



**INSTITUTE OF FUNDAMENTAL TECHNOLOGICAL RESEARCH POLISH
ACADEMY OF SCIENCES**

HUMAN RESOURCES STRATEGY FOR RESEARCHERS

INTERNAL REVIEW (revised)

Warsaw, April 2022 (revised: July 2023)

Case number: 2018PL358471

Name Organisation under review: Institute of Fundamental Technological Research Polish Academy of Sciences

Organisation's contact details: A.Pawińskiego 5B, Warsaw, Mazovia, 02-106

Submission date to the European Commission: 04/04/2022 (updated and resubmitted in July 2023)

1. Organisational Information

STAFF & STUDENTS	FTE
Total researchers = staff, fellowship holders, bursary holders, PhD. students either full-time or part-time involved in research	162.7
Of whom are international (i.e. foreign nationality)	29
Of whom are externally funded (i.e. for whom the organisation is host organisation)	8
Of whom are women	46
Of whom are stage R3 or R4 = Researchers with a large degree of autonomy, typically holding the status of Principal Investigator or Professor	41
Of whom are stage R2 = in most organisations corresponding with postdoctoral level	64
Of whom are stage R1 = in most organisations corresponding with doctoral level	11
Total number of students	52
Total number of staff (including management, administrative, teaching and research staff)	268.25

RESEARCH FUNDING (figures for most recent fiscal year)	<i>the data provided directly to the European Commission</i>
--	--

ORGANISATIONAL PROFILE (a very brief description of your organisation)

The Institute of Fundamental Technological Research, Polish Academy of Sciences (in Polish: Instytut Podstawowych Problemów Techniki Polskiej Akademii Nauk – IPPT PAN) is the largest engineering sciences institute of the Polish Academy of Sciences (PAS). It is a public institution with a record dated back to January 1953 when the decision to establish such a science problem-oriented institute within the structure of the newly then (1952) created Polish Academy of Sciences was taken.

The Institute has been traditionally active in educating PhD students in its own post-graduate schools.

Since its establishment in 1968 over 750 PhD degrees have been granted to young Polish and foreign researchers. Currently IPPT PAN has the right to confer doctoral degrees in five fields: Mechanical engineering, Information technologies and telecommunications, Material engineering, Automation, electronics and electrical engineering, Biomedical engineering.

IPPT PAN keeps holding the highest scientific category (A+) in Poland conferred by the minister in charge of science, following the regularly organised national process of evaluation of scientific institutions and organisations (so called parametrisation).

2. Strengths and weaknesses of the current practice

I. Ethical and professional aspects

A. Strengths and Weaknesses (Initial Phase)

Presented on the [webpage dedicated to HRS4R](#) ("Initial Phase" section).

B. Strengths and Weaknesses (Interim Assessment)

Ethical and professional aspects are properly reflected in the legal framework and rules binding IPPT PAN. The only change which has to be introduced to the internal regulations is the consequence of the national reform of science and higher education system and the entry into force of so called Constitution for Science. More in the Remark part below.

The information policy, including Ethical and professional aspects, has been improved and the staff has been regularly reminded of the existence and importance of [C&C](#), the [Code of Ethics for Researchers](#), approved by the General Assembly of the Polish Academy of Sciences (last edition approved in 2016) and internal regulations, including non-discrimination, accountability, contractual and legal obligations and IPR.

All principles covered by "Ethical and professional aspects" section have been implemented.

Some of them, e.g. evaluation system, research freedom, ethical principles, professional responsibility and attitude, accountability, non-discrimination and dissemination and exploitation of results have been well developed and well rooted in the overall system.

Despite that, there is a permanent need to continue the effort to increase the quality and make the existing solutions more and more staff-friendly. Thus further improvements are still possible and required.

In the first HRS4R implementation cycle actions addressing gaps in Good practices in research and Public engagement principles (see: the Actions section below) were conducted. The implementation challenges and further plans are described in the Section 3. Actions.

Although there was a substantial involvement of IPPT PAN in various 'science-for-society' events (which has been growing over the recent years - also as a result of HRS4R implementation) and the quality of information available on the webpages of IPPT PAN has been recently improved, further actions are foreseen. They include a complete rebuilding of the webpages of the Institute and its active presence in social media such as Facebook and Youtube to reach wider society with not only attractive content but also a form suitable for relevant target groups (see: the Remark part below). Further attention will be paid to availability and quality of information in the English language.

Researchers, regardless of the stage of their career, participate in research projects and enjoy freedom of conducting research.

The institutional system of professional support provided by relevant administration units (such as Projects Management and Research Coordination Office, Public Procurement Office, Accounting Office and the Centre for Commercialization of Research Results and Technology Transfer) allows meeting contractual and legal obligations in a proper manner. The change of the organisational structure of IPPT PAN adopted in 2018 will contribute to better responsiveness to the needs of researchers and to improved performance of the Institute.

Due to a growing share of staff members and PhD students from abroad in recent years there is a clear need for availability of internal documents in English and ability to provide full support in English to foreign employees and PhD students. For this reason new actions have been planned which will result in increased internal availability of documents and services in English offered by larger than currently share of administration members, in particular those who have regular contacts with foreigners.

C. Strengths and Weaknesses (Award Renewal)

Strengths

Ethical and professional aspects are well-rooted in the overall system in which IPPT PAN operates. The system consists of the national legal framework, internal rules binding at IPPT PAN and the existing practice.

The scientists at the Institute enjoy freedom of conducting research. They need to respect the ethical principles as set out in the [Code of Ethics for Researchers](#), approved by the General Assembly of the Polish Academy of Sciences (the latest edition was approved in 2020). In addition, those who implement projects funded by the National Science Centre (Narodowe Centrum Nauki – NCN) are obliged to follow the [Code of NCN on Research Integrity and Applying for Research Funding](#), adopted in 2016. NCN is the Polish governmental funding agency in charge of supporting fundamental research.

Relevant mechanisms, such as supervision procedures, are in place at the Institute. According to the rules, a disciplinary official and disciplinary committee appointed at IPPT PAN constitute the structures empowered to act in cases of significant breaching of professional duties.

Researchers at IPPT PAN are supported by relevant administration and technical units. Dedicated units, in particular Projects Management and Research Coordination Office and Accounting Office, are in charge of ensuring that all contractual and legal obligations related to project implementation have been met. Other structures such as Public Procurement Office, Technical Services Office and IT Office take care of – respectively - proper provision and operation of relevant elements of infrastructure the staff and PhD students of IPPT PAN need. The users of IPPT PAN's infrastructure undergo necessary trainings, including health and safety trainings, as required by the national legal regulations.

The Centre for Commercialization and Technology Development, situated in the structure of the Institute, provides support related to exploitation of research results.

The requirements of GDPR are met, including the appointment and activity of the data protection officer and introduction of the "Personal data protection policy" in 2018.

The strengths of the Institute in respect to ethical and professional aspects have been confirmed by the results of the recent survey where its participants assessed the level of implementation of this group of C&C rules better than in 2016. The only exception was the assessment of the evaluation system (the annual evaluation of research activity constitutes its core part), where the share of positive opinions slightly decreased (from 66 to 64%), while at the same time the group of respondents providing the answer "no opinion / non-applicable" decreased from 25% in 2016 to 10%. Although the decrease of the share of positive opinions over the years is relatively small and the share of positive opinions is still large, also compared to 26% who believe the evaluation system is either partially or insufficiently implemented, it will be analysed and appropriate measures will be introduced (see: "Room for improvement" subsection).

In case of the remaining C&C rules in the ethical and professional aspects group the largest increase in positive opinions compared to 2016 was in research freedom (from 46% to 91%) and ethical principles (from 55 to 82%). Also, a significant decrease of "no opinion / non-applicable" answers related to ethical and professional aspects, compared to 2016 (in some case of even more than 30%) is welcomed. It clearly shows a growing awareness of the staff and PhD students' rights, including the rights covered by the European Charter for Researchers.

The implementation of the HRS4R action aiming at rebuilding the web-based information services of IPPT PAN and launching promotion activities in social media has further improved the visibility of information on IPPT PAN, its activity and achievements, dedicated to various groups of recipients. It has served well dissemination purpose as well. Also, the quality of the information contents and form in both languages, Polish and English, has been improved.

The active participation in a wide range of activities dedicated to society has been continued and widened, including invited lectures at schools delivered by our researchers.

As the approach of the Institute and its managing bodies is against any form of discrimination and in favour of fair treatment, in the recent years much attention has been paid, inter alia, to improving availability of services (communication, documents) in English, taking into account the growing number of PhD students and staff members coming from abroad.

Room for improvement

Although the implementation of the C&C evaluation/appraisal rule was well assessed in the survey (positive opinions significantly outweigh the negative ones), the system of evaluation of research activity will be carefully analysed, also in the context of the feedback received in the survey, and appropriate measures will be undertaken.

Although the level of satisfaction of the IPPT PAN's community regarding the implementation of ethical and non-discrimination principles has grown compared to the feedback collected in 2016 (from 55 to 82% and from 70 to 76% - respectively, with a much lower share of the survey participants giving "no opinion / non – applicable" response: the decrease from 36 in 2016 to 2% and from 25 to 2% - respectively), an increase of the share of responses showing insufficient level of satisfaction requires careful monitoring of the implementation of these rules.

D. Remarks

A drastic reform of the national system of higher education and science in Poland, which was followed by the entry into force of a new national law called Constitution for Science in 2018, had imposed many changes on universities and research institutions in Poland. At IPPT PAN it deeply affected the internal system of evaluation of research activity and it had significant impact on the PhD studies, run by IPPT PAN. The changes in the internal rules, regulations and practice aiming at adjusting the institutional system to the new national rules and requirements have been prepared outside the framework of HRS4R. Some of the changes have required significant work like redesigning the rules and procedures of the system of the annual evaluation of research activity and implementing them as well as reconstruction of the doctoral education system.

The frequent changes introduced to the national regulation on the evaluation of the quality of scientific activity (the regulation adopted in 2019 was amended in 2020 and 2021) and the need of making respective adjustments in the internal evaluation rules and procedures of the Institute (which had to take into account and reflect the national evaluation rules) did not facilitate the task IPPT PAN had.

In order to improve the system and maintain the high quality of research works at IPPT PAN and their impact and – at the same time - adjust the system to the changing national rules, each year the relevant modifications of the internal evaluation system have been introduced by the Scientific Council on the basis of proposals made by its dedicated committee (recently: the Committee for modification of the rules of evaluation of research activity). Each year the evaluation results have been prepared by the Committee for evaluation of research activity and approved by the Scientific Council. In each of the committees the research staff is represented, including assistant and associate professors group.

Despite all the effort IPPT PAN has made, the changes imposed by the national reform and the frequent amendments of the executive acts, have caused some frustration at IPPT PAN as they have disturbed the sense of stability and predictability of rules and procedures, clearly resulting in slightly worse assessment of the implementation of the rule 11. Evaluation/appraisal systems made recently by the community of the Institute than it was in 2016.

The national reform of science made it necessary to reconstruct the doctoral education system by creating new doctoral schools which - according to the intention of the national decision-makers – would gradually replace the previous system of PhD studies. Such a big change has required a significant organisational effort and solving many legal and practical challenges in order to allow a smooth transition, without doing harm to PhD students who started their education in the old system.

II. Recruitment and selection

A. Strengths and Weaknesses (Initial Phase)

Presented on the [webpage dedicated to HRS4R](#) (“Initial Phase” section).

B. Strengths and Weaknesses (Interim Assessment)

Recruitment and selection rules, procedures and processes were well developed already prior to the beginning of HRS4R implementation and the situation has not changed.

The rules and procedures have been properly set out in the national regulations ([Labour Code](#), [Act on the Polish Academy of Sciences](#)) and internal regulations of IPPT PAN (primarily the [Scientific Council Resolution 'Rules of employment of scientists'](#) and the [Scientific Council Resolution on the terms of reference of call for research positions procedure at IPPT PAN](#)) and strictly followed.

The recruitment and selection process is transparent and merit-based. In case of research positions a relevant Scientific Council committee (namely: the Committee for Organisation and Employment and/or the Committee for Employment on Full Professor Position) is involved. The process is supervised by and involves the Board of Directors and the Scientific Council. The whole process is fully supported by a professional, well-trained representative of HR Office. Further details are provided in OTM-R checklist.

In the Gap Analysis it was identified that two aspects of C&C needed to be strengthened and made more visible in the recruitment and selection process. These were Variations in the chronological order of CVs (Code) and Recognition of mobility experience (Code). Following the Action Plan the works to fully adjust the regulations to C&C requirements have been launched. The need for such modifications was announced to the Scientific Council in May 2018. The continuation of the works is planned in the Revised Action Plan and the modified resolution is foreseen to be adopted by the Scientific Council in 2019.

In the course of Internal Review and the preparation of OTM-R checklist for IPPT PAN it was identified that a clear indication regarding the complains procedure is missing in the feedback to applicants. A relevant action is planned in the Revised Action Plan.

C. Strengths and Weaknesses (Award Renewal)

Strengths

As it was stated in the previous Internal Review for Interim Assessment, the recruitment and selection rules, procedures and processes had been well developed already prior to the beginning of HRS4R implementation. The situation has not changed.

The Polish legislation (Labour Code, Act on the Polish Academy of Sciences) and the internal regulations of IPPT PAN (primarily: the Scientific Council Resolution 'Rules of employment of scientists' and the Scientific Council Resolution on the terms of reference of call for scientific positions procedure at IPPT PAN), which are strictly followed, define the recruitment process in line with the rules of the Charter for Researchers and the Code of Conduct for the Recruitment of Researchers. The recruitment and selection

process is open, transparent, merit-based and it ensures equal opportunities to all candidates. The vacancies are always advertised on the Institute's website, EURAXESS portal and the internet services of the ministry in charge of science. In case of scientific positions the process involves a relevant Scientific Council committee (namely: the Committee for Organisation and Employment and/or the Committee for Employment on Full Professor Position) and it is fully supported by a professional, well-trained representative of HR Office. The process is supervised by and involves the Board of Directors and the Scientific Council. Such a practice guarantees a coherent approach and full adherence to legal and formal rules and requirements at every stage of the process. Further details are provided in the [OTM-R policy](#).

The only aspects of C&C which were identified in 2016 in the Gap Analysis and Internal Review as giving some room for improvement (Variations in the chronological order of CVs (Code) and Recognition of mobility experience (Code)) as well as an identified need of a clear indication of the complaint procedure in the feedback to applicants have been subject of relevant actions. The first two actions have reached their final procedural stage. They are planned to be completed still this year (2022). The latter action has been successfully completed.

The modern, rebuilt in 2020 (according to the plan), internet information services of IPPT PAN, with improved content in English, contribute to attracting attention of potential candidates willing to study or work in Poland to our offer.

Room for improvement

The rather big share of “no opinion / non – applicable” responses in the survey regarding the implementation of the C&C recruitment and selection rules (ranging from 24 to 51% per C&C) is understandable as only those who are directly involved in the process know its procedural details and practice. So the implementation of the rules is naturally non-applicable to others, in particular those who have not been recruited recently.

Despite the above and the fact that the relevant regulations are publicly available, regular information actions will be conducted in order to increase the awareness of the general rules of the recruitment and selection process among the staff and PhD students.

III. Working conditions

A. Strengths and Weaknesses (Initial Phase)

Presented on the [webpage dedicated to HRS4R](#) (“Initial Phase” section).

B. Strengths and Weaknesses (Interim Assessment)

Although the working conditions as such were generally positively assessed in the Gap Analysis, a number of gaps and some room for improvement compared to C&C principles was identified. Among them was a need for easy access to information presented in a clear and concise manner. In order to further improve the quality of working conditions a number of actions was planned (see: Section 3. Actions).

In the feedback regularly collected from the staff, also as part of Internal Review, there were no fundamental complains about research environment, working conditions, stability and permanence of employment, funding and salaries, IPR and co-authorship, recognition of the profession and gender issues.

The recent investments in research and IT equipment, including new servers, contributed to the overall level of satisfaction.

Despite the HRS4R actions implemented in 2017 and 2018 with the view of improving access to information and regular distribution of information (e.g. on research and mobility programmes, IPR, employment rules) there is a need for further actions. They are planned in the Revised Action Plan.

Among the staff and PhD students there is no feeling of gender imbalance in terms of equal treatment and fair conditions. One of the visible examples is the current composition of the Board of Directors with 2 women out of 5 Board members (in the previous term of office: all men). Despite the relatively small share of women in the overall research community of IPPT PAN (the main reason is a general limited availability of female researchers in traditionally "male" technical sciences, represented by IPPT PAN, in particular among the older generation) female researchers play important roles in key bodies of IPPT PAN, for example the Scientific Council's Committee for Education and Development of Research Staff is chaired by a female professor. The number of women in the younger generation of researchers at IPPT PAN is growing.

Despite the positive trend described above, actions to further increase the awareness of the gender balance principle and to promote more gender balanced representation in various internal bodies, whenever feasible, are planned in the Revised Action Plan.

At IPPT PAN rules and regulations regarding career development are in place and they are available to the staff. The Scientific Council is in charge of the research career development policy. Updated career development offers are regularly distributed to the staff. Researchers can participate in research seminars, organised regularly by every research department.

Individual career advice and job placement assistance are offered on the research department level. HR Office also provides necessary support on the case by case basis. There is still a gap in systemic approach to access to career advice in Poland, in particular at smaller research institutions like IPPT PAN. As the initiative addressed to the President of the Polish Academy of Sciences in 2017 has remained unanswered there are new actions planned in the Revised Action Plan to address the issue.

The actions already implemented (also those outside direct HRS4R framework, like for example the restructuring process, finalised in 2018) together with the ones planned in the Revised Action Plan should bring a visible quality change.

C. Strengths and Weaknesses (Award Renewal)

Strengths

The working conditions, including research-friendly environment, are well organised. It has been confirmed by the majority of the survey participants (69 and 75% – respectively – of positive opinions in the recent survey compared to 59% in 2016 survey, while the share of responses showing insufficient level of satisfaction has dropped to approx. 7% in the recent survey from 14% in 2016). Also, the framework ensuring stability and permanence of employment as well as a fair funding and salaries system have been well developed which is appreciated by the majority of the staff members expressing their views in the survey (85% of positive opinions recently, compared to 49 and 59% – respectively – in 2016). The relatively recent investments in research and IT equipment, including new servers, contributed to the overall level of satisfaction.

The national and institutional regulations on IPR constitute a solid legal basis for proper management of these issues, including co-authorship. The feedback collected from the staff and PhD students, also as part of the current Internal Review, has been positive (63 and 71% - respectively - of positive responses in the recent survey compared to 54 and 62% in 2016). The only aspect which could be still improved, despite the actions which have been carried out already, is to make PhD students better acquainted with the applicable legal regulations – as presented below (in “Room for improvement” subsection).

As mentioned before, the approach of the managing bodies is against any form of discrimination and in favour of fair treatment. For this reason the gender balance is one of the aspects which is subject to regular monitoring by the Board of Directors and reporting to the Scientific Council. It has been also addressed in the HRS4R Action Plan.

The feedback about the gender aspects collected in the periodic anonymous survey and by the ombudsman has not confirmed any evident case of discrimination directly related to gender.

The domain of IPPT PAN are engineering sciences which are still perceived as traditionally "male" areas of science. The Institute has been successfully undertaking measures aiming at attracting more female researchers which have already brought meaningful results (currently: 47 compared to 36 in 2019 and 18 in 2016). Since 2016 the number of female full professors employed at IPPT PAN has grown from 1 to 3 in 2021.

The visible sign of the growing awareness of gender issues at IPPT PAN and the changing approach is the composition of the Board of Directors. Since 2018, for the first time in the history of the Institute, women have constituted 40% of the board.

Despite the positive trend described above, induced by the already implemented HRS4R actions as well as other measures not formally included in HRS4R, the gender aspects, including balance, will be still subject to monitoring. Further actions are presented below (in "Room for improvement" subsection) and in the Reviewed Action Plan.

As a result of HRS4R implementation the awareness of the importance of the mobility rule execution has been broadened among the community of IPPT PAN (a decrease from 45 to 36% of "no opinion / non-applicable" between 2016 and 2022 survey) and the level of satisfaction how it is done has grown significantly (from 37% in 2016 to 60% in 2022 survey).

The system of career development consists of the relevant rules and regulations which are in force, the policy the Scientific Council is in charge of and the necessary tools. Updated career development offers which are distributed to the staff and regularly organised scientific seminars, also attended by invited speakers from abroad, are among the basic tools.

Comparison of opinions on career development implementation expressed in the survey conducted in 2016 and recently has shown a significant growth of the level of awareness of the situation at IPPT PAN (in 2016: 37% of all responses was "no opinion / non applicable" while recently: only 1%) and the level of satisfaction (38% in 2016 compared to 73% recently) which is very positive.

As a result of HRS4R implementation the previously existing system of solving conflicts and dealing with breaching ethical rules has been strengthened by establishing in 2019 the office of Ombudsman who provides support in cases of or related to violation of rules of coexistence in professional environment. Persons holding the office for 4-years' term are selected in general elections, involving staff and PhD students of IPPT PAN.

At IPPT PAN researchers representing various stages of career development, starting from R1, are involved in the decision making process, for example as members of the Scientific Council. As already mentioned, a representative of assistants and associate professors participates in the works of the Committee for modification of the rules of evaluation of research activity and the Committee for evaluation of research activity - respectively. PhD students have their self-government which strengthens their voice and represents their interests in discussions with the management of the schools and the Institute.

Room for improvement

In order to make PhD students better acquainted with the applicable legal regulations on IPR, including co-authorship aspects, relevant trainings, primarily dedicated to them, will be organised.

Although the situation related to gender aspects in terms of fairness and non-discrimination in the professional environment at IPPT PAN is good and it is subject to relevant care under HRS4R implementation, the Gender Equality Plan has been under development, as required by the European Commission.

The issue related to access to career advice has been subject to internal discussions and a number of actions, also under HRS4R (including our initiative addressed to the authorities of the Polish Academy of Sciences in 2017, proposing to create a career advice office which could provide support to all PAS institutes). The measures have taken into account that at IPPT PAN the career advice and development pathways should be tailored individually to each employee and/or PhD student. For this reason an individual career advice is mainly offered on the research department level. HR Office also provides necessary support on the case by case basis.

Although 49% of the survey participants assess the access to career advice system very well or well, 34% do not think so. As the feedback collected in the survey indicates the PhD students as the group which needs such an advice, relevant trainings, also for newly enrolled PhD students, are planned.

IV. Training and development

A. Strengths and Weaknesses (Initial Phase)

Presented on the [webpage dedicated to HRS4R](#) ("Initial Phase" section).

B. Strengths and Weaknesses (Interim Assessment)

The organisational structure with a clear division into research departments and research groups (supported by clear internal legal framework, including Statutes of IPPT PAN and Organisational bylaws, updated in 2018) ensures sufficient level of formal and real supervision. The way IPPT PAN functions, with merit-based collaboration between researchers, guarantees sound support in a friendly atmosphere.

The fact that the majority of the Board of Directors members are active researchers themselves contribute to a good understanding of researchers' needs across the whole Institute.

Leaders of research departments and groups, who are selected in open competition, are natural (and formal) mentors and supervisors of their teams. They also play successfully their roles of leaders, project coordinators as well as case-by-case career advisors.

PhD students are guided and monitored in their research work by dedicated senior scientific supervisors.

A common practice spread across the Institute of regular organisation of scientific seminars serves well the purpose of exchanging knowledge and obtaining feedback on conducted research works, in particular in case of early-stage researchers.

Participation in research projects, in particular implemented in international environment, workshops and conferences helps researchers at IPPT PAN to develop new and update existing knowledge and acquire new skills.

Researchers are free to participate in trainings they need. However, in some cases financial aspects (a lack of grant) may limit their freedom.

Despite the generally positive feedback collected in the Gap Analysis, it was concluded that soft skills trainings could be beneficial for the staff, in particular for the ones holding managerial positions. In the process of implementation of the action it was decided to start from a pilot phase for directors, heads of research departments and other organisational units. After the pilot phase impact will be monitored and then a possible widening of the trainings will be considered (in terms of scope of next trainings and groups of participants).

A. Strengths and Weaknesses (Award Renewal)

Strengths

The training policy of IPPT PAN comprises a set of obligatory trainings such as health and safety trainings, recommended trainings based on identified needs on the institutional level and support of individual requests. Researchers can participate in trainings they need.

The staff of IPPT PAN, in particular researchers, and PhD students are also encouraged to participate in various trainings and workshops enlarging their skills, including transferrable skills (such as Open Science, academic writing, career development, intellectual property rights). The benefits of training opportunities abroad under Erasmus+ and other mobility funding programmes offered inter alia by the Polish National Agency for Academic Exchange are promoted at the Institute.

PhD students may choose a specific curriculum which brings together the benefits of working for a company with enlarging the corresponding knowledge and skills in doctoral schools (so called Implementation doctorate).

The well-defined organisational structure consists of relevant units, including research departments and research groups. The national and institutional legal regulations, in particular the Act on the Polish Academy of Sciences, Statutes of IPPT PAN and Organisational bylaws, constitute the framework in which IPPT PAN and its units operate. Such a setting guarantees the necessary level of formal and real supervision.

The heads of research departments and groups, who are selected in open competitions, are natural (and formal) mentors and supervisors of their teams, implementing the roles of leaders and providing tailor-made advice, also regarding an individual career development. PhD students are guided and monitored in the learning process and their research work by dedicated senior scientific supervisors. The relations with supervisors are assessed as very good (89% of positive opinions in the recent survey compared to 62% in the survey conducted in 2016).

Also, the evaluation of the execution of supervision and managerial duties at IPPT PAN is good (59% of positive opinions in the recent survey and 14% of the respondents who believe the C&C rule is either partially or insufficiently implemented; if "No opinion / non-applicable" answers are excluded, the ratio is 81% to 19%). However, considering the fact that the recent survey results are slightly worse in this respect than in 2016 the relevant action is planned (see: "Room for improvement" below).

The fact that the majority of the Board of Directors members are active researchers themselves has a positive impact on their good understanding of the needs of the scientific community of the Institute.

The well-rooted tradition and practice of regular organisation of scientific seminars, also delivered by invited scientists from abroad, constitute a good opportunity for respectful exchange of knowledge, research results and inspiring discussions. It provides merit-based friendly support, which is of particular importance to early-stage researchers.

Participation in research projects, especially the ones implemented in international environment, workshops and conferences allows researchers of IPPT PAN to develop new knowledge, update the existing one and acquire new skills.

Room for improvement

Despite the well-established framework and relatively large positive feedback collected in the recent survey, also compared to the results of the Gap Analysis in 2016 (the current level of satisfaction ranging from 59 to 89%, while in 2016 it was from 55 to 65%), the survey outcome revealed the need to improve access to information on the

trainings policy of IPPT PAN, including research trainings and continuous development aspects. The information will cover elements such as: what trainings are available to the staff and PhD students and whether and what procedural steps need to be undertaken to benefit from them.

Although, as presented above, the assessment of the relations with supervisors and colleagues at the Institute is very good, the organisation of soft skill trainings, in particular for the staff holding managerial positions (top and lower-level) is still on the agenda. Due to the pandemic this action has to be extended until the circumstances allow to have it organised onsite, in groups having direct face-to-face contact, as this way it will have a better impact than if conducted remotely.

Also, although the implementation of the C&C supervision and managerial duties rule was well assessed in the recent survey (positive opinions significantly outweigh the negative ones), the share of positive opinions has slightly decreased compared to 2016 (from 61% to 59%) and the share of respondents who believe the rule is partially or insufficiently implemented has increased (from 10% to 14%). The outcomes of the recent survey were definitely impacted by the pandemic and remoted work arrangements (which in some cases could influence the undisturbed information and process flow) but the issue still requires relevant measures (see: Action Plan).

Have any of the priorities for the short- and medium term changed?

The short and medium-term priorities remain essentially unchanged.

Since 2016 when IPPT PAN prepared its first Human Resources Strategy for Researchers and it was granted the HR Excellence in Research Award the HRS4R has become an integral part of the [development strategy of the Institute](#).

The first HRS4R covered 25 actions aiming at improving the working environment by addressing the gaps and imperfections identified in the Gap Analysis. The cross-cutting goals were to increase the awareness of the rules of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers among the community of the Institute and to strive for full incorporation of them into the framework in which IPPT PAN operates.

The Gap Analysis process sparked an in-depth internal discussion, involving all professional groups, about priorities and necessary changes which would best serve the environment of the Institute and its development and contribute to increasing the international recognition of its potential and activities.

By the end of the first phase of HRS4R implementation 18 actions had been completed, 3 were in progress and 4 were extended for the next cycle. Some of the actions which had been completed according to the first Action Plan were incorporated into the institutional practice as permanent activities, for example the monitoring the gender balance in employment or regular dissemination of information on mobility offers.

The primary goals of the twelve new actions planned in 2019 for the next cycle concentrated on further improvements of the working environment and the information policy of IPPT PAN addressed internally and externally - to the society, including scientists and industry representatives. The actions included updating the development strategy of the Institute and making it publicly available in English, rebuilding and modernising the information services and making its contents available - as much as possible - in English, also templates and forms used internally.

The actions planned in 2022 mainly focus on monitoring to make sure the measures which have been introduced meet the goals and properly work in practice and on spotting the remaining imperfections. Also, as we have noticed a slightly decreased level of satisfaction in the case of some C&C principles (2. Ethical principles, 10. Non-discrimination, 11. Evaluation /appraisal system, 13. Recruitment (Code), 37. Supervision and managerial duties, 39. Access to research trainings and continuous development) compared to the 2016 survey, the issues will be subject to further careful analysis and relevant measures, if needed.

All those steps and actions undertaken since 2016 constitute a coherent approach to achieving a visible quality change and making as good conditions as possible for all, with a special emphasis on scientists. It has been evolving from introducing new solutions and modifying the existing ones in the initial phase to monitoring the entire system in order to make sure it works like a well-oiled machine.

Have any of the circumstances in which our organisation operates, changed and as such have had an impact on our HR strategy?

The change of the organisational structure of IPPT PAN adopted in 2018 has contributed to better responsiveness to the needs of researchers and to improved performance of the Institute.

Two elements which in recent years have had a major impact on the circumstances in which IPPT PAN operates, and – naturally – affected HRS4R implementation and the internal assessment of its effects, were the already mentioned reform of the national system of higher education and science in Poland, and COVID-19 pandemic.

The reform, with the entry into force of the Constitution for Science adopted in 2018, imposed a number of revolutionary changes on the previous system of higher education and science. As already mentioned, at IPPT PAN it deeply affected the internal system of the annual evaluation of research activity and the PhD studies, run by IPPT PAN. Further details about it are provided in Remarks to the “Strengths and weaknesses of the current practice” regarding “Ethical and professional aspects” above.

Also, the COVID-19 pandemic has affected the operation of IPPT PAN triggering activities to adjust many operational and legal aspects to frequently changing national regulations, introduce relevant precautions and - at the same time – ensure working conditions allowing safe and effective work.

Are any strategic decisions under way that may influence the action plan?

Currently, no substantial changes in the development strategy of IPPT PAN are foreseen which could influence the Action Plan.

3. Actions

Proposed ACTIONS				
Action 1	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To undertake measures based on amended IT and data security policy which will lead to coordinated management of IT equipment and IT network	7. Good practice in research	October 2017	Computing Services Unit	Regulation on management of IT equipment and IT network
	Current Status COMPLETED	Remarks The Action, which after its extension in 2019 was planned to be finalised in IV Q 2019, has been completed. The relevant information and rules related to IT and data security policy are available in intranet to staff and PhD students. The staff of IT Office as well as data protection inspector are in charge of ensuring proper implementation of the rules. They are also available to provide detailed explanation and support, if needed.		
Action 2	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)

To review the existing rules and practices at IPPT PAN in the context of the principle and adjust them accordingly	17. Variations in the chronological order of CVs (Code)	III Q 2022	HR Office	Modified "Rules on employment of scientists"
	Current Status	Remarks		
	IN PROGRESS	Although the regular monitoring of the implementation of the rule did not show deviation from the principle in the institutional practice, it was decided to better reflect the principle in the internal legal framework. The HR Office and the Board of Directors have initiated the discussion with involvement of the Scientific Council on the need for relevant modifications and appropriate procedural steps have been undertaken. Currently the modified draft of the "Rules on employment of scientists" has been transferred to the chairman of the Scientific Council for further processing and final adoption by the Council. The process has reached its final phase and the document is planned to be adopted as soon as possible, no later than in III Q 2022.		
Action 3	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To modify the Scientific Council Resolution 'Rules of employment of scientists' by quantifying the mobility criterion in order to amplify its value	18. Recognition of mobility experience (Code) 29. Value of mobility	III Q 2022	HR Office / Board of Directors	Modified "Rules of employment of scientists"
	Current Status	Remarks		
	IN PROGRESS	Despite the fact that mobility experience has been properly recognised in practice and appreciated as a necessary component of the career development, it has been decided to stronger reflect its value in the internal regulation and modify the provisions regarding the mobility criterion in recruitment. The HR Office and the Board of Directors have initiated the discussion with involvement of the Scientific Council on the need for relevant modification and appropriate procedural steps have been undertaken. Currently the modified draft of the "Rules on employment of scientists" has been transferred to the chairman of the Scientific Council for further processing and final adoption by the Council. It is the final phase of the process and the modified document is planned to be adopted as soon as possible, no later than in III Q 2022.		
Action 4	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To modify the IPPT PAN's website in order to increase the visibility of information on career development	28. Career development 30. Access to career advice	II Q 2020	HR Office / Computer Services Unit	Information package on career development, available on the website
	Current Status	Remarks		
	COMPLETED	A new website of the Institute has been created, with contents available in Polish and English, ensuring greater transparency and easy access to documents and information for employees, PhD students and external recipients. Information regarding work, career development paths and job offers are published on the website in a dedicated space.		
Action 5	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To elect (bottom-up approach) and appoint an ombudsman	34. Complaints/appeals	I - II Q 2019	Board of Directors / HR Office	<ul style="list-style-type: none"> Documentation of the election process Election of ombudsman

	Current Status	Remarks		
	COMPLETED	In April 2019 the office of ombudsman was established for an unlimited period, divided into 4 years' terms of office. In parallel the process of electing and appointing 2 persons (a man and a woman, representing research and administrative pillars) to hold the first term of the office was finalised. The entire process was transparent and documented. The elections for the next term will be conducted in 2023.		
Action 6	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To organise series of soft skills trainings, workshops in smaller groups (research departments)	36. Relation with supervisors 37. Supervision and managerial duties	IV Q 2023	HR Office / Board of Directors	Training documentation: agenda, attendance list, training materials
	Current Status	Remarks		
	IN PROGRESS	After conducting a wide market research a training company was selected in February 2020, followed by the signature of a contract for the provision of a series of soft skills trainings. The trainings were planned to be organised as onsite workshops, recognised as a format bringing the best results. Due to the lockdown related to Covid-19 pandemic and the fact that the recommendation to work remotely is still in force at IPPT PAN (as it is in many other institutions in Poland) the trainings had to be postponed. Once the state of the pandemic is lifted and employees return to stationary work the trainings will be organised.		
Action 7	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To prepare an 'HR-dedicated space' in IPPT PAN's internal network with staff-useful information package, including Labour law regulations and employees' rights and obligations	1. Research freedom 40. Supervision	IV Q 2022	HR Office	HR-related information package, available in 'HR-dedicated space' in IPPT PAN's internal network
	Current Status	Remarks		
	IN PROGRESS	The Action addressed all 40 principles. The implementation of the action is advanced, with conceptual works already finalised. Although an HR- dedicated space in its target form is technically still under construction (mainly due to the fact that some legal acts are not yet available in English) a significant part of information package contents is already accessible in the internal network. Further works dedicated to facilitating access to user-friendly information in both language versions (Polish and English), including translation of the remaining legal acts into English, are underway.		
Action 8	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To rebuild the web-based information services of IPPT PAN and to launch promotion activities in social media	8. Dissemination, exploitation of results 9. Public engagement	II Q 2020	Deputy Director for Innovation, Development and Cooperation	Improved visibility of information on IPPT PAN, its activity and achievements, dedicated to various groups of recipients; more effective outreach; page view statistics will be monitored to assess the popularity of improved services
	Current Status	Remarks		
	COMPLETED	The web-based information services have been completely rebuilt. This includes a new website of IPPT PAN, with more attractive contents and format than before as well as social media services of the Institute. The implementation of the action has ensured improved visibility of information about IPPT PAN, its activities and achievements as well as more effective outreach. The conceptual works regarding the contents and format of the web-based information services were supported by a bottom-up initiative of a number of PhD students and staff members and their active involvement.		
Action 9	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)

To update the development strategy of IPPT PAN and to make it available in English on the Institute's website	8. Dissemination, exploitation of results 9. Public engagement	II Q 2020	Board of Directors / Scientific Council	improved visibility of the updated development strategy of IPPT PAN
	Current Status	Remarks		
	COMPLETED	The updated development strategy of IPPT PAN in Polish and English is available on the website of the Institute.		
Action 10	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To develop and publish on the IPPT PAN webpage the OTM-R policy in the form of a single document collecting the existing rules and regulations. The document will be available in English	13. Recruitment (Code) 14. Selection (Code) 15. Transparency (Code) 16. Judging merit (Code) 17. Variations in the chronological order of CVs (Code) 18. Recognition of mobility experience (Code) 19. Recognition of qualifications (Code) 20. Seniority (Code) 21. Postdoctoral appointments (Code)	IV Q 2019	HR Office	Public availability of OTM-R policy in English
	Current Status	Remarks		
	COMPLETED	The OTM-R policy has been published on the website of IPPT PAN. It is available in two language versions: Polish and English.		
Action 11	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To organise seminars dedicated to career development for the staff and PhD students	28. Career development 30. Access to career advice	at least once a year	Deputy Director for Research	<ul style="list-style-type: none"> A wider overview on career development options and possible paths provided to researchers and PhD students; Enlarged access to career advice Indicator: at least 20 participants per seminar
	Current Status	Remarks		
	IN PROGRESS	Apart from seminars and lectures organised at IPPT PAN dedicated to career development (for example 2 seminars organised in 2021, lectures in PhD schools on scientific writing, effective speaking and career development), PhD students and staff are encouraged to benefit from seminars and workshops dedicated to career development, organised by other institutions (at least one invitation per year distributed to the community of the Institute). The action will be continued and further efforts will be made to ensure the future seminars respond well to the needs of the staff and PhD students.		
Action 12	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To make basic internal documents (contracts, rules, forms) available in English	10. Non discrimination 24. Working conditions	II Q 2020	Deputy Director for Innovation,	<ul style="list-style-type: none"> Increased accessibility of documents to all the staff members and PhD students;
	Current Status	Remarks		
	COMPLETED			

			Development and Cooperation	<ul style="list-style-type: none"> • 100% of basic internal documents available in 2 language versions (Polish and English)
	Current Status	Remarks		
	COMPLETED	All basic internal documents are available in 2 language versions: English and Polish. The set covers contracts and forms related to HR issues, civil contracts, basic legal regulations. Many of them are publicly available, for example, rules and regulations regarding PhD schools.		
Action 13	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To organise language courses for the administration, supporting researchers	5. Contractual and legal obligations 10. Non discrimination 24. Working conditions	regular actions, first courses organised in I Q 2020, to be continued in III Q 2022	HR Office	<ul style="list-style-type: none"> • Increased scope and quality of support provided to all researchers and PhD students; Indicators: • at least 70% of administration staff supporting researchers with communication skills in English; • at least 30% of administration staff supporting researchers with a very good command of English
	Current Status	Remarks		
	IN PROGRESS	The English language courses for administration started in March 2020. Lessons were organised on the premises of the Institute during working hours. Due to the fact that most of the participants started from the lowest learning level (A0, A1), the stationary mode was chosen as the most effective. The state of pandemic and remote work resulted in the necessity to temporarily suspend the courses. They will be continued after the state of pandemic is lifted, subject to availability of dedicated funds.		
Action 14	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To prepare a guide for newly enrolled PhD students in English	23. Research environment 24. Working conditions 36. Relation with supervisors	IV Q 2022	PhD Student Council and Heads of PhD schools	<ul style="list-style-type: none"> • Availability of the guide; • Easy access of PhD students to necessary practical information on PhD studies, students' rights and obligations and professional environment
	Current Status	Remarks		
	EXTENDED	The first conceptual works started in II Q 2020. Due to pandemic and the need to rapidly adjust the operation, also of PhD schools, to new circumstances (in the times of frequently changing legal regulations on the national level), solving many organisational and legal challenges related to it, and the limited human resources which could deal with it, the implementation of the action had to be postponed for a less demanding period. In the meantime it was decided to produce FAQs for PhD students which would provide them with responses to the most common questions they had. The first set of FAQs will be available by IV Q 2022.		
Action 15	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To prepare an information brochure for the staff, in particular newcomers, on IPPT PAN (basic rules and procedures, including document flow, who is in charge of what)	5. Contractual and legal obligations 12. Recruitment 23. Research environment 24. Working conditions 25. Stability and permanence of employment	IV Q 2022	HR Office	<ul style="list-style-type: none"> • Availability of the brochure to the staff; • Access to necessary information to properly perform professional duties

	26. Funding and salaries 28. Career development 31. Intellectual Property Rights 34. Complains/ appeals 36. Relation with supervisors 39. Access to research training and continuous development			
	Current Status	Remarks		
	IN PROGRESS	The brochure will be available together with other documents, including the applicable legal acts in the Polish and English language versions, in the HR- dedicated space.		
Action 16	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To conduct short satisfaction survey among the staff and PhD students	3. Professional responsibility 4. Professional attitude 5. Contractual and legal obligations 10. Non discrimination 11. Evaluation/ appraisal systems 23. Research environment 24. Working conditions 28. Career development	once a year	HR Office and Head of PhD studies respectively	<ul style="list-style-type: none"> Regular measurement of satisfaction level; Possibility to identify systemic problems; Questionnaires sent to all staff members and PhD students respectively; At least 60% of responses
	Current Status	Remarks		
	COMPLETED	The survey research was conducted 3 times: in 2019 - a survey focused on PhD students and recent alumni, with a set of questions related to the quality of doctoral studies, in 2021 - a survey addressed to the staff and to PhD students, with specific set of questions per each of the two groups, in 2022 - a survey on C&C rules not addressed in 2021 survey. Although the planned indicator of at least 60% of responses appeared overly optimistic and the real share was lower (54% in 2019, 31% in 2021 and 57% in 2022), the feedback provided sufficient material for analysis and was valuable. The findings and conclusions drawn from the analyses of each satisfaction survey results, also comparative, serve as tools to improve the performance of the Institute and the doctoral schools. For this reason - although the action has been formally completed - it will become part of the standard practice of the Institute.		
Action 17	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To increase the number of research seminars held in English	7. Good practice in research 8. Dissemination, exploitation of results 10. Non discrimination 28. Career development	regular actions (at least once a month)	Deputy Director for Research in cooperation with relevant research departments	Availability of seminars to all researchers Indicator: 50% of all research seminars held in English

	39. Access to research training and continuous development			
	Current Status	Remarks		
	COMPLETED	The action has been completed and the planned target was definitely exceeded, with more than 70% of all research seminars held in English. Although the action has been formally completed it will be continued as part of the standard practice of the Institute.		
Action 18	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To conduct a central health and safety training for staff and PhD students	7. Good practice in research 23. Research environment	periodic action	Technical Services Office	Safe functioning in the working environment; Increased awareness regarding health and safety; Indicator: at least 90% of employees and PhD students trained
	Current Status	Remarks		
	COMPLETED	The central health and safety training for staff and PhD students was conducted according to the previous Plan (in 2019) and the targets and indicators were achieved. The action as such was completed. The trainings will be regularly repeated as part of standard practice. The next one is planned in IV Q 2024. It will be addressed to all PhD students and staff of IPPT PAN.		
Action 19	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To clearly indicate to applicants the complains procedure	13. Recruitment (Code) 14. Selection (Code) 15. Transparency (Code) 34. Complains/ appeals	IV Q 2019	HR Office	Increased transparency of the process Indicator: no more than 2% of complains
	Current Status	Remarks		
	COMPLETED	Applicants are informed about the complains procedure. Up till now there have been no complain received.		
Action 20	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To analyse the system of evaluation of research activity and introduce appropriate measures, including the necessary modifications (if identified) and information campaign on the principles and rationale behind the system, addressed to the staff of the Institute, in particular researchers	11. Evaluation/ appraisal systems	IV Q 2022	<ul style="list-style-type: none"> Deputy Director for Research Scientific Council 	<ul style="list-style-type: none"> Presentation of the results of the analysis to the Scientific Council; An internal information campaign carried out in order to explain and clarify the principles and details of the process; Introduction of necessary changes to the evaluation system (if such a need identified); A higher share of positive opinions collected in the next survey compared to the recent results Number of information meetings Number of participants in the meetings Target: 15% increase in positive opinions in the total survey feedback regarding the principle implementation, compared to the previous survey result.
	Current Status	Remarks		
	NEW			

Action 21	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To regularly monitor the implementation of ethical and non- discrimination principles and, if needed, undertake relevant measures	2. Ethical principles 10. Non discrimination	Regular action, at least once a year	<ul style="list-style-type: none"> • Ombudsman • Deputy Director for Research 	<ul style="list-style-type: none"> • A short survey addressed to staff and PhD students regarding both issues which will be analysed, conclusion will be drawn and implemented; • Annual reporting by Ombudsman to the Board of Directors; • Facilitated access to and further promotion of information about the remits of Ombudsman • Fewer comments in the comment box (a free text box) in the next survey • A dedicated page in the web-based information services of IPPT PAN • Number of entries on the dedicated webpage
Current Status		Remarks		
NEW		<p>Newly added (in 2023) remarks:</p> <p>Considering ethical and discrimination issues, free text comments collected in an anonymous survey might signal problems in the institution better than an average result from it. Thus the target is to have fewer comments in the comment box (a free text box) in the next survey.</p> <p>Annual reports, including a brief summary of activities undertaken by Ombudsman, formulated findings and recommendations addressed to the Institute and its management regarding the necessary systemic changes (if identified) will be transmitted by Ombudsman to the Board of Directors every year in II Q.</p> <p>The access to and further promotion of information about the remits of Ombudsman will be facilitated via, inter alia, a dedicated page (an indicator) in the web-based information services of IPPT PAN (the existing functional mailbox will gain an enhanced visibility there).</p> <p>Number of entries will constitute another indicator of the monitoring of the action implementation.</p>		
Action 22	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To increase awareness of the general rules of the recruitment and selection process among the staff and PhD students, by conducting regular information actions	12. Recruitment 13. Recruitment (Code) 14. Selection (Code) 15. Transparency (Code) 16. Judging merit (Code) 17. Variations in the chronological order of CVs (Code) 18. Recognition of mobility experience (Code) 19. Recognition of qualifications (Code) 20. Seniority (Code) 21. Postdoctoral appointments (Code)	Regular action, at least every 18 months	HR Office	<ul style="list-style-type: none"> • An information action / awareness campaign • Increased awareness regarding recruitment and selection rules and procedures, confirmed by the next survey results (i.e. a smaller share of “no opinion / non applicable” responses in comparison to the recent results)
Current Status		Remarks		

	NEW	Despite the fact that in each organisation only the units and groups involved in the recruitment and selection process need to have very detailed knowledge of rules and practice in this respect, it was decided to plan this action in order to increase a general awareness of the rules and procedures related to it.		
Action 23	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To organise trainings on IPR, including co-authorship aspects, primarily dedicated to PhD students	31. Intellectual Property Rights 32. Co- authorship	IV Q 2024 the latest	Centre for Commercialization and Technology Development	<ul style="list-style-type: none"> • Organisation of a workshop on patenting; • Organisation of a training on IPR; • Increased skills and knowledge regarding patenting procedures, in particular among the most active PhD students; • Increased and updated knowledge of the general rules and procedures regarding IPR among the staff and PhD students
	Current Status	Remarks		
	NEW	The workshop on patenting will be primarily dedicated to the most active PhD students who are involved in research areas where this form of protection is common. The training on IPR will be primarily dedicated to PhD students. The staff participating in the training will refresh and update their knowledge.		
Action 24	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To develop and publish Gender Equality Plan (GEP)	10. Non discrimination 27. Gender balance	II Q 2022	HR Office	GEP published and the attention of the community of the Institute drawn to it
	Current Status	Remarks		
	NEW	Despite the fact that many elements of GEP are in practice already in place at IPPT PAN, further works are conducted and the formal document, as required by the European Commission, is under development. It will be published in II Q 2022.		
Action 25	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To organise lectures and trainings on career pathways, dedicated to PhD students	28. Career development 30. Access to career advice	Annual action	Heads of PhD schools	<ul style="list-style-type: none"> • Organisation of lectures and trainings on career development and pathways; • Inclusion of scientific writing and effective communication aspects in the permanent offer of doctoral schools' programmes • Participation in 1 training session on career pathways will be mandatory for a newly enrolled PhD student • Scientific writing and effective communication aspects will be a subject (lectures and exercises) awarded with ECTS points in the PhD schools' programmes
	Current Status	Remarks		
	NEW			
Action 26	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To improve access to information on the training policy at IPPT PAN, including research trainings and continuous development aspects	39. Access to research training and continuous development	IV Q 2022	<ul style="list-style-type: none"> • Heads of PhD schools • HR Office in collaboration with the Deputy Director for Research 	<ul style="list-style-type: none"> • Easily accessible to staff and PhD students information on the training policy, specifying what trainings are available (including research trainings and continuous development aspects), to whom and whether and what procedural steps need to be undertaken to benefit from them <p>Target:</p>

				<ul style="list-style-type: none"> • a 15% increase in positive opinions in the total survey feedback regarding the principle implementation compared to the previous survey. • One of new trainings, primarily dedicated to PhD students: ethics in science (mandatory for newly enrolled PhD students).
	Current Status	Remarks		
	NEW	<p>Newly added (in 2023) remarks: A new target is a 15% increase in positive opinions in the total survey feedback regarding the principle implementation compared to the previous survey. The new training on ethics in science is planned to be mandatory for newly enrolled PhD students.</p>		
Action 27	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To strengthen the monitoring mechanism for the performance of supervision and managerial duties	37. Supervision and managerial duties	regular action, starting III Q 2022	College of the Institute in collaboration with HR Office	<ul style="list-style-type: none"> • at least 1 meeting of the College every six months devoted to monitoring the C&C rule execution and discussing systemic aspects related to it Target: <ul style="list-style-type: none"> • fewer comments in the comment box (a free text box) in the next survey
	Current Status	Remarks		
	NEW	<p>Newly added (in 2023) remarks: A real or potential problem in proper performance of supervision or managerial duties is better communicated with free text comments in an anonymous survey, rather than an average result of it. Thus a new target is to have fewer comments in the comment box (a free text box) in the next survey.</p>		
Action 28	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To develop and publish an Open Science strategy of IPPT PAN	3. Professional responsibility 6. Accountability	<ul style="list-style-type: none"> • • II Q 2024 – publication of OS strategy • • IV Q 2024 – availability of open data repository 	Deputy Director for Innovation, Development and Cooperation	<ul style="list-style-type: none"> • Open Science strategy published and introduced to the community of the Institute • Creation of an own repository of research data, produced at IPPT PAN and clear research data management rules implemented
	Current Status	Remarks		
	NEW	<p>Actions planned in the OS strategy will be implemented according to its Action Plan, covering clear responsibilities and timing per each actions. The OS strategy of IPPT PAN will be fully compliant with the EU and national policies in this respect. It will create a well- structured framework which will cover among others the creation of our own repository of research data, produced at IPPT PAN, and the set of rules of research data collection and management. Action 28 will complement the activities already undertaken at IPPT PAN in the EU and national Open Science framework. One of the examples of promoting Open Science and already available tools is on the webpage of the Library of the Institute (currently available in Polish).</p>		
Action 29	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)

To improve access to and awareness of the EU policy developments, in particular related to ERA, among the staff and PhD students (a dedicated information set on the website of IPPT PAN, awareness raising campaign)	4. Professional attitude	<ul style="list-style-type: none"> • II Q 2024 – dedicated webpage • III Q 2023 – the first information set introduced to PhD students and staff, followed by regular (twice a year) information activities correlated with EU policy updates 	Deputy Director for Innovation, Development and Cooperation	<ul style="list-style-type: none"> • an easily accessible dedicated webpage created, with a relevant information set, including links to EU documents and regular updates • number of entries on the dedicated webpage • regular information activities on EU E&I policy for PhD students and staff
	Current Status	Remarks		
	NEW	In order to accelerate this action initialization of information activities such as email notifications including links to the basic EU documents will precede establishment of the dedicated webpage. This action will be linked with Action 28 dedicated to the development and implementation of an Open Science strategy at IPPT PAN.		
Action 30	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To strengthen the role of young researchers (R1 and R2) in the decision-making process, in particular regarding working conditions and career development	35. Participation in decision-making bodies	<ul style="list-style-type: none"> • III Q 2023 - enlargement of HRS4R WG • II Q 2023 - the first meeting of R1 and R2 with the Board of Directors, followed by the meetings organised twice a year 	Deputy Director for Research	<ul style="list-style-type: none"> • HRS4R WG composition enlarged by appointing additional R1 and R2 representatives, designated by R1 and R2 independent gathering (elected by young researchers) • R1 and R2 researchers constituting at least 40% of HRS4R WG members • regular meetings of R1 and R2 with the Board of Directors dedicated to discussing issues of key importance to ensure their perspective considered
	Current Status	Remarks		
	NEW	Since the beginning of HRS4R implementation at IPPT PAN and due to it our young researchers have become one of the most active professional groups expressing in formal (e.g. HRS4R WG works) and informal manner their perspective. Every time their comments and suggestions have been carefully considered by the HRS4R WG and the management of the Institute and, whenever possible, relevant measures have been		

		undertaken. The active involvement of young researchers in HRS4R implementation is planned to be further enhanced.		
Action 31	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To strengthen the system of effective scientific supervision over doctoral students and young scientists	33. Reaching 37. Supervision and managerial duties 40. Supervision	<ul style="list-style-type: none"> • IV Q 2023 – first trainings for current supervisors • Once a year (dates correlated with the meeting with PhD students - usually IV Q) - training for supervisors-to-be • Once a year – collection of feedback from young researchers, including PhD students (dates of feedback from PhD students correlated with the meeting with them - usually II/III Q) 	<ul style="list-style-type: none"> • Deputy Director for Research • Committee of the Scientific Council for Education • Heads of PhD Schools 	<ul style="list-style-type: none"> • training for current supervisors • training for supervisors-to-be: once a year together with the meeting with PhD students • regular collection of feedback from PhD students and young researchers regarding their level of satisfaction with the overall system and individual supervision
	Current Status	Remarks		
	NEW	<p>In order to strengthen the existing system, dedicated trainings for supervisors (current supervisors as well as a mandatory one for supervisors-to-be) will be conducted on the regular basis. They will cover various aspects of supervision, including formal and legal ones as well as communication, planning and cooperation.</p> <p>Trainings will be conducted by experienced researchers from IPPT PAN having effective supervision track-record and also by invited external trainers.</p> <p>The detailed scope of the trainings will be defined on the basis of feedback collected in due time from current and potential supervisors as well as from young researchers, including PhD students (a platform for best practice and problem sharing among trainers and supervisors, and trainers and young researchers).</p>		

		<p>The efficiency of the strengthened system will be monitored by regular collection of feedback from young researchers, including PhD students.</p> <p>The implementation of this Action will be linked and correlated with Action 27 "To strengthen the monitoring mechanism for the performance of supervision and managerial duties" as well as with already existing internal mechanisms such as the system of annual satisfaction survey (anonymous) or face-to-face confidential meetings of the Committee of the Scientific Council for Education with individual PhD students (in which individual supervisors do not participate).</p>		
Action 32	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To develop a solid system ensuring easy access to comprehensive career advice for researchers	28. Career development 30. Access to career advice	<ul style="list-style-type: none"> • III Q 2023 – a letter of intent between IPPT PAN and Warsaw University of Technology (WUT) signed • III Q 2023 – renewal of the proposal of a career advice centre as a central service offered by PAS • IV Q 2023 – a collaboration agreement between IPPT PAN and WUT signed 	<ul style="list-style-type: none"> • Deputy Director for Research • Heads of PhD Schools 	<ul style="list-style-type: none"> • a letter of intent between IPPT PAN and WUT signed • a collaboration agreement between IPPT PAN and WUT signed covering, inter alia, access to services of the Career Office of WUT and IPPT PAN • the renewed proposal of having a career advice centre created centrally (which will serve researchers of all PAS institutes) in the structure of the Polish Academy of Sciences, sent to the President of PAS
	Current Status	Remarks		
	NEW	<p>The existing career advice practice (based mainly on individual guidance and support offered on the level of research departments at IPPT PAN and possibility to participate in external events and to individually benefit from external services) will be complemented – on the systemic basis - by enlarged collaboration with the Warsaw University of Technology. The talks on relevant extension between both organisations have been finalised (formal documents processing is well advanced).</p> <p>One of the pillars of the enlarged collaboration will cover the availability of services of the Career Office of WUT and career offers dedicated primarily to PhD students of IPPT PAN.</p> <p>The Institute turned to WUT with its idea because of the already existing scientific collaboration, compatible areas and the fact that the Career Office of WUT has a very well developed system of career advice and well established network of professional contacts on the market.</p>		

		<p>Apart from that IPPT PAN plans to renew its initiative (undertaken for the first time by the Institute in 2017 and left unresponded by the then President of PAS) of creating a central career advice centre (which will serve researchers of all PAS institutes) within the structure of the Polish Academy of Sciences. The renewed proposal will be addressed to the recently elected President of PAS. The need for such a central centre has been already recognised by a number of institutes of PAS. The activities planned under this Action will complement the existing practice at IPPT PAN, thus creating a comprehensive and coherent career advice system.</p>		
Action 33	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To strengthen the system of support in developing transversal skills, including successful proposal writing and project management by organising regular trainings dedicated to researchers	38. Continuung Professional Development 39. Access to research training and continuous development	IV Q 2023 - the first training, followed by regular activities (trainings, workshops and consultations), correlated with the call schedules of relevant funding agencies	<ul style="list-style-type: none"> Deputy Director for Research Centre for Research Programmes of EU Projects Management and Research Coordination Office 	<ul style="list-style-type: none"> development of matrix of required transversal skills and competences for researchers 10% increase of draft proposals prepared in 2024, compared to 2023 and keeping the increased number of drafts in the following years 10% increase in positive opinions in the total survey feedback regarding the principle compared to the previous survey
	Current Status	Remarks		
	NEW	<p>In the enhanced system the already existing mechanism of support will be complemented by additional internal trainings, regular comprehensive best practice exchanges and trainings organised by external trainers. The implementation of this Action will be linked and correlated with Action 6 (“To organise series of soft skills trainings, workshops in smaller groups (research departments)”), Action 23 (“To organise trainings on IPR...”) and Action 25 (“To organise lectures and trainings on career pathways, dedicated to PhD students”) which also cover activities dedicated to development of transversal skills.</p>		
Action 34	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To enlarge the scope of information planned to be available in the ‘HR-dedicated space’ in the intranet of the Institute by including concise step-by-step guidance on basic internal procedures	5. Contractual and legal obligations 6. Accountability 7. Good practice in research 23. Research environment 24. Working conditions 31. Intellectual Property Rights	I Q 2024	<ul style="list-style-type: none"> Deputy Director for Administration – coordinator Deputy Director for Innovation, Development and Cooperation Deputy Director for Finance 	<ul style="list-style-type: none"> availability and easy access to user-friendly guides for staff and PhD students number of procedures described
	Current Status	Remarks		

	NEW	<p>Each section of the guide will be prepared by the relevant unit – according to its remits. The following units will be involved: HR Office, Technical Services Office, Public Procurement Office, Projects Management and Research Coordination Office, IT Office, Main Office, Accounting Office.</p> <p>The development of the guide will be supervised by the relevant Board of Directors (according to the organisational structure) members whose task will be coordinated by the Deputy Director for Administration.</p> <p>The Action will be linked with and it will complement Action 7 "To prepare an 'HR-dedicated space' in IPPT PAN's internal network with staff-useful information package, including Labour law regulations and employees' rights and obligations".</p>		
Action 35	GAP Principle(s)	Timing	Responsible Unit	Indicator(s) / Target(s)
To review and if necessary revision of Regulations of Doctoral Schools with a goal of improving its clarity and efficiency	5. Contractual and legal obligations 11. Evaluation/appraisal systems 12. Recruitment 28. Career development 30. Access to career advice 33. Teaching	IV Q 2023	<ul style="list-style-type: none"> • Committee of the Scientific Council for Education - coordinator • Heads of PhD Schools • PhD Students Council 	Publication and availability of more clear regulations
	Current Status	Remarks		
	NEW	<p>The PhD schools run by IPPT PAN were established in 2019 as the result of the mandatory changes introduced by the reform of the national system of higher education and science in Poland.</p> <p>In 2023 the PhD schools are entering the end of the first full education cycle and will produce its first alumni. Although some immediate necessary modification were implemented on the way, now, there is a need for a comprehensive review of its performance and internal legal framework, based on the 4 year education cycle.</p>		

The extended version of the reviewed HR Strategy for our organisation for the next 3 years, including the OTM-R policy is published on our organisation's website:

<http://www.ippt.pan.pl/en/programs/ippt-strategy-hr>

Comments on the implementation of the OTM-R principles (Initial Phase)

Presented on the [webpage dedicated to HRS4R](#) ("Initial Phase" section).

Institutions applying for HR Excellence in Research IPPT PAN in 2016 (like IPPT PAN) or earlier were not obliged to fill in the OTM-R checklist in the Initial Phase.

Comments on the implementation of the OTM-R principles (Internal Review for Interim Assessment)

The first HRS4R of IPPT PAN was prepared prior to the introduction of the Strengthened HRS4R process by the European Commission (the HR Excellence in Research award was granted to IPPT PAN in 2016). Thus the preparation of OTM-R checklist was not then required as part of the Initial Phase of HRS4R. Despite this fact the overall compliance of the institutional framework regarding the recruitment process (national and internal regulations and practice) was covered by the Gap Analysis and addressed in HRS4R. The general conclusion was that the regulations, procedures and practice of IPPT PAN are in line with C&C principles and requirements.

Under the Internal Review held in 2018 (finalised in January 2019) the OTM-R checklist was prepared. The internal review of the legal framework regarding recruitment and the recruitment process practice confirmed the overall system is fully in line with C&C principles and it meets most of the requirements from the OTM-R checklist. The only elements which currently require improvements are the availability of OTM-R policy document in English visible on the IPPT PAN's website and a clear indication to applicants regarding the complains procedure. Also, e-recruitment tools have not been implemented at IPPT PAN but - despite it - the system of organisational and technical aspects of recruitment process has worked well, it has been kept on file (either paper or electronic) and the overall process and all its merit-based aspects are fully in line with C&C and OTM-R principles, including the quality monitoring system. As explained in OTM-R checklist, due to the scale (the size of IPPT PAN in terms of the number of employed researchers and the frequency of the recruitment process - for example in 2018 the recruitment process was conducted 12 times) there is no reason (either economic or organisational) to introduce more advanced e-tools now or in the nearest future. When the situation changes, IPPT PAN will consider transition to the e-recruitment tool.

The actions to make OTM-R policy document in English visible on the IPPT PAN's website and to clearly indicate the possibility for complain to applicants for vacancies are planned in the Revised Action Plan 2019-2021.

Comments on the implementation of the OTM-R principles (Internal Review for Award Renewal)

The stable, well-developed recruitment and selection system was in place at IPPT PAN already prior to the beginning of HRS4R preparation and implementation in 2016.

The system, comprising relevant regulations, procedures and practice, has not changed in its main principles. The aim of modifications which have been introduced in recent years was only to adjust the rules to amendments in the national legal framework, to fine-tune the process and fully align it with the relevant C&C principles (for example, to clearly indicate the complains procedure in the feedback sent to applicants).

On the national level two acts: the Labour Code and the Act on the Polish Academy of Sciences set the general recruitment and selection framework.

On the level of IPPT PAN two Scientific Council Resolutions: "Rules of employment of scientists" and the Scientific Council Resolution on the terms of reference of call for research positions procedure at IPPT PAN constitute the legal core of the entire system. The rules are strictly followed.

The recruitment and selection system is in line with C&C principles and requirements and the process is open, transparent and merit-based.

In case of research positions relevant committees of the Scientific Council, namely: the Committee for Organisation and Employment and/or the Committee for Employment on Full Professor Position, are involved.

The process is supervised by and involves the Board of Directors and the Scientific Council. The whole process is fully supported by a professional, well-trained representative of HR Office.

Further details are provided in OTM-R policy published on the website of the Institute.

4. Implementation

General overview of the implementation process:

Since IPPT PAN was established in 1953 it has been concentrating on conducting high quality research in the areas of the focus of the world's science and technology and ensuring favourable conditions to implement the goal. Over the years the Institute has been a cradle of many new research and innovation ideas, brilliant minds and new organisations, including a number of new research institutes and companies established in Poland. All that would not be possible without paying sufficient attention to the quality of the working conditions and professional approach.

The effort which resulted in developing the first Human Resources Strategy for Researchers in 2016 was the natural step on the consequent path aiming at making the professional environment at IPPT PAN friendly and – at the same time - keeping it inspiring.

After the decision of entering the HRS4R path was made a working group, composed of representatives of all staff and PhD groups, including R1 to R 4 researchers, management and administration of the Institute, was formally created. Its goal was to develop HRS4R. The works aiming at meeting the goal allowed to identify imperfections in the operation of the Institute and initiated a multifaceted discussion what and how needs to be done in order to improve the institutional environment.

After IPPT PAN was granted the HR Excellence in Research Award in December 2016 the working group changed its name and goal, becoming the Working Group for the monitoring of the implementation of the Human Resources Strategy for Researchers (HRS4R WG). The name of the Group clearly reflected its main goal, which has been executed by tracking and assessing the progress, identifying the still existing needs and bottlenecks in every-day activities and policies.

When needed, the HRS4R WG invited to its meetings other members of the staff or PhD students in order to get additional feedback or widely discuss possible solutions. For example:

- when discussing IT management issues the head of the IT Office together with the deputy director supervising the area were invited,
- when the Group discussed the ways to improve the quality of the internet information services of IPPT PAN a group of PhD students was involved as the most natural representatives of users and content providers of internet services, including social media.

The activity of the HRS4R WG and the HRS4R implementation have been regularly reported to the Board of Directors and Scientific Council who have been supervising the overall works and progress.

The first phase of implementation was focused on solving the most visible and urgent issues identified in the Gap Analysis and preparing the ground for further actions, including the ones having long-term impact.

Since 2019 the focus has evolved towards two main groups of measures dedicated to:

- further improvements of internal processes, in particular of the availability of and access to information employees and PhD students need in order to implement their duties well;
- reaching the widest possible audience with information on the activities of IPPT PAN, presented in an attractive format.

Since 2019 the monitoring system, which has remained unchanged in its structure, has been enriched by analysing the regularly collected feedback from the community of the Institute on selected policy and operational aspects.

In the course of HRS4R implementation the awareness of the real value of the Charter and Code and their rules has been raised across the whole institution.

Although many of the rules had been already fully or almost fully implemented prior to the beginning of our HR Excellence path, now the Institute and its community definitely pays more attention to various aspects which could still be improved in order to make the working environment more and more friendly.

How have we prepared the internal review?

When discussing the methodology of the Internal Review and the most efficient way of collecting feedback from the staff and PhD students which – together with other resources – could form a solid basis for drawing conclusions and preparing a set of new actions, the HRS4R WG decided to have it done via a survey. The main reason was to have a complete, fresh, overview of the level of satisfaction regarding the implementation of C&C rules. Although in the recent years the feedback from the community of the Institute was formally collected twice in the HRS4R framework: in 2019 (a survey addressed to PhD students and recent alumni working at the Institute) and in 2021 (a survey addressed to staff and PhD students), it did not cover all C&C rules but some selected aspects directly or indirectly linked with C&C. The WG decided to ask the community of IPPT PAN two questions per each C&C rule in the survey in 2022: about the importance and the level of its implementation at the Institute. At the same time - in order to reduce the burden of responding to 80 questions related to 40 rules - the HRS4R WG decided not to ask for feedback on C&C rules which had been covered by the previous survey, conducted in 2021. Such an approach allowed the number of questions to be limited in the questionnaire to 58 related to 29 rules. Further details about the survey and its results are provided in a separate file.

The survey results (the surveys were conducted in 2021 and 2022; their results were also compared with the survey results of 2016) together with:

- the outcome of the continuous monitoring of the HRS4R implementation by the HRS4R WG

and

- every-day individual interactions of the Group members with other employees and PhD students of IPPT PAN

provided a reliable basis for the Internal Review.

It allowed for re-analysing the strengths of the Institute, the aspects which still need further improvements and assessing what actions had been successful, which had not and which ones, although completed, should be incorporated into the standard practice.

The review also resulted in planning a set of actions for the next three years' period. Some of them are new and some are in progress or extended. The results of the Internal Review and the Reviewed HRS4R and Action Plan have been approved by the Board of Directors.

How have we involved the research community, your main stakeholders, in the implementation process?

As already described in the previous subsections, the whole community, including researchers, has been involved in the design and implementation process from the beginning. The first survey conducted in 2016 under Gap Analysis was addressed to all employees and PhD students. On the basis of the collected feedback and analysing the legal framework and practice the first HRS4R was developed, with significant involvement of the already established working group for HRS4R. Since the 2016 the Board of Directors and Scientific Council has had an important role in the process, in particular its supervision.

The composition of the HRS4R WG, comprising all groups of staff and PhD students (R1 to R4 researchers, administration, management, including deputy directors and Scientific Council members) clearly shows its representativeness. The lively constructive discussions among its members presenting different perspectives bring a real added value, resulting in new ideas which contribute to the quality change.

Do we have an implementation committee and/or steering group regularly overseeing progress?

The HRS4R implementation has been regularly monitored by the Working Group for the monitoring of the implementation of the Human Resources Strategy for Researchers. The works of the WG and the overall HRS4R implementation have been supervised by the Board of Directors and Scientific Council.

Since its establishment the list of persons composing the HRS4R WG has slightly changed due to the natural fluctuation of the human resources, but the represented groups of staff and PhD students have remained the same.

Currently the HRS4R WG is composed of:

1. Janusz Szczepański, Professor – Chair (an advanced researcher, the deputy director for research, the member of the Scientific Council)
2. Katarzyna Kowalczyk-Gajewska, PhD. DSc. (an advanced researcher, associate professor, the member of the Scientific Council)
3. Cezary Graczykowski, PhD Eng. (assistant profesor)
4. Jakub Lengiewicz, PhD (Post-doc)
5. Piotr Jencyk, M.Sc. Eng. (PhD student)
6. Agnieszka Milczarek, M.Sc. (administration; the head of the Human Resources Office, since 2018 also the deputy director for administration)
7. Monika Milewska, M.Sc. (administration; the head of the Projects Management and Research Coordination Office),
8. Grażyna Omarska, M.Sc. – Vice-Chair (administration)
9. Anna Wiśniewska, M.Sc. (an external expert – Horizon Europe NCP).

The HRS4R WG has been holding regular meetings (2 in 2017, 3 in 2018, 4 in 2019, 2 in 2020, 3 in 2021, already 3 meetings in 2022) and – when needed – intensive exchanges of views and consultations via emails.

The group has been regularly reported on the state-of-play of HRS4R implementation, informed about the progress and challenges regarding individual actions. It has discussed in-depth the implementation issues and proposed solutions to identified challenges.

One meeting of the WG per year has been dedicated to a comprehensive analysis of the achievements and challenges of the implementation during the last 12 months' period as well as the efficiency and impact of the actions on the overall operation of the Institute.

The findings and conclusions from the HRS4R WG meetings have been recorded in the meeting minutes.

Exchange of views via electronic means has been also documented.

The documents provided to the Group and produced by it as well as the minutes have been filed in a shared dedicated directory to ensure an easy access to them for each HRS4R WG member.

The mode of operation of the HRS4R WG is presented in section 7. Implementation and monitoring of the updated Strategy and Action Plan (page 17) of the [Updated HRS4R and Action Plan](#).

As the developed monitoring and supervision system has proved to work well, it will be continued in the next implementation period.

Is there any alignment of organisational policies with the HRS4R? For example, is the HRS4R recognized in the organisation's research strategy, overarching HR policy

HRS4R is fully embedded in the [development strategy of IPPT PAN](#).

The development strategy has been updated in order to incorporate the recent changes in the national legal framework and structure the existing practice and documents into a single coherent umbrella document. It outlines the mission, vision, goals, strategic orientations and implementation tools. The goals presented in the development strategy represent two groups: the research and innovation goals which are primarily achieved by project implementation and other research-related activities and cross-cutting goals where HRS4R with its aim of providing excellent working conditions fits perfectly well.

The system designed the way to stimulate and maintain the high standards, quality of research and overall performance of IPPT PAN, where HRS4R implementation is a natural part of it, has a significant impact on the path to excellence of IPPT PAN.

How has our organisation ensured that the proposed actions would be also implemented?

Since 2016 IPPT PAN has developed the necessary structures and procedures in order to ensure proper implementation of the Action Plan. Possible actions and expected impacts are always subject to in-depth discussion, not only by the HRS4R WG but also with relevant persons at IPPT PAN within their remit, before the reviewed documents, including the list of new actions, are finalised. The reviewed HRS4R and Action Plan are approved by the Board of Directors.

The way the reviewed HRS4R and Action Plan are prepared, together with the clear assignment of responsibilities per action, defined timing, targets and indicators as well as the mature monitoring and supervision system ensure the implementation of the proposed actions.

How are we monitoring progress (timeline)?

The implementation is monitored by the HRS4R WG through regularly conducted analyses of its state-of-play, also against the set targets and indicators, and identification whether it brings the expected quality change.

The HRS4R WG has been holding regular meetings and – whenever needed – its members have exchanged views via electronic means.

The overall process has been supervised by the authorities of the Institute, namely the Board of Directors and Scientific Council.

The fact that two deputy directors and two members of the Scientific Council are in the composition of the HRS4R WG facilitates the regular, very direct, interaction and information flow between the Group and the authorities of the Institute.

Also, the feedback reflecting the level of satisfaction regarding the execution of certain rules and procedures has been regularly collected from the community of the Institute via dedicated survey research and analysed.

Apart from that the feedback from the staff and PhD students is collected via every-day informal contacts and various meetings organised at the Institute, with participation of the management of the Institute and members of HRS4R WG. It has always been a subject of careful analyses and in-depth discussions, allowing to assess the impact of the implemented actions and, if needed, to undertake additional measures.

Such a system ensures efficient monitoring of the progress.

It is planned to be continued, following the same framework. The involvement of enlarged representation of R1 and R2 researchers is planned (e.g. enlarged representation of these groups in HRS4R WG and strengthened collaboration between HRS4R WG and an informal group of young researchers which was formed as a very positive side effect of discussions conducted at IPPT PAN on HRS4R implementation issues).

How will we measure progress (indicators) in view of the next assessment?

The system of monitoring the progress of HRS4R implementation and its impact on the community and environment of IPPT PAN has been developed and improved since 2016. The system works well allowing measuring progress and assessing whether the actions are implemented according to the Action Plan and whether their execution contributes to the expected quality change.

Each action in the Action Plan has its own targets, indicators and timing. The level of implementation according to the Plan has been and will be monitored by the HRS4R WG. In case of identifying problems or challenges the WG analyses them and initiates relevant measures, involving appropriate units of the Institute, if needed.

Regularly organised short, well-focused survey research, introduced in 2019 as part of the reviewed Action Plan, has been already incorporated into the standard practice as a useful tool, allowing to collect additional feedback from the staff and PhD students and assess the efficiency of the implemented actions and other changes, introduced outside the formal HRS4R framework.

How do we expect to prepare for the external review?

The external review consists of three steps: an administrative eligibility, desk-based assessment and site visit.

The required documents have been uploaded to E-Tool for assessment. Complementary documents are also available on the [webpage dedicated to HRS4R](#) on the website of IPPT PAN.

A detailed agenda of the site visit we will agreed with assessors assigned to evaluate the implementation of HRS4R by our Institute. The meetings with assessors will involve representatives of the authorities of IPPT PAN, including the Board of Directors, Scientific Council, R1 to R4 researchers, administration and the HRS4R WG. Relevant presentations will be prepared in order to provide a good overview of our activity and the circumstances in which IPPT PAN operates.