

Important message to institutions:

Site Visits: All HRS4R in-house audits planned for 2021 and the foreseeable future in 2022 will be conducted remotely with the consent of the host institution. Should your institution be at renewal stage, once you submit your self-assessment online via the e-tool, the EC will be in contact with you to set a date for the remote visit together with a panel of independent experts. Should the institution prefer a classic on-site visit, the audit will be postponed. Meanwhile, institutions involved in the process can continue using the HR Excellence in research award.

GAP Analysis (Charter and Code Checklist)

Case number: 2020SK574179

Name Organisation under review: Slovak University of Technology

Organisation's contact details: Vazovova 5, Bratislava, 812 43

Submission date: 30/05/2022

Date endorsement charter and code: 04/11/2020

GAP Analysis overview

The Charter and Code provides the basis for the Gap analysis. In order to aid cohesion, the 40 articles have been renumbered under the following headings. Please provide the outcome of your organisation's GAP analysis below. If your organisation currently does not fully meet the criteria, please list whether national or organisational legislation may be limiting the Charter's implementation, initiatives that have already been taken to improve the situation or new proposals that could remedy the current situation. In order to help the organisation's recruitment strategy, a specific self-assessment checklist is provided for Open, Transparent and Merit-Based Recruitment.

European Charter for Researchers and Code of Conduct for the Recruitment of Researchers : GAP analysis overview

- **Status** : to what extent does this organisation meet the following principles?
- **Implementation (++, +/-, -/+, --)** :
 - ++ fully implemented
 - +/- almost but not fully implemented
 - -/+ partially implemented
 - -- insufficiently implemented
- **GAP** : In case of --, -/+, or +/-, please **indicate the actual "gap"** between the principle and the current practice in your organisation.
- **Implementation impediments** : If relevant, please list any national/regional legislation or organisational regulation currently impeding implementation.
- **Initiatives undertaken/new proposals** : If relevant, please list any initiatives that have already been taken to improve the situation and/or new proposals that could remedy the current situation.

Status

Ethical and Professional Aspects

Status

1. Research freedom

Implementation	GAP / Implementation impediments
++ fully implemented	At the Slovak University of Technology (STU), the research freedom is implemented in compliance with the European Charter for Researchers. Full freedom is guaranteed by law but the low financial level of state support for research, which causes different conditions for researchers in individual EU countries. In practice this means, in Slovakia research is mainly carried out as part of research projects and not efficiently linked to nationwide economic strategies and/or preparing students for professions currently in demand. Regulation: - Article 43(1) of the Charter of Fundamental Rights of the EU states that 'Freedom of scientific research and freedom of artistic expression shall be guaranteed. Intellectual property rights shall be protected by a law'. - Section 4(1)(a) of the Act on Academic Rights and Freedoms and Academic Rights of the Act No. 131/2002 Coll. on Higher Education guarantees 'freedom of scientific investigation, research, development of artistic and other creative and publicising their achievements'.

2. Ethical principles

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	<p>In general, these principles are adhered to, however there can be occasional individual oversights. The Code of Ethics is not up to date and not all researchers have been familiarized with it. Practical implementation of the STU Code of Ethics, acquainting employees with its contents and the form and possibilities of applying the code to strengthening the position of the STU Ethics Committee. There is no institutional approach to training and courses. Leading by example and best practice examples are insufficient. There are no explicit ethical rules on how experiments involving human participants should be conducted and how the collected data should be published (e.g., data anonymization). Regulation: - Rules and procedures for implementation habilitation and inauguration procedures at the Slovak University of Technology in Bratislava (unofficial translation) https://www.stuba.sk/buxus/docs/stu/pracoviska/rektorat/odd_veda_vyskum/HRS4R/Rules_of_the_recruitment_procedure_at_STU.pdf - Staff Regulations for employees of the Slovak University of Technology in Bratislava https://www.stuba.sk/buxus/docs/stu/pracoviska/rektorat/odd_veda_vyskum/HRS4R/Staff_Regulations_of_STU.pdf - The Code of Ethics of the Slovak Chamber of Civil Engineers (SvF): https://www.sksi.sk/eticky-poriadok-sksi - Department of the Head Controller – Whistleblowing</p>	Potential ethical issues are being resolved or can also be discussed by the Faculty Manager at the Slovak University of Technology in Bratislava. Suggestions: - STU examples, best practice procedures and training. Update and specify policies for individual courses (self-)plagiarism and clearly define what it means for academic staff explaining the Code of Ethics. The Ethics Committee in the university magazine shall form an appendix to all employment contracts regarding acknowledgement of co-authorship work after they finish their studies (by waiving their right to be used in the future) and behave in a diligent and responsible manner.

Status

3. Professional responsibility

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	<p>In general, these principles are adhered to, however there can be occasional individual oversights. The rights, obligations and statutes of the Ethics Committee have not been sufficiently defined. There is no institutional approach to training and courses. Leading by example and best practice examples are insufficient. The Code of Ethics is not up to date; there are no automated processes to verify professional responsibility. We could/should specify the consequences of non-ethical behavior for individuals and/or teams guilty of misconduct. The publication of results in the so-called predatory and low-quality magazines, which can be used to obtain the necessary results quickly, is treated individually. Lack of staff at STU's Technology Transfer Office (TTO) and the setup of national grant agencies (e.g. APVV) often does not really support socially important research. - Lack of information due to the absence or exploration of facts (state of the art verification) prior to the start of research can cause research spanning several years to be the same or very similar to the state of the art and therefore cannot be deemed original or industrially applicable. This failure appears at grant calls of the national agencies as well as at the research site. - Many of the aforementioned failures are caused by an excessive valuation of publications or by the (sometimes existential) necessity to present certain research results which should be achieved with disproportionately low government subsidies as those figures are key to general governmental funding. Regulation: - The Act No. 131/2002 Coll. on Higher Education (Section 62a Special requirements regarding Final, Rigorosa and Habilitation Thesis and Part Eight: University Employees). - Disciplinary Regulations of the Slovak University of Technology in Bratislava for Students - Staff Regulations for employees of the Slovak University of Technology in Bratislava</p>	<p>In general, it appears that researchers have reasonable knowledge of plagiarism. Initiatives: - Technology Transfer Office (TTO) - Legal & Code of Technology in Bratislava - Code of Ethics for employees of the STU Portal - Development of a set of information, examples of best practices and their wordings for published data and reproducibility of experiments and (online) courses (e.g. on how to create scientific publications including focusing on possible legal implications. - Making the necessary scientific access to libraries, databases and magazines, otherwise it is not possible to avoid incorrectly published results - Change of national university evaluation sanctions must be applied, and personal responsibility taken. - A sufficient number of real-life stimuli may improve the originality of research) - A high-sensitivity centralized verification system (anti-plagiarism articles, not just for final theses), - Legal aid , which could also be used for instructions?), not only in matters of a faculty-wide scope, but also research results categorized by fields of science containing both local and international experiments), which would also allow for publishing results in compliance with the required licence prior to the commencement of the research, the possibility to monitor the TTO if sufficient staff were available.</p>

4. Professional attitude

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	<p>In general, these principles are adhered to, however there can be occasional individual oversights. Not all researchers wish to participate in information events and workshops. They often do not have enough information about different grant schemes (in particular, the international ones). There is no institutional approach to training and courses. Leading by example and best practice examples are insufficient. A university-wide consulting and monitoring system is missing, which would at least provide researchers with the general information mentioned in this section. There is no department or unit capable of proposing a suitable grant scheme according to the requirements of the researchers, such as the topic of the research, the method of funding, expected results, measurable indicators, required paperwork, etc. Researchers are forced to obtain such information individually, which takes a lot of time and effort. Due to this increased administrative burden on staff, there is no room or capacity for a more in-depth analysis of the funding schemes, therefore 'proven' grant agency activities are usually repeated. The Code of Ethics is not up to date Strategic goals of the university have been set relatively vague – which negatively impacts the level of identification and professionalization of work of individual STU employees.</p>	<p>Initiatives: - information and individual consulting are provided to researchers through the Department of International Relations in a newsletter and on a designated University Project Centre and the project centres of individual departments and 'example' - Development of a set of information, examples of best practices and their wordings for published data and reproducibility of experiments and (online) courses (e.g. on how to create scientific publications including focusing on possible legal implications. - Making the necessary scientific access to libraries, databases and magazines, otherwise it is not possible to avoid incorrectly published results - Change of national university evaluation sanctions must be applied, and personal responsibility taken. - A sufficient number of real-life stimuli may improve the originality of research) - A high-sensitivity centralized verification system (anti-plagiarism articles, not just for final theses), - Legal aid , which could also be used for instructions?), not only in matters of a faculty-wide scope, but also research results categorized by fields of science containing both local and international experiments), which would also allow for publishing results in compliance with the required licence prior to the commencement of the research, the possibility to monitor the TTO if sufficient staff were available.</p>

Status

5. Contractual and legal obligations

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	<p>In general, these principles are adhered to, however there can be occasional individual oversights. Lack of staff at the Technology Transfer Office (TTO). There is no institutional approach to training and courses. Leading by example and best practice examples are insufficient. There is no institutional approach to initiatives when it comes to Open Access and Open Data. Overall, the legal and administrative support for contract-based research is insufficient. Insufficient legal awareness among the members of staff. Regulation: - Act No. 131/2002 Coll. on Higher Education - Act No. 311/2001 Coll., the Labour Code - Act No. 552/2003 Coll. on Performance of Work in the Public Interest - Act No. 553/2003 Coll. on Remuneration of Certain Employees During Performance of Work in the Public Interest - Staff Regulations for employees of the Slovak University of Technology in Bratislava</p>	<p>In general, it appears that researchers have a reasonable knowledge of national, industrial, and institut Organizational Department - Code of Ethics for employees of the Slovak University of Technology in Bi System (AIS) Suggestions: - Development of a set of information, examples of best practices and train publication evaluation / appraisal system. - Regular training and courses - raise legal awareness amon 'training'. - Many approaches have been identified, e.g. to bolster the legal and administrative support f project management department / Improve efficiency of transfer of the necessary information at all leve changed – they need to work in support of the main activity of STU: education, science, and research. reorganized. A further study is needed to find the best solution for the university. - Motivate and suppor processes used to claim intellectual property rights, set clear rules. - Motivating criteria for inventor(s) v could organize regular information seminars or at least send out information regularly. - When it comes – a separate interactive website/repository could help improve this. - Proposal to prepare a IPR directiv Centre of Scientific and Technical Information in Bratislava with regard to Open Access and Open Data</p>

6. Accountability

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	<p>In general, these principles are adhered to, however there can be occasional individual oversights. The concept of data storage and accessibility at an institutional level is inadequate There is no institutional approach to training and courses. Leading by example and best practice examples are insufficient. There is no institutional approach to initiatives when it comes to Open Access and Open Data. The Code of Ethics is not up to date. Considering the absence of long-term strategic goals, funds may not always be spent efficiently. The data required by researchers is not always up to date. Lack of internal control.</p>	<p>Researchers are more or less forced to use their funds in an efficient and effective way, beca has its own rules ensuring a reliable, transparent and efficient spending of funds as well as cc the respective bodies. Initiatives: - Implementation of an extension for the Academic Informati Ethics for employees of the Slovak University of Technology in Bratislava - Development of a prepared. - 'Train the trainer' activities - Regular training and courses and/or an accessible cl accountable in case of violations must be more efficient. - The funds can be used more effect them have been defined. - Improve the system of gathering, transfer and availability of the rec bureaucracy. - 'Lead by example'</p>

Status

7. Good practice in research

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	<p>STU does not have a centralized methodology for specific research activities (handling of biological material, waste, etc.), which are usually handled on a case-by-case basis whereas, with regard to the nature of our university, they are quite rare. However, with the development of biomedical applications, the need for such a methodology can be expected. Information about suitable strategies and procedures for backup of research related data (e.g. a centralized repository) which could prevent the loss or misuse of such data are not available. At STU there is no overview of the possibilities to use specialized (expensive) equipment owned or hired long-term by the university. The excessive administrative burden of the researchers does not allow to fully utilize research capacities and procedures. Regulation: - Act No. 124/2006 Coll. on Occupational Safety and Health - Staff Regulations for employees of the Slovak University of Technology in Bratislava</p>	<p>STU has implemented general rules for hazardous work which are in line with the Slovak legi GDPR regulation. The university also organizes mandatory annual occupational safety and h and individual consulting regarding the requirements of funders are provided to researchers t the Department of International Relations in person, or 'en bloc' in a newsletter and through a the requirements of funders is also offered by the University Project Centre and the project w intellectual property rights is offered by the Technology Transfer Office of the Rector's Office ; the OHSE Protection Specialist. - Consulting regarding GDPR is offered by the Legal Depart required level. The specific requirements of individual workplaces must be fulfilled by the resp the Slovak University of Technology in Bratislava. - STU Ethics portal - Possibly an improved research, artistic activities and publication evaluation / appraisal system. - Prepare data stora Dissemination of centralized but personalizable information (e.g. filters). - Waste chemicals u methodology.</p>

8. Dissemination, exploitation of results

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	<p>In general, these principles are adhered to, however there can be occasional individual oversights. Lack of staff at the Technology Transfer Office (TTO). There is no institutional approach to training and courses. Leading by example and best practice examples are insufficient. There is no institutional approach to initiatives when it comes to Open Access and Open Data. There is no focus on commercialization, in particular among the senior researchers. The personnel support to ensure external or commercial presentation of results is insufficient, the cooperation with industry is lacking. There is no wide-spread support of dissemination of information about the research results in the media, including the modern social media. Dissemination of results has been partially implemented when it comes to publishing in scientific journals, however the results are not promoted (marketed) sufficiently to reach the general public. Researchers are evaluated on the basis of the quantity and not quality of their published results. There is also an issue with measuring the efficiency of research, which may be dissimilar for different fields of study. Regulation: - Section 4(1)(a) Academic Freedoms and Academic Rights of the Act No. 131/2002 Coll. on Higher Education guarantees 'freedom of scientific investigation, research, development of artistic and other creative activities and publicising their achievements'.</p>	<p>Researcher evaluation is based on the published research results, i.e. on their scientific pu criteria of scientific publication is how often they are quoted. The objective of each researc practical applications as possible. Initiatives: - The results of the researchers' work are als university meetings. The results of their work are published in annual reports, evaluation re The results of the researchers' work are also disseminated through conferences and publi of their research use a profile at Google Scholar, Research Gate, ORCID or similar platfor systematically regulated or controlled. - Technology Transfer Office (TTO). - Implementatic Chemday activity has offered new possibilities to share knowledge among researchers (a ' research). Suggestions: - Creating an 'Open Access' and 'Open Data' repository - Preparii information, examples of best practices and training - Improve/develop a systematic institu Significantly bolster cooperation with the industry, spin-off activities and entities such as th by providing institutional support with dissemination outside of publishing and conferences recommendations. - Institutional database of both active and completed research projects promotion thereof. - Improvement of communication with the industry, asking industry ma business companies dealing with the issues at hand, etc. All of that with the objective of dc dissemination of research results through Open Access - When judging research, its quali</p>

Status

9. Public engagement

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
-/+ partially implemented	<p>There is a lack of common procedures, a comprehensive concept and support for promotion of science, research, and other results of creative activities at the university level, or any kind of training regarding this topic other than publication activities and enrolment of students. Public engagement often depends on individual activities of the faculties, on individual research teams or individuals. There is no institutional approach to initiatives when it comes to Open Access and Open Data. Lack of communication in English. Lack of information about domestic and foreign research activities. Researchers often do not have sufficient know-how on how to appropriately present the results of their research (both to the general public and to professionals from related fields). There is a lack of communication with secondary schools. A lack of material and financial support for science popularization, research- and other results of creative activities of individual research teams.</p>	<p>- Activities of the Ministry of Education, Science, Research and Sport of Slovak Republic: o Department of Higher Education, o Department of Technical Information (since 15 June 2007), and a specialised scientific library o The Central Information Portal and Information System promote public engagement: o The Science and Technology Week has been organised in Slovakia annually since 2004 (by the Ministry of Education, Science, Research and Sport, the Slovak Centre for the Popularisation of Science and Technology in Society, the Slovak Centre of Scientific and Technical Information). The aim is to improve the perception of science and technology in society, promote and present them, encourage young people to study scientific technical information, and communicate the necessity to support science and technology, which form the basis of economic and social development. Complementary events are organised by individual unions, associations, research & development organisations, ministries, self-governments usually have the form of open days, lectures, seminars, project presentations, conferences, workshops, exhibitions and similar. o The Science and Technology Week to facilitate exchange of information between the Ministry of Education and the universities. Members of the SRM promote R&D topics. o The Night of Researchers is another annual event. The event was held for the first time in Europe and Slovakia in 2012. Its mission is to show that researchers are 'ordinary' people with an exceptional profession. The results of their work help improve our lives. The project is organised by: SOVVA, SAV, EURACTIV in collaboration with the Ministry of Education, universities, business partners. o Open days o Children's university o Summer schools o Olympiads and competitions o Student scientific forums o Universities of the 21st century o Cafés and confectioners, different debates with researchers o Master classes focussing on physics (secondary schools, universities) o Information System (AIS) Suggestions: - Develop a set of information, examples of best practices and training should be prepared. - Instructive webinar for all academic staff - Regular training and courses - Bolster collaboration between universities with regard to information that the greater the number of universities presenting their results at the same time, the greater the public impact. - System solution support for young researchers when preparing such output. - We need professional PR staff at the university! / Promotion of science by researchers especially suited to carry out this work. Responsible lead researchers – prominent scientists – are not sufficiently engaged in promoting the work ideas about the actual research.</p>

10. Non discrimination

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
++ fully implemented	<p>There is a risk of discrimination based on political views. There is no control of discrimination on the basis of the selected field of science. Regulation: - Article 33 of the Constitution of the Slovak Republic states that 'Membership in any national minority or ethnic group may not be used to the detriment of any individual'. Article 36(b) states that 'protection of the employee against discrimination at work'. - The Act No. 365/2004 Coll. on Equal Treatment in Certain Areas and Protection against Discrimination, (the Anti-discrimination Act) - Code of Ethics for employees of the Slovak University of Technology in Bratislava - Staff Regulations for employees of the Slovak University of Technology in Bratislava</p>	<p>While there was a huge difference between the distribution of work to men and women are no longer perceived by employment assessment system and the subsequent remuneration of female and male researchers. Researcher remuneration is becoming more objective. However, it always depends on work and remuneration. A system for monitoring of opportunities and remuneration for students also requires training on multicultural issues. Improvement of the curriculum for a week instruction course for foreign students regarding the specifics of science and technology.</p>

Status

11. Evaluation/ appraisal systems

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	<p>In general, these principles are adhered to, even though the amounts paid are mostly an expression of recognition rather than a financial motivation... There is no evaluation by international committees. The employer's hands are often tied due to the underfunding of education, science and research. Young researchers can usually cope with such disincentive, the senior ones often seek other opportunities to provide for their families. When evaluating R&D, too much attention is paid to publishing, while e.g., practical application is often neglected.</p>	<p>Researcher activity is regularly evaluated, in particular in connection with: - comprehensive accreditation of universities; - accreditation of Education, Science, Research and Sport of SR required in the decision-making regarding distribution of subsidies to universities (published individually through an international evaluation process (e.g., EUA) - not on a regular basis; - preparation of university annual reports; - the procedure...); - and preparation of foreign and domestic research projects. - when creating a subject of industrial property, employees of continues to be used, by law they are entitled to further compensation (rector's regulation On the Protection and Management of Industrial publications - Rector's award for the best artistic performance - Young researcher support programme - Young researcher excellent team award 'Researcher of the Year' - Rewards for activities of authors - Faculty awards to the best researchers in individual departments (e.g. and publication evaluation / appraisal system. - Introduction of further (centralized) motivational remuneration schemes. - Along with the created, who can objectively evaluate the work of researchers and whose verdict will be relevant in the evaluation and appraisal of such in the field in which their subordinates work, therefore their evaluation and appreciation of the performance of such a person may not always students. This model could be used to nominate the best research team or best researcher from the students point of view. - Add the obligation Performance based financial rewards should be more direct instead of being implemented through institutes, but we should not forget at funding of technical universities and schools in general (lobbying).</p>

Recruitment and Selection - please be aware that the items listed here correspond with the Charter and Code. In addition, your organisation also needs to complete the checklist on Open, Transparent and Merit-based operationalization of these principles.

12. Recruitment

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully i...	<p>The process of publishing of open positions is very detailed (the Higher Education Act, the Anti-discrimination Act, and different internal documents), however the interviews and hiring standards for researchers – in particular, at the beginning of their career – are rather inconsistent and vague. In many cases the recruitment process is very individualized. STU does not have a sufficiently detailed description of the recruitment process and career development. Insufficient legislation for hiring researchers (and teachers) at an international level (in particular, for professors and associate professors) poses a significant obstacle to making the university more international. Most STU buildings are wheelchair accessible. The current remuneration possibilities prevent a faster development (recruitment from abroad and from the industry) and recruitment of younger staff. Regulation: - Rules of the recruitment procedure for university teachers, researchers, professors and associate professors and head employees at the Slovak University of Technology in Bratislava https://www.stuba.sk/buxus/docs/stu/pracoviska/rektorat/odd_veda_vyskum/HRS4R/Rules_of_the_recruitment_procedure_at_STU.pdf</p>	<p>Initiatives: - Job offers include requirements regarding education described in the collective agreement. - Vacancies are advertised are published on the STU website or at one of the job portals (Action), offering competitive salary conditions with the aim of Personnel audit. - Recruitment of researchers follows the standards and head employees, which is beyond the requirements of https://www.stuba.sk/buxus/docs/stu/pracoviska/rektorat/oc Suggestions: - Intensify publishing of open positions on the website and the Rector's Office in accordance with OTM-R - Include comprehensive HR policy, issue a guidance for qualitative recruitment of researchers and introduce long-term systemic measures for a better environment. - A clear and precisely applied concept of STU Improve funding of technical universities and schools in general</p>

Status

13. Recruitment (Code)

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
-/+ partially implemented	Employment for the duration of a project, employment for a fixed period of time and limited funds of universities reserved for researchers do not give researchers a lot of security in regard to their future employment. Frequently, the job description or a detailed description of obligations is vague, and the specification whether the contract is temporary or permanent is missing. The university has no rule to ensure transparency, career development and no mobility policy (alternative requirements), etc. Global websites for researchers (EURAXESS, Research Gate etc.) are rarely used, open positions are rarely promoted in english language on the STU web page. The Higher Education Act does not specify how the work activities of researchers differ from those of teachers. Information in job activity catalogues is also very limited. A large percentage of women with great research potential are discouraged by low social support for women on maternity leave. Insufficient funding and the therefrom arising unsatisfactory competitiveness on the labour market.	Job offers include requirements regarding education, required experience and agreement. Vacancies are advertised for a time period of 3 weeks (or longer) of the job portals. Initiative: - Personnel audit - Recruitment of researchers for professors and head employees, which is beyond the requirements of Slovakia https://www.stuba.sk/buxus/docs/stu/pracoviska/rektorat/odd_veda_vyskum/ Implement the recommendation of the personnel audit - Unification of recruitment OTM-R - Preparation of a welcome information package for new employees research projects, the possibilities and forthcoming nature of university's environment EURAXESS portal - A social programme for mothers on maternity leave should concept of STU development is the best advertisement when hiring new employees form only. No obligation to mail CVs by post. - Improve funding of technical

14. Selection (Code)

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully i...	In general, these principles are adhered to, however there can be occasional individual oversights. The criteria for selection of new employees and the terms for creating selection committees are only specified very vaguely in the regulations and procedures for hiring employees. Members of the selection committees are not trained on hiring and selection. The international dimension is often completely disregarded. Insufficient level/interest of applicants. Selection committees are mostly homogeneous, there is no variety of scientific qualifications. Regulation: - At present, these processes have been set to comply with the law, however there is room to modify them within the boundaries of the law. - Rules of the recruitment procedure for university teachers, researchers, professors and associate professors and head employees at the Slovak University of Technology in Bratislava https://www.stuba.sk/buxus/docs/stu/pracoviska/rektorat/odd_veda_vyskum/HRS4R/Rules_of_the_recruitment_procedure_at_STU.pdf	- The system used for selection of new employees works, c in detail. - The rule of gender and age diversity in selection Act and the Anti-discrimination Act. - The selection committee results, as well as project management experience. - New i competences are determined by the project owner (in the u comprehensive knowledge, results, publishing activity, etc.) Labour Inspectorate) the processes are being gradually pei same rules as recruitment of teachers, professors and assoc Slovak law: https://www.stuba.sk/buxus/docs/stu/pracoviska/rektorat/oc Suggestion: - Implement the recommendation of the person Rector's Office in accordance with OTM-R - Foreign and in from the Rector's Office for all departments of the university based. - Development of a comprehensive HR policy. Empl training, with a focus on managing interviews, and a compe applicant evaluation procedure and standard should be pre communication, character qualities, ability to collaborate, et

Status**15. Transparency (Code)**

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
-/+ partially implemented	Job seekers applying for an advertised open position are notified about the hiring process and the selection criteria, however only seldom are they notified about the number of open positions, possibilities of career development and the strengths and weaknesses of their application, which is mainly due to the fact that in the Slovak Republic attention is paid primarily to the impartiality of the selection procedure, which usually takes the form of a ballot by the members of the selection committee. Because of this, it is difficult to notify the applicants of their strengths and weaknesses. Also a lack of transparency with respect to strengths and weaknesses has been identified.	Initiative: - Implement the recommendations of the person of teachers, professors and associate professors and head https://www.stuba.sk/buxus/docs/stu/pracoviska/rektorat/oc - Unification of recruitment procedures of all faculties and transparency, awareness and the therefrom arising objectiv

16. Judging merit (Code)

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	Even though this rule is generally accepted and used, the university is missing detailed evaluation criteria for judging merit and weights for individual evaluated indicators. Their specification in internal documents is very vague.	Initiative: - Implement the recommendations of the personnel audit. Suggestions: - Improve transparrer as part of the comprehensive HR policy (a system of comprehensive evaluation of candidates). Propo: development with basic research. - Non-university experts and experts from the respective fields shou

17. Variations in the chronological order of CVs (Code)

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
++ fully implemented	Unified document is missing.	Suggestion: - Use a unified CV form for all. - This should be included in the unified comprehensive HR policy.

18. Recognition of mobility experience (Code)

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	Even though mobility experience is very important to STU, the provisions of internal documents in this regard are very vague. The university only has very limited resources to support mobility. Lack of information about the possibilities of funding mobility as part of grant schemes and projects. Lack of time due to the high workload of researchers. Language barrier or insecurity when communicating in a foreign language.	Assessment of applicants and their selection use a multi-criteria approach and mobility (in p when it comes to researchers. The importance of this parameter, however, depends on the t consideration the duration, the quality of institutions visited and the position in which the mobil comprehensive HR policy with a focus on the quality of knowledge obtained as part of mobil assessment of the mobility experience. - Promotion of mobility experience and raising of aw

Status

19. Recognition of qualifications (Code)

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
-/+ partially implemented	STU does not have a specific regulation on recognition of informal qualifications as part of professional mobility, and even though it is taken into account in the selection process, its impact is minimal. Insufficient legislation for hiring researchers (and teachers) at an international level (in particular, for professors and associate professors) poses a significant obstacle to making the university more international. Regulation: - Recognition of qualifications of researchers is based on the Higher Education Act. Academic titles (Doctor, Associate Professor, Professor) can be obtained from universities that offer accredited doctoral studies, habilitation and appoint professors. These titles are valid in all institutions in the Slovak Republic. Recognition of qualifications of foreign employees is regulated by a decree of the Ministry of Education.	Suggestion: - First of all, v Introduce a system of trail long education. - Should t knowledge obtained quali experience. Lobbying: - TI Committee, etc.) STU mu:

20. Seniority (Code)

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
++ fully implemented	The principles of seniority are fully implemented by: - The rules and procedures for implementation habilitation and inauguration procedures at the Slovak Universit (https://www.stuba.sk/buxus/docs/stu/pracoviska/rektorat/odd_veda_vyskum/HRS4R/Rules_and_procedures_for_implementation_habilitation_and_inauguration_p obtaining the titles of associate professor and professor at the Slovak University of Technology in Bratislava (https://www.stuba.sk/buxus/docs/stu/pracoviska/rektorat/odd_veda_vyskum/HRS4R/Rules_for_determining_the_minimum_criteria_for_obtaining_the_titles_of_as remuneration of employees in the public sector	

21. Postdoctoral appointments (Code)

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	Even this point was regarded as fully implemented by the majority of responders, some still perceive some room for improvement regarding: - Lack of information about the system of postdoctoral positions. - Transparency of selection of postdoctoral researchers and specify their obligations. - The postdoctoral researchers have no guarantee of employment at STU in the future. - The number of postdoctoral positions is small and only attracts a few foreign employees.	Even though the Slovak legislation does not differentiate between researchers an positions. Suggestions: - Unification of recruitment procedures of all faculties and obligations of postdoctoral researchers and researchers, which will be part of the positions for research assistants. - Increase the number of postdoctoral positions a more efficient use of APVV grants. - Collect best practices with the aim to imple

Working Conditions and Social Security

Status

22. Recognition of the profession

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
++ fully implemented		Initiatives: - Rector's award for the best publications - Rector's award for the best artistic performance - Young researcher support programme - Young researcher The STU award 'Researcher of the Year' - Rewards for activities of authors Suggestion: - Highlight the results of scientific work having practical applications. - Uni system.

23. Research environment

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
-/+ partially implemented	Public institutions in the Slovak Republic are significantly limited by the funds available to them (compared to other EU countries, Slovakia only spends a very low GDP percentage on science and research). Cooperation with the industry, when it comes to joint worksites, could be better. Big differences between individual departments – issues with assessment of actual performance. A lack of long-term support of basic research at universities through industrial funds. A lack of technical equipment, lack of information about the equipment available at the university which could be used and shared even with another research group to achieve the required scientific output. There is no strategy and rules for a systematic maintenance of equipment of individual departments. There is only very limited communication between individual research worksites. A high administrative burden and bureaucracy involved in gaining projects (even small ones). Very non-transparent assessment of research project applications.	Initiatives: - Research support funds. - Internal university grants for sc research conditions in the less attractive fields of science. - Facilitate More funding to make the cooperation with the university more attract graduates into managerial positions. Involvement in the matters of the invitations to scientific seminars, lectures for students...) cultivate prid researchers about the availability and the possibility of sharing techni individual research workplaces (e.g., the Slovak Academy of Science rules and strategies, as well as their practical implementation in the s during its continued existence in the coming decades. Lobbying: - Im approach to grants will help stimulate research.

24. Working conditions

Implementation	GAP / Implementation impediments	Initiatives undertaken/new prop
+/- almost but not fully implemented	Long-term leave of absence for researchers (the so-called sabbatical) is not stipulated in the Slovak legislation. However, the respective draft bill is already in preparation. Some political parties have included it in their election programmes. Shorter working hours more or less an exception. There still are some departments or parts thereof, where the working conditions are alarming (non-existent ventilation, inferior air extraction from equipment in the workplaces, obsolete electrical wiring, and other media distribution systems, etc.), but the trend towards modernization is positive - mainly financed through European structural and investment funds, national funds, cooperation with industry, and own resources.	Initiative: - Tele-working (home-off Covid-19. - Project ACCORD (Ad boosting the research infrastru care in its own kindergarten for 22 Suggestion: - Increased transpare helpful.

Status

25. Stability and permanence of employment

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
++ fully implemented	<p>In general, an employment contract concluded for a fixed period of time can only be extended twice, the third extension makes the employment permanent. However, the Section 48 (6) of the Labour Code of the Slovak Republic states: 'A further extension or renewal of an employment relationship for a fixed term of up to two years or over two years can be agreed with a teacher in higher education or a creative employee in science, research or development if there are objective reasons relating to the character of the activities of the teacher in higher education or creative employee in science, research or development as stipulated in special regulation'. Meaning basically, that if the employees are funded from grants, their contracts are only valid for the duration of the grant, following which they must leave, as the department does not have funds to cover their salaries. Despite that this situation is in compliance with the European standards and employing doctoral candidates and external students under a contract tied to the duration of a project is a common practice, the resulting uncertainty, however, can impact the productivity of the personnel and cause issues, e.g., when applying for a mortgage or a consumer credit.</p>	<p>Where possible, the employer offers sta conditions could be improved by introdu performance-based remuneration mode collective agreement and, if necessary, and motivational way of determining the procedures should be announced auton be included in the internal regulations of employment in advance. - The possibilit dormitories for those who do not have o situated.</p>

26. Funding and salaries

Implementation	GAP / Implementation impediments	Initiatives unc
-/+ partially implemented	<p>Significant differences in remuneration of researchers working for public institutions and in industry are caused mainly by the Act No. 553/2003 Coll. on Remuneration of Certain Employees During Performance of Work in the Public Interest. Female doctoral candidates have basically no entitlement to maternity allowances, because they do not receive a salary but a scholarship (a doctoral candidate is considered a student by Slovak law system). Quote from one of the responders: "Almost everyone I know in research and teaching has other work besides STU – especially for financial reasons, at best for personal development." Regulations: - Act No. 131/2002 Coll on Higher Education - Act No. 553/2003 Coll. on Remuneration of Certain Employees During Performance of Work in the Public Interest - Staff Regulations for employees of the Slovak University of Technology in Bratislava</p>	<p>Suggestion: - (often helps res processes of c contracts for ir appraisal syste funding of rese</p>

27. Gender balance

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
++ fully implemented	<p>Even there is no scientific study on the topic of comparing the assessment system and the subsequent remuneration of female and male researchers at the university, or at universities in Slovakia in general, gender balance is not perceived as an issue among the responders.</p>	<p>The university designed the Gender Equality Plan Programme for Research and Innovation 2021-2020 gender equality training.</p>

Status

28. Career development

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	In general, these principles are adhered to, however, there is no institutional strategy for career development of researchers. Lack of university-wide or department-wide career consulting. The terms of accreditation and the therefrom arising impossibility of habilitation and inauguration of our junior colleagues.	Career development is regarded as a matter of the individual – institutions only provide opportunities for him/her by allowing them to research for individual departments, faculties, and the university as a whole. Targeted institutional strategy for career development is (http://www.ads.sk) - The EURAXESS network (http://ec.europa.eu/euraxess/) Initiative: - information about available trainings is provided in Scientific Cooperation and the Department of International Relations in a newsletter and at a designated website http://www.granty.stuba.sk/ the project centres / faculty departments. Suggestion: - Offer foreign-language courses for employees and doctoral candidates at a communication with those interested in external PhD studies at the university and promote topics of an interdisciplinary nature. - Support with the aim to implement them into the comprehensive HR policy.

29. Value of mobility

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	Even the university recognizes the value of mobilities, there is no institutional career development strategy to acknowledge any mobility experience within the career progression/appraisal system. The acknowledgement is in the hands of the respective departments. However, this is not perceived as an issue among the responders. Their main concerns lie with insufficient support regarding: - Lack of funding of mobilities causing discontinuity between individual research stays and/or accommodation related issues. - Language barrier and cultural barrier. - Migration policy agenda (visa, differences in tax and migration legislation – e.g., third countries...). - Recognition of qualifications (legislation). - Low level of mobility between the state and private sector. - Complex red tape without professional support. - Unwillingness to accept long-term mobility due to a lack of workforce.	Motivation of researchers to be mobile is beneficial in part and working conditions of the hiring organisation - work on international research projects - access to special equipment with new countries and cultures - business and commercial Suggestion: - Offer foreign-language courses for employees of study programmes and research in English. - Prepare between the university and the industry by making available processes, in particular within the EU

30. Access to career advice

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
-/+ partially implemented	The rules of career development are not stipulated in any internal document (only the terms of habilitation and appointment of professors) and there is no system solution to career advice. Lack of an institutional strategy for career development of researchers. There is only informal consulting.	In connection to career advice, researchers at STU usually consult their superiors (heads of departments, Head of the institute/department Research, the Vice-Rector for Science and Research, ...) STU supports research careers, among other things, by organising occasional external training courses. Initiatives: - Information about available training is provided to researchers by the Department of Science Relations in a newsletter and at a designated website http://www.granty.stuba.sk/. - Consulting is also offered by the University Project The EURAXESS network (http://ec.europa.eu/euraxess/). Suggestions: - Establishment of a career advice centre for university employees system. - Preparation of an institutional career development strategy for researchers with clearly specified rules of career progression

Status

31. Intellectual Property Rights

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	<p>In general, these principles are adhered to, however there can be occasional individual oversights. There is no institutional approach to training and courses. Leading by example and best practice examples are insufficient. Some documents in English are missing. These issues are mainly tied to the lack of staff at the Technology Transfer Office (TTO). There is no institutional approach to initiatives when it comes to Open Access and Open Data. A directive on copyright in the STU environment is missing. The rules currently valid in this area usually encourage researchers to look for loopholes, as most intellectual property rights (and the thereto related benefits) belong to the institution, and the researcher only gets moral appraisal (if any at all). Intellectual property protection by means of patents and similar legal tools offer very limited benefits to the employees, which is why most employees do not use this form of research result protection. When results are published in a recognised magazine, the researcher cannot have them subsequently patented (and vice versa), therefore our employees are not interested in having their work patented. Patents do not offer any significant financial bonuses either, and are not taken into consideration with regard to career development, therefore they are unattractive to the employees. Regulation: - The Act No. 131/2002 Coll. on Higher Education (Section 62a Special requirements Regarding Final, Rigorosa, and Habilitation thesis and Part Eight: University Employees). - Disciplinary Regulations of the Slovak University of Technology in Bratislava for Students - Staff Regulations for employees of the Slovak University of Technology in Bratislava - Rector's Regulation No. 8/2017 – SR Protection and Management of Industrial Property Rights at the Slovak University of Technology in Bratislava</p>	<p>In general, it appears that researchers have reasonable knowledge of authorship and plagiarism. At STU there are 2 main issues: property register it under their own name (thanks to the academic environment). Proposed solution: consistent application of research results. STU concluded with business companies, where STU – in industrial property rights. Proposed solution: more staff should be involved in information at individual departments. Initiatives: - As part of the entire process of protection and management of industrial property rights of the Slovak University of Technology in Bratislava - Update of the Code of Ethics and the role of the Ethics Committee. - Introduction of a magazine with emphasis on the role of the Ethics Committee. - Introduction of new contracts of new STU employees. - Intellectual property rights schemes for the activation of industry transfer (e.g., licensing). - Work discipline violations related to violations of the intellectual property rights.</p>

32. Co-authorship

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	<p>In general, these principles are adhered to, however there can be occasional individual oversights. There is no institutional approach to training and courses. Leading by example and best practice examples are insufficient. A directive on copyright in the STU environment is missing.</p>	<p>Co-authors are recognised and listed and/or quoted in connection to their actual contribution (percentage of contribution to the work). Initiatives: - 'Train the trainer' activities - Regular training and courses - Unified research, artistic activities and publications. - Also recognised when organising different scientific, professional, and promotional events – when only the responsible organ is mentioned. - A university guideline regarding acknowledgement of co-authorship of doctoral students at the end of their studies to enable them to maintain their contact data at the university to keep in touch in case their work will be used in the future). - Create copyri</p>

33. Teaching

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	<p>In general, these principles are adhered to, however some respondents feel that the level of adequacy of teaching in individual workplaces and departments is not evenly distributed, stating that there are workplaces where the pedagogical activity far exceeds the scope of a scientific researcher, and his/her scientific activity is supplanted. Some feel that the teaching requirements are high, in particular for the young researchers. Most of the young researchers lack formal pedagogical education, which in some cases reflects in the quality of teaching and the students' feedback.</p>	<p>Teaching is considered an integral part of the professional development of researchers, and they also expect their teaching obligations not to significantly interfere with their research. It is also expected that teaching obligations should not be significantly interfered with by research. It is also expected that teaching obligations should not be significantly interfered with by research. Suggestions: - A balanced ratio between pedagogical and research activities. - All doctoral candidates and researchers should be obliged to take supervision of an older colleague or a more experienced pedagogue. - Require and use feedback. - Be able to measure the quality of teaching and prioritize quality over quantity. - Recognize bachelor, diploma or doctoral thesis as part of teaching obligations.</p>

Status

34. Complains/ appeals

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	There is no institutional approach to training and courses. Leading by example and best practice examples are insufficient.	Initiatives: - Ethics Committee of the Slovak University of Technology in Bratislava - Updated Code of Ethics for employees of the Slovak University of Technology (including information, examples of best practices and training. - Raise awareness of these issues among the employees and offer help in resolving conflicts (e.g. through a magazine with emphasis on the role of the Ethics Committee). - Creating a webinar for all academic staff explaining the Code of Ethics and the implications to all employment contracts of new STU employees. - 'Lead by example'

35. Participation in decision-making bodies

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
++ fully implemented		Public universities proceed in compliance with the Act No. 131/2002 Coll. on Higher Education and the internal regulations of universities and allow researchers to participate in government bodies. Researchers can participate and make joint decisions in meetings of colleges, boards, senates, and scientific councils.

Training and Development

36. Relation with supervisors

Implementation	GAP / Implementation impediments
+/- almost but not fully implemented	In general, these principles are adhered to, however there can be occasional individual oversights. Even though student and doctoral candidate checks are compulsory, the requirements for employees are managed by individual faculties and departments. There is no unified control system and postdoctoral researchers do not have to behave in the same way in university. Researchers do not always establish a structured relationship with their superiors and faculty representatives, and communication is not always at the required level. There should be more information about the professional possibilities and research conducted by individual departments, even though the interdisciplinary nature of numerous departments is apparent. This may lead to a detriment of faster development of individual workplaces both in terms of research and pedagogics.

37. Supervision and managerial duties

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	In general, these principles are adhered to, however there can be occasional individual oversights. - There is no systematic conceptual approach to training in the field of management, HR management and pedagogic skills, meaning that the lead researchers have often trouble with coordinating supervising activities with other obligations. - Lack of an institutional strategy for the career development of researchers. Regulations: - Act No. 131/2002 Coll on Higher Education - Code of Ethics for employees of the Slovak University of Technology in Bratislava - Staff Regulations for employees of the Slovak University of Technology in Bratislava	Suggestions: - Prepare the institution's comprehensive HR policy. - Systematize pedagogic skills. - Teachers' complex management and administrative research and publication activities

Status

38. Continuing Professional Development

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
-/+ partially implemented	Lack of an institutional strategy for the career development of researchers. There is no centralised support for workshops and conferences. The possibilities for education are scarce and usually only available after working hours. There is no sabbatical during which employees could stay abroad. Regulation: - Act No. 131/2002 Coll on Higher Education - Code of Ethics for employees of the Slovak University of Technology in Bratislava - Staff Regulations for employees of the Slovak University of Technology in Bratislava	Suggestions: - Ensure equal access to qualification institutional strategy for the career development management policy. - Increase motivation in your (IT technologies, English etc.), and thereto relate should be created.

39. Access to research training and continuous development

Implementation	GAP / Implementation impediments	Initiatives undertaken/new proposals
+/- almost but not fully implemented	- Lack of an institutional strategy for the career development of researchers. - Lack of a central library and the thereto related services providing training related to research of sources and writing of a thesis, but especially 'soft skills' training for students and staff. - There is no consulting when it comes to using library systems, book search, or obtaining research on a specific topic and/or insufficient access to scientific literature and computers.	Researchers have access to professional training in the field of research and to continuous development through Technical Information (CVTI) - faculty libraries - the State scientific library - the Slovak computer science library articles in journals published by Springer, Elsevier, etc. - life-long education at various universities (foreign languages of departments, colleagues, the Department of Science and International Scientific Cooperation, the Department of Access to global databases must be ensured at an STU or country level (e.g. CVTI). - 'soft skills' training for students of researchers, which should include the introduction of research training funding with clear rules as a part of a opportunities – getting closer to employees. - Modernization and restructuring of the libraries.

40. Supervision

Implementation	GAP / Implementation impediments	Initiatives undertaken/
++ fully implemented	In general, these principles are adhered to, however some respondents experienced issues, that leave room for improvement such as: - It is not always clear to whom young researchers can turn to for assistance in the early stages of their career. - The institute of tutoring is underdeveloped. - Researchers are frequently overloaded with other activities, in consequence of which they have very limited time for supervision, or they are forced to provide supervision outside their normal working hours. Regulations: - Directive No. 2/2006-N Rights and Obligations of a Study Programme Guarantor - Rector's Directive number: 2/2014-SR: Professional Committee for Doctoral Study Programmes at the Slovak University of Technology in Bratislava - Rector's Directive number: 6/2014 – SR: Post-doctoral Research Stays at the Slovak University of Technology in Bratislava	Suggestions: - Use professional study programme guarantee hierarchy should be set control tasks. - There is however the doctoral department which can p