agree nor disagree* (3). 10% answers were marked - *rather disagree* (2) or *totally disagree* (1).

22. 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. Such measures should be regularly assessed for their accessibility, take up and effectiveness in improving competencies, skills and employability.

Existing rules and practices/legislation/action:

Employees are allowed to participate in scientific conferences, workshops, meetings and specialist training courses. All information about the above-mentioned events are provided via the intranet.

Relevant permitting legislation: *Act on the Polish Academy of Sciences.*

Action required: Average score 3.37.

32% answers were marked: *totally agree* (5) and *rather agree* (4), and 18% - *neither agree nor disagree*. 50% answers were marked - *rather disagree* (2) or *totally disagree* (1).

Improving of the passing on of information about workshops, conferences and training courses. Developing of informal courses and workshops in the Institute that are available for all stage researchers which will help in their continuous development (e.g. courses in statistics, informal meetings to discuss on-going and future projects). The encouraging of young researchers to participate in conferences and workshops, especially those devoted for young people. *Who and when? Director, Deputy Director, Senior Researchers, IT Network Administrator, Q2 2017*

23. 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 career, regardless of their contractual situation.

Existing rules and practices/legislation/action:

All researchers at all stages of their career are able to obtain advice concerning career and job placement.

Relevant permitting legislation: no formal rules exist.

Action required: Average score 2.47.

16% answers were marked: *totally agree* (5) and *rather agree* (4), and 10% - *neither agree nor disagree*. 74% answers were marked - *rather disagree* (2) or *totally disagree* (1).

Improving of information actions on perspectives of professional career development through applications for Polish and international grants/projects. Improving administrative support in the process of applying for research stays. *Who and when? Deputy Director, Administration, Q3 2017*

24. 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.

Existing rules and practices/legislation/action:

The Scientific Council of INC PAS has approved rules on the management of copyright and related rights and industrial property rights, as well as principles of commercialisation of results of scientific and development work in INC PAS. The rules include regulations linked to the rights and obligations of the Institute and employees due to protection and use of copyrights and related rights and industrial property rights, the principles of compensating of authors and the principles and procedures of commercialisation.

Relevant permitting legislation: *Regulations of intellectual property protection, regulations of management of copyrights and industrial property rights and principles of commercialisation of results of scientific and development work in INC PAS.*

Action required: Average score 3.27.

32% answers were marked: *totally agree* (5) and *rather agree* (4), and 50% - *neither agree nor disagree* (3). 18% answers were marked: *rather disagree* (2) or *totally disagree* (1).

Placing the regulations of intellectual property protection etc. on the website of the Institute in order to better inform about existing regulations for all employees. Circulating information about appointment of the Disciplinary Commission. *Who and when? Director, Administration, IT Network Administrator, Q1 2017*

25. 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).

Existing rules and practices/legislation/action:

Senior researchers should inspire and facilitate the creativity of young researchers and support them with their knowledge. Researchers working in teams or collaborating in Poland and abroad need to be the co-author of the published achievements. The Institute strongly supports the collaboration and publishing of results of scientific teams.

Relevant permitting legislation: *Regulations of intellectual property protection, regulations of management of copyrights and industrial property rights and principles of commercialisation of results of scientific and development work in INC PAS.*

Action required: None. Average score 4.04.

68% answers were marked: *totally agree* (5) and *rather agree* (4), and 27% - *neither agree nor disagree* (3). 5% answers were marked - *totally disagree* (1). No person marked answers *rather disagree* (2).

26. Supervision

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. Such arrangements should clearly define that the proposed supervisors are sufficiently expert in supervising the 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.

Existing rules and practices/legislation/action:

Senior researchers are involved in the training of early-stage researchers through direct training, and acting as members of scientific communities and societies, advisors in ministries and business bodies. They are obliged to transfer scientific knowledge and skills to younger colleagues. The skills and activity of senior researches are verified during periodic 2 or 4 year evaluations of researchers. A supervisory role is required as one of obligatory duties for the gaining of a professor title.

Relevant permitting legislation: *Ordinance of the Minister for Science and Higher Education on conducting proceedings for beginning a doctoral dissertation, a habilitation procedure*

and a procedure for obtaining a professor title; Act on the Polish Academy of Sciences; INC PAS Researchers' Evaluation regulations.

Action required: Average score 3.30.

43% answers were marked: *totally agree* (5) and *rather agree* (4), and 19% - *neither agree nor disagree* (3). 38% answers were marked: *rather disagree* (2) or *totally disagree* (1).

Appointing a guardian for young researchers. *Who and when? Deputy Director, Q2 2017*

27. 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.

Existing rules and practices/ legislation/ action:

In the institutes of the Polish Academy of Sciences teaching is not an obligatory duty; however, in INC PAS researchers have an obligation to teach younger colleagues, give lectures to PhD students, students and pupils etc. Because teaching is temporary and occasional and is perceived as passing on scientific knowledge to a public audience, there are no rewards for it.

Relevant permitting legislation: *INC PAS Researchers' Evaluation regulations, Scopes of Duties for individual employees of INC PAS.*

Action required: Average score 3.02.

22% answers were marked: *totally agree* (5) and *rather agree* (4), and 43% - *neither agree nor disagree* (3). 35% answers were marked: *rather disagree* (2) or *totally disagree* (1).

Adding a new criteria to the Regulations of the evaluation of researchers. *Who and when? Deputy Director, Q4 2016.*

28. 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.

Existing rules and practices/ legislation/ action:

Researchers are evaluated according to national and internal regulations. The researchers of INC PAS are familiarised with the scopes and rules of evaluation. According to Polish law, the evaluation process is every 2 (young researchers) or 4 (senior researchers) years. Every evaluated person receives a written statement about the outcome of the evaluation performed by the Evaluation Committee. The appeals procedure exists.

Relevant permitting legislation: *Act on the Polish Academy of Sciences, INC PAS Researchers' Evaluation regulations.*

Action required: None. Average score 4.24.

86% answers were marked: *totally agree* (5) and *rather agree* (4), and 5% - *neither agree nor disagree* (3). 9% answers were marked: *rather disagree* (2) or *totally disagree* (1).

29. 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 the 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.

Existing rules and practices/legislation/action:

Every employees is allowed to lodge a complaint/appeal to the Director or Scientific Council. There is also a Disciplinary Committee which is responsible for preliminary investigation, especially in cases of dispute over a deed such as: appropriation of authorship, misleading in authorship, plagiarism, infringement of another person's copyright or related rights.

Relevant permitting legislation: *Labour Code, INC PAS Work Regulations, INC PAS Scientific Council Resolution about election of a Commissioner for Disciplinary Actions in INC PAS.*

Action required: Average score 3.52.

32% answers were marked: *totally agree* and *rather agree* (4), and 45% - *neither agree nor disagree* (3). 23% answers were marked: *rather disagree* (2) or *totally disagree* (1).

Establishing the rules for lodging a complaint/appeal. Designation of a person who will assist in resolving work-related conflicts, with special attention paid to solving the problems and conflicts between early-stage researchers and supervisors. Formulating a regulation for solving problems and conflicts between all employees of INC PAS. *Who and when? Director, Deputy Director, Q3 2017.*

30. 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.

Existing rules and practices/legislation/action:

The Scientific Council of INC PAS is the governing, advisory and decision-making body of the Institute. Staff of the Council are elected every four years and involve representatives of all research groups.

Relevant permitting legislation: *Act on the Polish Academy of Sciences, Statute of INC PAS.*

Action required: Average score 3.53.

55% answers were marked: *totally agree* (5) and *rather agree* (4), and 36% - *neither agree nor disagree* (3). 9% answers were marked: *rather disagree* (2) or *totally disagree* (1).

Improving the knowledge of employees about relevant representatives in a decision making-body. *Who and when? Deputy Director, Q4 2016*

31. 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 the 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.

Existing rules and practices/ legislation/ action:

The rules and standards are clearly specified in the *Regulations of the recruitment of new researchers for INC PAS* and are available for every researcher. All candidates are informed after the recruitment process about the final decision.

Relevant permitting legislation: *Regulations of the recruitment of new researchers for INC PAS*

Action required: None. Average score 3.89.

64% answers were marked: *totally agree* (5) and *rather agree* (4), and 32% - *neither agree nor disagree* (3). 4% answers were marked - *totally disagree* (1). No person marked answer *rather disagree* (2).

Part 3. The Code of Conduct for the Recruitment of Researchers

32. 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.

Existing rules and practices/ legislation/ action:

The rules and standards are clearly specified in the *Regulations of the recruitment of new researchers for INC PAS* and are available for every researcher. All candidates are informed after the recruitment process about the final decision. All information about recruitment and official requirements are placed on the Institute's website and on the Euroaccess site.

Relevant permitting legislation: *Regulations of the recruitment of new researchers for INC PAS*

Action required: None. Average score 4.27.

90% answers were marked: *totally agree* (5) and *rather agree* (4), and 10% - *neither agree nor disagree* (3). No person marked answers *rather disagree* (2) nor *totally disagree* (1).

33. 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.

Existing rules and practices/legislation/action:

Selection committees comprise experts in a specific field, and the committee is carefully chosen in every case of selection. Members of these committees have appropriate experience and qualifications. In special cases the committees may include external experts. Interviews with the candidates are a general practice.

The Committees produce written protocols after each recruitment campaign for new researchers for INC PAS. All candidates are informed after the recruitment process about the final decision.

Relevant permitting legislation: *Labour Code, Act on the Polish Academy of Sciences, Regulations of the recruitment of new researchers for INC PAS*

Action required: None. Average score 3.85.

64% answers were marked: *totally agree* (5) and *rather agree* (4), and 32% - *neither agree nor disagree* (3). 4% answers were marked *totally disagree* (1), and no person answered *rather disagree* (2).

34. 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.

Existing rules and practices/legislation/action:

Prior to the selection, the candidates are informed about the selection criteria and the recruitment process. After the final decision, all the candidates are informed about the results, and this information is placed on the Institute's website. Candidates are informed about strengths and weakness of their applications.

Relevant permitting legislation: *Labour Code, Act on the Polish Academy of Sciences, Regulations of the recruitment of new researchers for INC PAS.*

Action required: None. Average score 4.21.

73% answers were marked: *totally agree* (5) and *rather agree* (4), and 27% - *neither agree nor disagree* (3). No person marked answers *rather disagree* (2) nor *totally disagree* (1).

35. 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.

Existing rules and practices/legislation/action:

Evaluation of candidates is carried out according to the *Regulations of the recruitment of new researchers for INC PAS*. The selection process takes into consideration the whole range of experience of the candidates, their creativity and level of independence. For candidates from an industrial background, particular attention should be paid to any contributions to patents, development or inventions. Merit is judged qualitatively as well as quantitatively, focusing on outstanding results within a diversified career path and not only on the number of publications. Evaluation criteria includes as well as teaching, supervision, teamwork, knowledge transfer, management of research and innovation, and public awareness activities.

Relevant permitting legislation: *Regulations of the recruitment of new researchers for INC PAS*

Action required: None. Average score 3.90.

57% answers were marked: *totally agree* (5) and *rather agree* (4), and 38% - *neither agree nor disagree* (3). 5% answers were marked *rather disagree* (2) and no person answered *totally disagree* (1).

36. 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.

Existing rules and practices/legislation/action:

INC PAS takes into account career breaks related to maternal/parental leaves, periods of sickness or recovery benefit. During recruitment the multidimensional career tracks of candidates are taken into consideration. A candidate has the opportunity to present his/her certificates or other documents proving any additional skills and achievements.

Relevant permitting legislation: *Labour Code.*

Action required: Average score 3.26.

35% answers were marked: *totally agree* (5) and *rather agree* (4), and 48% - *neither agree nor disagree* (3). 17% answers were marked *rather agree* (2) or *totally agree* (1).

Conducting dedicated meetings for the Institute employees to improve staff awareness of C&C principles and their implementation at the INC PAS. *Who and when? Director, Q1 2017.*

37. 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.

Existing rules and practices/legislation/action:

The mobility experience of researchers is taken into account at scientific promotions. Criteria that have to be met by a candidate for a scientific degree or a scientific title are described in the Ordinance of the Minister for Science and Higher Education on conducting proceedings for beginning a doctoral dissertation, a habilitation procedure and a procedure for obtaining a professor title. A candidate's experience gained in another research institution in Poland or abroad, work experience in interdisciplinary research teams, and all other forms of scientific activity are considered as a valuable contribution to the professional development of a researcher.

Relevant permitting legislation: *Ordinance of the Minister for Science and Higher Education on conducting proceedings for beginning a doctoral dissertation, a habilitation procedure and a procedure for obtaining a professor title, INC PAS Work Regulations.*

Action required: None. Average score 4.01.

77% answers were marked: *totally agree* (5) and *rather agree* (4), and 18% - *neither agree nor disagree* (3). 5% answers were marked *rather disagree* (2). No person marked answer *totally disagree* (1).

38. 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 the rules, procedures and standards governing the recognition of such qualifications and, consequently, explore existing national laws, conventions and specific rules on the recognition of these qualifications through all available channels.

Existing rules and practices/legislation/ action:

The national rules related to recognition of education obtained abroad are applied.
Regulations of the recruitment of new researchers for INC PAS

Action required: Average score 3.35.

15% answers were marked: *totally agree* (5), no answers *rather agree* (4), and 60% *agree nor disagree* (3). 25% answers were marked *rather disagree* (2) or *totally disagree* (1).

Obtaining information for the 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. Distributing the obtained information to all the researchers about the procedures and standards governing the recognition of qualifications. *Who and when? Deputy Director, IT Network Administrator, Q3 2017*

39. 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.

Existing rules and practices/legislation/action:

The basic qualifications required for a position are described in the *Regulations of the recruitment of new researchers for INC PAS* The recruitment procedure is based on the achievements, skills and creativity of a candidate.

Relevant permitting legislation: *Regulations of the recruitment of new researchers for INC PAS*

Action required: None. Average score 4.24.

85% answers were marked: *totally agree* (5) and *rather agree* (4), and 5% - *neither agree nor disagree* (3). 10% answers were marked: *totally disagree* (1) and no person answered *rather disagree* (2).

40. 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.

Existing rules and practices/ legislation/ action:

The rules are specified in the *Act on the Polish Academy of Sciences and Ordinance of the Minister for Science and Higher Education on conducting proceedings for beginning a doctoral dissertation, a habilitation procedure and a procedure for obtaining a professor title.*

Relevant permitting legislation: *Act on Polish Academy of Sciences, Ordinance of the Minister for Science and Higher Education on conducting proceedings for beginning a doctoral dissertation, a habilitation procedure and a procedure for obtaining a professor title.*

Action required: None. Average score 4.09.

73% answers were marked: *totally agree* (5) and *rather agree* (4), and 18% - *neither agree nor disagree* (3). 9% answers were marked *rather disagree* (2), and no person answered *totally disagree* (1).

5. ACTION PLAN

The results of the gap analysis confirm that the Institute of Nature Conservation Polish Academy of Sciences fulfils the majority of the Charter & Code Principles. Taking into account results of data collected in the four areas of the Human Resources Strategy, actions to be implemented have been proposed: *Improvement of staff awareness of the C&C, Modification of the network administration and office, Modification of the website and Adaptation of INC PAS Regulations* (Tab. 1, Fig. 7).

The analysis of gaps and the action plan were conducted based on the following documents:

- Polish Law;
- Labour Code;
- Act on the Polish Academy of Sciences;
- Act on Academic Degrees and the Academic Title;
- Ordinance of the Minister for Science and Higher Education on conducting proceedings for beginning a doctoral dissertation, a habilitation procedure and a procedure for obtaining a professor title;
- Act of Social Insurance System;
- Code of Ethics for Research Workers, Polish Academy of Sciences;
- Statute of INC PAS;
- INC PAS Work Regulations;
- INC PAS Salary Regulations;
- INC PAS Reward Regulations;
- INC PAS Researchers' Evaluation regulations;
- Regulations of the recruitment of new researchers for INC PAS;
- Regulations of intellectual property protection, regulations of management of copyrights and industrial property rights and principles of commercialisation of results of scientific and development work in INC PAS;
- Regulations of the Director of the INC PAS on the Principles of award for the scientific publications;
- Scopes of Duties for individual employees of INC PAS;
- INC PAS Scientific Council Resolution about the election of a Commissioner for Disciplinary Actions in INC PAS;
- INC PAS Organisational Regulations.

The summary of required actions and action time are presented in Tab. 1.

Table 1. Required actions and Action Plan

Question	Action Plan	Responsible	Deadline
<i>Part 1. General Principles and Requirements applicable to Researchers</i>			
11 - Supervision and managerial duties	Training how to be good supervisor, career advisor etc., and how to build proper relationships with early stage researchers. Professional training should be conducted.	Director, Administration	Q4 2017
<i>Part 2. General Principles and Requirements applicable to Employers and Funders</i>			
15 - Research	Creation of a list of available equipment	Director,	Q1 2018

environment	and of new scopes of responsibility. Applying for grants focused on the purchase of new equipment. Modernisation of the existing research environment by creating new laboratories.	Administration	
17 - Stability and permanence of employment	Improve access to training for fixed-term employees and ensure that fixed-term employees are informed about a permanent job during the maternity period and out of it.	Director, Administration	Q4 2017
18a – Funding and salaries	Encourage researchers to apply for different types of grants/ projects that allow for an increase of funding and salaries. Provide all types of information about seeking for external grant/project contractors. Improve the reward system for the best researchers and for publishing in good scientific journals.	Director, Administration	Q1 2017
20 - Career development	Developing of a strategy for researchers at all stages and all kinds of employment. Special attention should be paid to young employees and fixed-term contracts. Familiarising all employees with the requirements and expectations for every stage of a career, and working out clear consecutive steps for achievement of the next career step. Adoption of Regulations for Course of Action for PhD in INC PAS.	Director, Deputy Director, HR unit	Q2 2017
22 - Access to research training and continuous development	Improving of information actions on the perspectives of professional career development through applications for Polish and international grants/projects. Improving administrative support in the process of applying for research stays.	Deputy Director, Administration	Q3 2017
23 - Access to career advice	Improving of information actions on the perspectives of professional career development through applications for Polish and international grants/projects. Improving administrative support in the process of applying for research stays.	Deputy Director, Administration	Q3 2017
24 - Intellectual Property Rights	Placing the Regulations of Intellectual Property Protection etc. on the website of the Institute in order to inform all employees about the existing regulations. Circulating information about the appointment of a Disciplinary Action Commission.	Director, Administration, IT Network Administrator	Q1 2017

26 - Supervision	Appointing a guardian for young researchers.	Deputy Director	Q2 2017
27 - Teaching	Adding a new criteria to the Regulations of the evaluation of researchers.	Deputy Director	Q4 2016
29 – Complaints / appeals	Formulating the rules of lodging a complaint/appeal. Designation of a person who will assists in resolving work-related conflicts, with special attention paid to solving the problems and conflicts between early stage researchers and supervisors. Formulating a regulation for solving problems and conflicts between all employees of INC PAS.	Director, Deputy Director	Q3 2017
30 - Participation in decision-making bodies	Improving the knowledge of employees about relevant representatives in a decision making-body.	Deputy Director	Q4 2016
<i>Part 3. The Code of Conduct for the Recruitment of Researchers</i>			
36 - Variation in the chronological order of CVs	Conducting dedicated meetings for the Institute’s employees to improve staff awareness of the C&C principles and their implementation at the INC PAS.	Director	Q1 2017
38 - Recognition of qualifications	Obtaining information 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. Distributing the obtained information to all researchers about the procedures and standards governing the recognition of qualifications.	Deputy Director, IT Network Administrator	Q3 2017

Question Action Plan	Year							
	2016	2017				2018		
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
Part 1	11 Supervision and managerial duties	Red						Blue
	15 Research environment	Red	Red	Red	Red	Red	Red	Blue
Part 2	17 Stability and permanence of employment	Red	Red	Red	Red	Red	Red	Blue
	18 Funding and salaries, insurances	Red	Red					Blue
	20 Career development	Red	Red	Red				Blue
	22 Access to research training and continuous development	Red	Red	Red				Blue
	23 Access to career advice	Red	Red	Red	Red			Blue
	24 Intellectual Property Rights	Red	Red	Red	Red			Blue
	26 Supervision	Red	Red	Red				Blue
	27 Teaching	Red	Red	Red	Red	Red		Blue
	29 Complains/appeals	Red	Red	Red	Red			Blue
	30 Participation in decision-making bodies	Red	Red	Red	Red	Red		Blue
Part 3	36 Variations in the chronological order of CVs	Red	Red					Blue
	38 Recognition of qualifications	Red	Red	Red	Red			Blue

Fig. 7. Implementation of the Action Plan 2016 – 2018 (red – implementation of action; blue – report of results)

6. STRATEGY

Gap analysis allowed the members of the WGECI select the principles that require support and improvement at the institutional level. The target group of the Action Plan and changes in the institute is all staff of INC PAS, however special attention will be paid to young researchers. That group has been recognised as a crucial part of the Institute’s employees and the questionnaire results revealed that the awareness of the C&C principles is the weakest in that group.

Based on the analysis of questionnaire, the WGECI defined following actions:

- ✓ Improvement of staff awareness of C&C.
- ✓ Adaptation of INC PAS Regulations.
- ✓ Improvement a system of information.

- ✓ Developing of a strategy for researchers at all stages and all kinds of employment but with special attention to young scientists and to PhD students.
- ✓ Changes in administration work in order to improving administrative support in the process of applying for research stays.
- ✓ Appointing a guardian for young researchers and designation of a person who will assist in resolving work-related conflicts. Special attention will be paid to solving the problems and conflicts between early stage researchers and older staff.

For each principle the WGECI elaborated and proposed improvement actions. Every action will be coordinated by a designated person and the final time of implementation has been also indicated. The Action Plan is presented above in the table 1. The implementation of a set of tools will allow improve of HR management in INC PAS. The whole process will last 4-5 years with active involvements of the whole staff of the institute.

During the process of improving HR management and implementing C&C principles, WGECI is planning several actions:

- ✓ meetings of WGECI to oversee control all required actions,
- ✓ progress report
- ✓ internal audit after two years (2018/2019)
- ✓ external audit after four years (2020/2021)

The scheme of strategy is visualised in the Fig. 8.

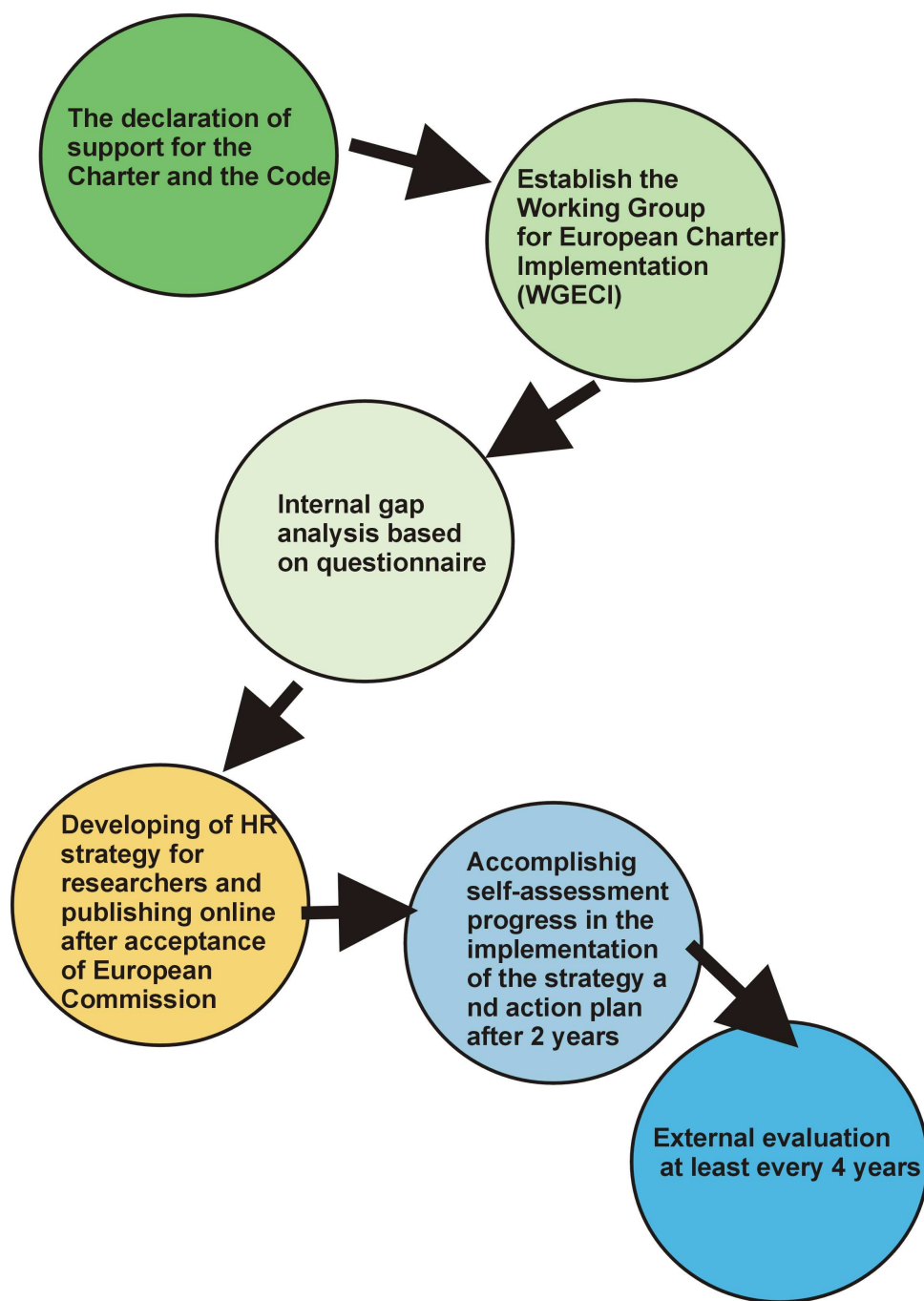


Fig. 8. Scheme of the strategy of the implementation of strategy of HR excellence

7. MONITORING

The implementation of the Action Plan will be monitored by the WGCEI at the Institute of Nature Conservation, Polish Academy of Sciences (Fig. 9). The following activities will be included:

- Persons responsible for a task will submit reports after the completion of task;
- The WGCEI will meet at Evaluation Meetings at the beginning of 2017 and 2018 in order to check the status of the implementation of the actions based on the reports;
- The WGCEI will prepare the conducting of an internal audit;
- January 2018 - an internal audit is planned;
- March 2018 - analysing the obtained data and proposing corrections to the Action Plan, if needed.

Monitoring Plan 2016 - 2018

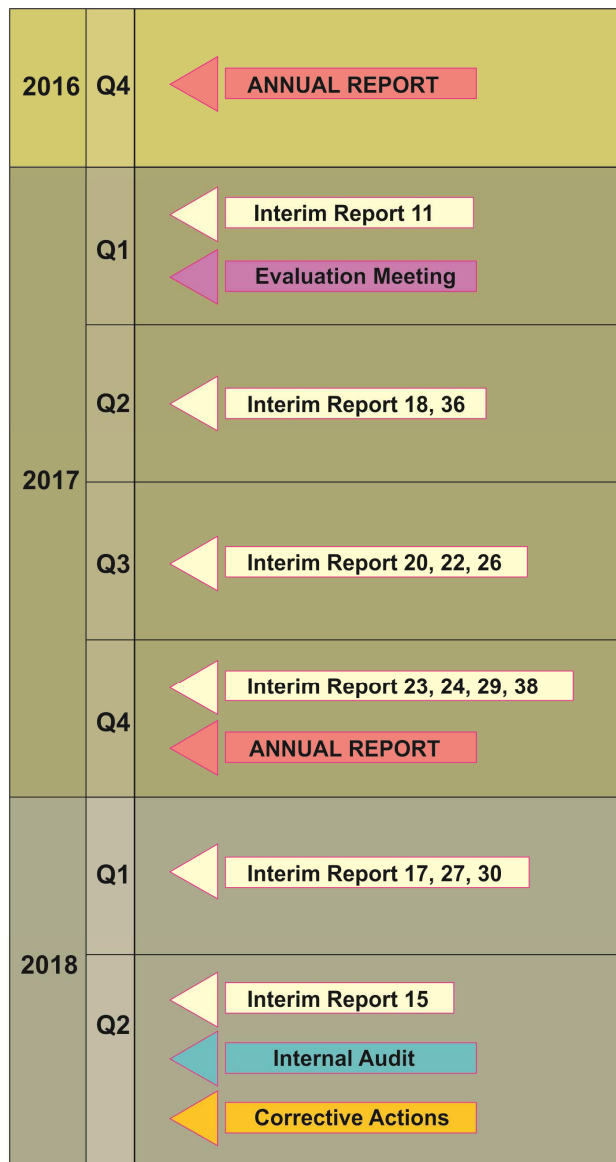


Fig. 9. Plan of monitoring of the implementation of the Action Plan

9. ACCEPTANCE

The Institute of Nature Conservation, Polish Academy of Sciences, represented by Director prof. Henryk Okarma, accepts the Human Resources Strategy for Researchers.

Henryk Okarma