

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.

Action Plan

Case number: 2021MD606257

Name Organisation under review: Technical University of Moldova

Organisation's contact details: 168, Blvd Stefan cel Mare si Sfant, Chisinau, MD2004

1. Organisational Information

*Please provide a limited number of key figures for your organisation. Figures marked * are compulsory.*

STAFF & STUDENTS	FTE
Total researchers = staff, fellowship holders, bursary holders, PhD. students either full-time or part-time involved in research *	650
Of whom are international (i.e. foreign nationality) *	23
Of whom are externally funded (i.e. for whom the organisation is host organisation) *	16
Of whom are women *	273
Of whom are stage R3 or R4 = Researchers with a large degree of autonomy, typically holding the status of Principal Investigator or Professor. *	12
Of whom are stage R2 = in most organisations corresponding with postdoctoral level *	15
Of whom are stage R1 = in most organisations corresponding with doctoral level *	163

STAFF & STUDENTS	FTE
Total number of students (if relevant) *	10009
Total number of staff (including management, administrative, teaching and research staff) *	1247
RESEARCH FUNDING (figures for most recent fiscal year)	€
Total annual organisational budget	13907000
Annual organisational direct government funding (designated for research)	328000
Annual competitive government-sourced funding (designated for research, obtained in competition with other organisations – including EU funding)	760000
Annual funding from private, non-government sources, designated for research	306000

ORGANISATIONAL PROFILE (a very brief description of your organisation, max. 100 words)

Technical University of Moldova (TUM) is the only higher education institution with engineering profile, accredited in the Republic of Moldova.

To scientific research at TUM is given a special attention, as it is an essential component of education. Students actively participate in the research process, which leads to raising their level of professional training.

TUM is recognized in the field of scientific research nationally and internationally. TUM's research centers successfully implement University's research strategy through numerous grants and projects won through competition. The research results are materialized in scientific papers, monographs and patents, all of which bring prestige to TUM.

2. Strengths and weaknesses of the current practice

Please provide an overview of the organisation in terms of the current strengths and weaknesses of the current practice under the four thematic headings of the Charter and Code at your organization.

Note: Click on the name of each of the four thematic headings of the Charter and Code to open the editor and provide your answer.

Ethical and professional aspects*



Strengths and Weaknesses (max. 800 words)

Strengths:

Academic freedom represents fundamental principle that is base for the organization of teaching and research activity at TUM and consists in the right of any member of the academic community to openly express his/her scientific and professional views in courses, seminars, conferences, debates as well as in published and reported scientific works, with limitations provided by law or internal regulations of TUM.

On institutional level the main act that regulates ethical principles is the TUM Code on ethics and professional deontology (2019). The Code takes into consideration international regulations and standards in research and teaching activity, including the Charter of Fundamental Rights of the EU, The European Charter for Researchers and Code of Conduct for the recruitment of researchers, Best Practices for Ensuring Scientific Integrity and Preventing Misconduct, Good scientific practice in research and scholarship. According to the Code, the ethical issues are solved based on the national and institutional regulations by Ethical Commission of TUM.

One of the principles promoted by TUM and described in the Code is the Integrity. According to p. 19, "In scientific research, integrity involves:

- a) accepting and mentioning as authors of a work only the persons who actually participated in its elaboration;
- b) indicating the source from which an idea, an expression, a result of a previous research was taken, regardless of whether they were published or not. This rule also applies to the elements taken from works of any kind by students or doctoral students and subsequently used by a teacher in their own research;
- c) recognizing explicitly the contribution of any person who has actually participated in a research activity;
- d) avoiding and denouncing any form of intellectual fraud: plagiarism or self-plagiarism, copying exams or other forms of knowledge verification, substituting papers or personse xamined, deliberate distortion of research results, undeserved appropriation of scientific / technical achievements, etc."

The TUM 2019-2023 Strategy on Research-Development-Innovation (2018) provides research strategic priorities, directions and topics that are in concordance with the National Program for Research and Innovation for 2020-2023.

TUM publishes on its website all institutional, national and European regulations, models of contracts, etc. that can be of interest of TUM academic comunity.

The Regulation of RDI activity in the TUM (2020) provides that the University promotes, supports, develops and stimulates logistically and financially the RDI activity. TUM provides researchers with adequate working conditions, informs about necessary health and safety rules, creates conditions for data protection and confidentiality in accordance with the institutional Security policy regarding the protection of personal data in the information systems managed by TUM, other national legislation and institutional regulations in force.

TUM ensures the dissemination and exploitation of research outcomes (communications, presentations at trade fairs, technology transfer and, where appropriate, marketing of results). TUM publications are archived in the Institutional Repository. Researchers archive their scientific works related to research projects in the institutional Current Research Information System. TUM researchers participate actively in the international innovation exhibitions and salons where expose the most innovative research outcomes.

TUM promotes and disseminates research outcomes in society through participation at the World Science Day for Peace and Development event, organized annually by Ministry of Education and Research, the European Researchers' Night, organized by TUM annually since 2017. These two events offer TUM's researchers the opportunity to expose publicly research outcomes, to discuss openly with civil society and business.

TUM does not discriminate in any way researchers. According to p.3 of TUM Regulation on occupation of teaching and scientific-didactic positions (2021), any form of direct or indirect discrimination, based on gender, age, race, skin color, ethnicity, religion, political choice, social origin, domicile, disability, HIV / AIDS infection, membership or trade union activity, as well as on other criteria not related to his/her professional qualities is prohibited.

TUM applies professional performance evaluation system on a regular basis and in a transparent manner. All research and teaching staff report and are evaluated on Department/Laboratory/Centre level. Research project leaders report the outputs and are evaluated, twice a year, at the Scientific Council of TUM. Vice-rector for research presents the report on university RDI activities and outputs at TUM Senate. The report is evaluated by senators and then published on a dedicated TUM web page.

Weaknesses:

The management and practices specific to research activities are not brought together in a unitary framework and do not have a wide dissemination, allowing the guidance, first of all, of young researchers, to adapt from the beginning of their careers with understanding and approach of research freedom.

TUM provides insufficient means for researchers to become familiar with the institutional strategic objectives and the decisions taken by the existing governing bodies (Board of Directors / Senate / Scientific Council / Faculty Council).

Insufficient information of academic and research staff about personal data protection and cybersecurity.

Researchers complain about reporting time consuming and bureaucracy.

Recruitment and selection*



Strengths and Weaknesses (max. 800 words)

Strengths:

In the recruitment process TUM provides information on the requirement academic staff, which is specified in the TUM Regulation on the occupation of teaching and scientific-didactic positions (2021). TUM applies transparent recruitment procedures, adapted to the type of academic positions, Thus, in accordance with this Regulation (p. 10), the announcements of vacant academic functions are published on TUM web site <https://utm.md/blog/category/posturi-vacante/> and Euraxess platform. The announcements contain a comprehensive description of the knowledge and skills required, recruitment process and the selection criteria, the number of available positions and the career development prospects and the dead-line for the submission of dossiers.

The members of Competition commission for filling the vacancies are selected among the scientific-didactic staff of the UTM faculties, who made a valuable contribution in the field and combine expertise and competence, with relevant experience for the evaluation of the candidates.

In accordance with the Methodology for awarding salary supplements for performance in research and innovation at TUM (updated in 2021), TUM evaluates merits, focusing on outstanding results.

TUM does not penalize career breaks or changes in the chronological order of CVs, therefore candidates are allowed to submit evidence-based CVs that reflect a representative range of achievements and qualifications appropriate to the position for which the recruitment is made. At the same time, TUM respects National regulations that impose to have research outcomes obtained in the last 5 years for appointment on some positions (full professor, associate professor position, project coordinator position, member of the scientific council for the defence of doctoral thesis etc.).

UTM considers any mobility experience to be a valuable contribution to the professional development of a researcher, for example, a stay in another country / region or in another research setting (public or private) or a change from one discipline or sector to another, either as part of initial research training, or at a later stage of the research career, or virtual mobility experience.

According to the p.5 of TUM Regulation for appointments to academic positions (2021), on the academic positions may be employed foreign persons, according to national law in force. The official recognition of degrees received abroad is performed at national level only by the National Agency for Quality Assurance in Education and Research (equivalence of PhD Diplomas).

The required qualification levels are in line with the needs of the job and there are no barriers set for admission. TUM recognizes and evaluates qualifications focusing on the person's accomplishments rather than their circumstances or the reputation of the institution where the qualifications were obtained.

The main objective of postdoctoral programs is to provide additional opportunities in professional development for a research career. TUM follows clear and explicit rules for the recruitment and promotion of postdoctoral researchers, according to the TUM Regulation on organization and conduct of postdoctoral programs (2019), that is in line with National Regulation on organization of postdoctoral programs approved by National Agency for Research and Development (499/2018)

Weaknesses:

The competence of Competition Commission is not always gender balanced.

The information on vacant positions needs wider dissemination.

The quantitative and qualitative indices are not appropriately balanced in a number of evaluation criteria, such as teaching, supervision or coordination, teamwork, knowledge transfer, research and innovation management and dissemination activities for public information

The information on research mobility opportunities is not disseminated sufficiently.

Lack of information for international scholars on the TUM web site regarding procedure of equivalence of PhD Diplomas in the Republic of Moldova.

The recognition of degree process (equivalence of PhD Diplomas) by the National Agency for Quality Assurance in Education and Research may take up to 10 or 30 days, respectively. For that reason, hiring of international researchers is difficult, hindered by the lengthy and highly bureaucratic recognition process.

Working conditions*



Strengths and Weaknesses (max. 800 words)

Strengths:

All researchers involved in a research career are recognized by TUM as professionals and are treated accordingly, regardless of their classification.

TUM promotes the creation of a stimulating research environment and / or a research training environment (providing appropriate equipment, facilities and opportunities within the limits of the possibilities) and the achievement of national or sectoral regulations on research health and safety.

TUM provides the flexibility considered essential for the successful performance of research, in accordance with the national legislation in force (sabbatical and maternity leave, distance work where appropriate etc.) providing opportunities to enable researchers to combine family life and work, children and career.

National legislation and specific provisions for academic staff, as well as the internal regulations, guarantee stability of employment. Work stability among teaching staff is high and the fluctuation of staff is at a low rate.

TUM complies with the legislation in force and pays the salary to academic and research staff in accordance with the Law on the unitary salary system in the budgetary sector (270/2018) and Gov. Decision. No 1234/2018. At the same time, in accordance with university Methodology for awarding salary supplements for performance in research and innovation at TUM (2017), researchers have the possibility to boost their wages.

TUM tries to ensure staff have every opportunity to acquire the skills, knowledge and expertise to carry out their duties effectively and to achieve their full potential. A comprehensive framework of Training & Development is provided in the University, including training in academic writing, using research social networks, creation researcher's profiles in social research networks, using repositories and archives etc.

TUM acknowledges the importance of career guidance and employment assistance for researchers at all stages of their career, particularly for the researchers in training. Given the stability of their position, experienced researchers are not as concerned with career advice. However, doctoral students and temporary research staff close to the end of their contract find it difficult to discover their new workplace.

TUM provides researchers at any stage of their career with the opportunity to benefit from the exploitation of their research and development results through legal protection and, in particular, through adequate protection of intellectual property rights, including copyright.

Co-authorship is viewed positively by institutions when evaluating staff, as evidence of a constructive approach to research. Therefore, TUM develops strategies, practices and procedures to provide researchers, including those at the beginning of their research career, with the necessary framework conditions for them to enjoy the right to be recognized and listed and / or cited, in the context of their actual contributions, as co-authors of papers, patents, etc., or to publish their own research results independently of their supervisors.

The job description developed by TUM for different academic positions take into account the type of employment, teaching load, and includes teaching activities, research activities, but also complementary activities such as mentoring.

TUM offers trainings for teaching staff organized within University Centre for Continues Training of different types: requalification, additional qualification, specialization, polyqualification.

TUM allows researchers to be legitimately represented in the relevant information, consultation and decision-making bodies of the institution, to protect and promote their individual and collective interests as professionals and to actively contribute to the operation of the institution. At the same time, young researchers are less represented in these bodies.

Weaknesses:

Lack of database of existing facilities in order to exclude duplication of purchase and to inform academic and research staff about existing facilities in order to make it available.

Not enough facilities exist to make disabled persons more welcome at TUM.

The employment on research positions is based on temporary contracts, which are signed for research projects that, by their nature, offer funding only for definite periods. In order to make more stable engagement on research positions, researchers should be informed about opportunities / calls for research projects.

TUM administration acknowledges that there is a need of more support and guidance for the personal and professional development of researchers.


Career development opportunities for researchers need to include training in making funding applications for purposes of structured career development.

There is no internal regulation on the protection of intellectual property rights.

Teaching staff complains about big teaching load and insufficient time for research and mentoring.

Insufficient procedures to deal with researchers' complaints / appeals, including disputes between supervisors and trainee researchers, providing all research staff with confidential and informal assistance in resolving labour disputes and grievances, in order to promote a fair attitude.

Young researchers are less represented in decision-making bodies.

Training and development* 

Strengths and Weaknesses (max. 800 words)

Strengths:

Senior researchers have supervision and managerial duties in their job description. These duties are carried out based on various internal regulations.

TUM provides appropriate means, such as scientific seminars, workshops, conferences and e-learning systems, for researchers at all stages of their career to develop themselves continuously, update and expand their skills and competencies on a regular basis.

TUM ensures all people who are at any stage of their career, regardless of their contractual situation, with the opportunity to develop professionally and create employability possibilities through access to skill development activities.

TUM provides trainee researchers with the opportunity to clearly address a designated person (supervisor) to seek any necessary information and to obtain assistance in their professional duties.

Weaknesses:

The process of supervising is not sufficiently well defined in operational terms. Also, supervision conditions are often restrictive, especially in terms of time resources. Moreover, courses lack appropriate review procedures, and the necessary feedback mechanism.

Lack of interest of some researchers in realizing their full potential as supervisors.

Larger promotion of organized trainings for reseachres at any stage of their career is desired.

3. Actions

The Action Plan and HRS4R strategy must be published on an easily accessible location of the organisation's website.

Please provide the web link to the organization's Action Plan/HR Strategy dedicated webpage(s):

<https://cercetari.utm.md/hrs4r/>

Please fill in the list of all individual actions to be undertaken in your organisation's HRS4R to address the weaknesses or strengths identified in the Gap-Analysis. The listed actions should be concise, but detailed enough for the assessors to evaluate the level of ambition, engagement and the expected implementation process. The institution should strive to provide a detailed plan, not just an enumeration of actions.

Note: Choose one or more of the principles automatically retrieved from the GAP Analysis with their implementation ratings.

Proposed ACTIONS

Action 1

Organization of dedicated events for training and coaching young researchers and assisting them in their applications for national / international funding, mobility, PhD and post PhD studies

GAP Principle(s)

- (++) 5. Contractual and legal obligations
- (++) 6. Accountability
- (+/-) 15. Transparency (Code)
- (+/-) 21. Postdoctoral appointments (Code)
- (+/-) 25. Stability and permanence of employment
- (+/-) 28. Career development
- (++) 29. Value of mobility
- (-/+) 30. Access to career advice
- (++) 38. Continuing Professional Development
- (++) 39. Access to research training and continuous development

Timing (at least by year's quarter/semester)

Every semester, annually

Responsible

Unit

Indicator(s) / Target(s)

Proposed ACTIONS

Responsible Unit	Indicator(s) / Target(s)
Department for Researches; Department of International Relations	Two trainings per year organized for training and coaching young researchers

Action 2

Dedicated training delivered to researchers of all career levels, dealing with Good Scientific Practice

GAP Principle(s)

Timing (at least by year's quarter/semester)

Proposed ACTIONS

GAP Principle(s)	Timing (at least by year's quarter/semester)
(+/-) 1. Research freedom	Second semester annually.
(++) 2. Ethical principles	
(++) 3. Professional responsibility	
(+/-) 4. Professional attitude	
(++) 5. Contractual and legal obligations	
(++) 6. Accountability	
(+/-) 7. Good practice in research	
(++) 8. Dissemination, exploitation of results	
(++) 9. Public engagement	
(++) 10. Non discrimination	
(+/-) 17. Variations in the chronological order of CVs (Code)	
(++) 27. Gender balance	
(++) 32. Co-authorship	

Proposed ACTIONS

GAP Principle(s)		Timing (at least by year's quarter/semester)
(-/+) 34. Complains/ appeals		
Responsible Unit	Indicator(s) / Target(s)	
Department for Scientific Researches	One training organized annually	

Proposed ACTIONS

Action 3

Improvement of the mechanism of reporting research results.

GAP Principle(s)

- (++) 3. Professional responsibility
- (++) 5. Contractual and legal obligations
- (++) 6. Accountability
- (+/-) 7. Good practice in research
- (++) 8. Dissemination, exploitation of results
- (+/-) 11. Evaluation/ appraisal systems
- (+/-) 19. Recognition of qualifications (Code)

Timing (at least by year's quarter/semester)

First semester of 2023

Responsible

Unit

Indicator(s) / Target(s)

Department for Scientific Researches; Department of Information Technologies.

Software for self-reporting of research outputs implemented.

Proposed ACTIONS**Action 4**

Development of Procedure for recruitment in research projects.

Timing (at least by year's quarter/semester)**GAP Principle(s)**

(+/-) 12. Recruitment

(++) 13. Recruitment (Code)

(+/-) 14. Selection (Code)

(+/-) 15. Transparency (Code)

(+/-) 16. Judging merit (Code)

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

First quarter of 2023

(++) 18. Recognition of mobility experience (Code)

(+/-) 19. Recognition of qualifications (Code)

(++) 20. Seniority (Code)

(++) 22. Recognition of the profession

Responsible**Unit****Indicator(s) / Target(s)**

Department

for

Researches;

HR Office

Procedure for recruitment in research projects developed and published on the dedicated webpage.

Proposed ACTIONS

Action 5

Improvement of criteria used for evaluation and update of the Methodology for awarding salary increase for performance in research and innovation at TUM

GAP Principle(s)

(+/-) 7. Good practice in research

(+/-) 11. Evaluation/ appraisal systems

(+/-) 16. Judging merit (Code)

(+/-) 19. Recognition of qualifications (Code)

(+/-) 26. Funding and salaries

Timing (at least by year's quarter/semester)

Second semester of 2022

Responsible

Unit

Indicator(s) / Target(s)

Vice-Rector
for
Research
and PhD
studies;
Department
for
Researches

Updated Methodology for awarding salary increase for performance in research and innovation at TUM

Proposed ACTIONS

Action 6

Organize and participate in events that promote and disseminate research results obtained by TUM researchers (World Science Day for Peace and Development, European Researchers' Night, national and international innovation and invention salons/exhibitions).

GAP Principle(s)

(++) 3. Professional responsibility

Timing (at least by year's quarter/semester)

Annually

(++) 6. Accountability

(++) 8. Dissemination, exploitation of results

(++) 9. Public engagement

Responsible

Unit	Indicator(s) / Target(s)
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Department for Scientific Researches	Participation and organization in at least 5 events that promote and disseminate research results obtained by TUM researchers.
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Action 7

Larger dissemination of mobility opportunities, research projects calls, PhD studies projects (web site, e-mail list, social media)

GAP Principle(s)

Timing (at least by year's quarter/semester)

Proposed ACTIONS

GAP Principle(s)	Timing (at least by year's quarter/semester)
(+/-) 4. Professional attitude	
(+/-) 15. Transparency (Code)	Annually
(+/-) 25. Stability and permanence of employment	
(++) 29. Value of mobility	
(++) 38. Continuing Professional Development	
Responsible Unit	Indicator(s) / Target(s)
Department for Researches	Research mobility, projects and PhD studies opportunities continuously disseminated via website, e-mail list, social media

Proposed ACTIONS

Action 8

Prepare and publish on the dedicated web pages of TUM (PhD school section, Research section) an information for international scholars regarding procedure of equivalence of PhD Diplomas in the Republic of Moldova.

GAP Principle(s)

(+/-) 15. Transparency (Code)

Timing (at least by year's quarter/semester)

First semester of 2022

(+/-) 19. Recognition of qualifications (Code)

Responsible

Unit

Indicator(s) / Target(s)

PhD School
of TUM,
Department
for
Scientific
Researches

An information regarding procedure of equivalence of PhD Diplomas in the Republic of Moldova published on a dedicated web page

Proposed ACTIONS

Action 9

Organize information sessions for PhD holders to promote post PhD programs.

GAP Principle(s)

(+/-) 21. Postdoctoral appointments (Code)

(+/-) 28. Career development

(++) 38. Continuing Professional Development

Timing (at least by year's quarter/semester)

Third quarter of every year

Responsible

Unit

Indicator(s) / Target(s)

PhD School of TUM

Information sessions organized annually, Increased number of post PhD students

Proposed ACTIONS

Action 10

Development of database of existing equipment and facilities at TUM

GAP Principle(s)

(+/-) 23. Research environment

(+/-) 24. Working conditions

Timing (at least by year's quarter/semester)

First semester of 2023

Responsible

Unit

Indicator(s) / Target(s)

Department
for Scientific
Researches;
Department
of
Information
Technologies;
Faculties;
Research
Centers

Database of existing equipment developed, continuously updated and available on-line

Proposed ACTIONS

Action 11

Improving access and working conditions for disabled researchers.

GAP Principle(s)

(++) 10. Non discrimination

(+/-) 23. Research environment

(+/-) 24. Working conditions

Timing (at least by year's quarter/semester)

First semester of 2023

Responsible

Unit

Indicator(s) / Target(s)

Department for technical issues

Improved access for disabled researchers in TUM edifices, research laboratories

Proposed ACTIONS

Action 12

Communication to researchers of the updated Methodology for awarding salary supplements for performance in research and innovation at TUM by publishing on the dedicated page on Research section of TUM web-site and via e-mails.

GAP Principle(s)

(+/-) 11. Evaluation/ appraisal systems

(+/-) 16. Judging merit (Code)

(+/-) 26. Funding and salaries

Timing (at least by year's quarter/semester)

First quarter, every year

Responsible

Unit

Indicator(s) / Target(s)

Department
for
Researches

Methodology published on a dedicated web page,
information sent via e-mails

Action 13

Organization of training courses for professional development of researchers: writing CV's, research methodology, academic writing, research project planning and implementation etc.

GAP Principle(s)

Timing (at least by year's quarter/semester)

Proposed ACTIONS

GAP Principle(s)	Timing (at least by year's quarter/semester)
(+/-) 7. Good practice in research	
(+/-) 28. Career development	
(-/+) 30. Access to career advice	Second semester, annually
(++) 38. Continuing Professional Development	
(++) 39. Access to research training and continuous development	

Responsible**Unit Indicator(s) / Target(s)**

Department for Scientific Researches; PhD School; TUM Centre for Career Counselling and Guidance	Training course delivered annually for professional development of researchers
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Proposed ACTIONS

Action 14

Reexamination of the teaching-research-mentoring load for academic staff, without violating national and institutional law and regulations.

GAP Principle(s)

(++) 5. Contractual and legal obligations

(+/-) 25. Stability and permanence of employment

(+/-) 33. Teaching

Timing (at least by year's quarter/semester)

Third quarter, annually

Responsible

Unit	Indicator(s) / Target(s)
Faculties	Teaching-research-mentoring load balanced

Action 15

Updating the procedure for solving individual complains / appeals of employees with provisions regarding negotiation / mediation a conflict

GAP Principle(s)

(-/+) 34. Complains/ appeals

Timing (at least by year's quarter/semester)

Second quarter, 2023

Responsible

Unit	Indicator(s) / Target(s)
Legal Office	One procedure updated

Proposed ACTIONS

Action 16

Promote participation of young researchers in decision-making bodies: Administrative Council of TUM, Scientific Council of TUM, TUM Senate.

GAP Principle(s)

(++) 10. Non discrimination

(+/-) 35. Participation in decision-making bodies

Timing (at least by year's quarter/semester)

Second quarter 2022

Responsible

Unit

Indicator(s) / Target(s)

TUM
administration

Young researchers included as members in decision-making bodies: Administrative Council of TUM, Scientific Council of TUM, TUM Senate.

Proposed ACTIONS

Action 17

Development of a procedure that details the supervising activity and includes schedules, milestones, deliverable and feedback

GAP Principle(s)

(+/-) 36. Relation with supervisors

(+/-) 37. Supervision and managerial duties

(++) 40. Supervision

Timing (at least by year's quarter/semester)

Third quarter 2022

Responsible

Unit

Indicator(s) / Target(s)

PhD School;
Department
for
Scientific
Researches

Procedure developed and applied

Action 18

Develop and approve internal regulation on the protection of intellectual property rights

GAP Principle(s)

Timing (at least by year's quarter/semester)

Proposed ACTIONS

GAP Principle(s)		Timing (at least by year's quarter/semester)
(++) 2. Ethical principles		
(+/-) 4. Professional attitude		
(++) 5. Contractual and legal obligations		Second semester of 2022
(+/-) 7. Good practice in research		
(++) 31. Intellectual Property Rights		
Responsible Unit	Indicator(s) / Target(s)	
Department for Scientific Researches	Internal regulation on the protection of intellectual property rights developed and approved	

Unselected principles:

The establishment of an Open Recruitment Policy is a key element in the HRS4R strategy. Please also indicate how your organisation will use the Open, Transparent and Merit-Based Recruitment Toolkit and how you intend to implement/are implementing the principles of Open, Transparent and Merit-Based Recruitment. Although there may be some overlap with a range of actions listed above, please provide a short commentary demonstrating this implementation. If the case, please make the link between the OTM-R checklist and the overall action plan. (max. 1000 words) *

TUM has analysed the extent to which the internal recruitment policies are aligned to the OTM-R principles and recommendations. TUM already applies most of the OTM-R principles or similar principles in the recruitment and selection process (TUM Regulation for appointments to academic positions, approved on 22.06.2021 - https://utm.md/wp-content/uploads/2021/07/Regulament-UTM_-_Ocupare-functii-did.-si-st-did.-2021.pdf, TUM Human Resources Strategy for Researches and Academic Staff - <https://utm.md/wp-content/uploads/2022/02/HRS4R-en.pdf>) that creates the opportunities for shaping the future evolution of the human resources management involved in research and development activities in accordance with the OTM-R principles.

So HRS4R certification does not involve a major change in human resources management policies, and it will continue to be part of the overall strategy of the University

At the same time the implementation of all OTM-R principles will be achieved by adopting some of the measure included in the Action Plan:

- Developing and applying of internal Regulation on recruitment in research projects;
- Developing and applying of internal Regulation on intellectual property rights;
- Revision and update of the Methodology for awarding salary supplements for performance in research and innovation at TUM;
- Updating the procedure for solving individual complains / appeals of employees;
- Developing of a procedure that details the supervising activity and includes schedules, milestones, deliverable and feedback

Through the proposed approach, the Action Plan ensures that the strategic and operational plans of the University are correlated with the OTM-R principles.

If your organisation already has a recruitment strategy which implements the principles of Open, Transparent and Merit-Based Recruitment, please provide the web link where this strategy can be found on your organisation's website:

URL:

https://cercetari.utm.md/wp-content/uploads/sites/31/2022/05/Regulation-occupation-academic-functions-22.06.2021_EN.pdf

4. Implementation

General overview of the expected overall implementation process of the action plan: (max. 1000 words)

The analysis of internal regulations and practices, interviews with researchers, as well as the survey carried out among academic and research staff, designed to investigate whether, and to what extent, the principles stated by the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers are applied in TUM highlighted the following situation:

- 18 principles are fully implemented
- 20 principles are almost but not fully implemented
- 2 principles - partially implemented.

The Action Plan reflects the orientation of the Technical University of Moldova towards Charter and Code principles and represents the main vector in support of achieving the objectives defined in the TUM Strategy for Research, Development and Innovation for 2019-2023, with direct implications for the main strategic directions followed by any university: education, research, innovation. This comprehensive approach of the three types of missions, that genuinely intertwines human capital training with high quality research and with capitalization of research with societal and economic impact, will contribute to strengthening TUM's reputation at national and regional level.

The action plan will be implemented with the support of a Steering Committee consisting of representatives of all stakeholders (TUM administration, decision bodies, researchers with different level of qualification and experience). The Committee will coordinate and evaluate the process of implementation of the Action Plan at TUM. The Working group responsible for the whole process of obtaining the diploma of excellence will split into separate groups to undertake the implementation of specific actions in the Action Plan. These permanent working groups will coordinate and participate in all the stages defined by the Action Plan for each action.

The implementation of the Action Plan within TUM will be carried out at two levels (university level and faculties / departments level). Such an approach will allow the optimization of internal processes, depending on the specific needs of the faculties and departments in the university organization chart.

The research community from TUM will be involved in the implementation of the Action Plan in three ways. Firstly, the representatives of the research community will be part of the Steering Committee. The group of scientific experts who worked in the first stage to carry out the activities necessary to obtain the diploma of excellence will continue to fulfill the role of main vectors at the department / faculty level and they will disseminate and provide feedback from the scientific community to the implementing structures of the Action Plan. Secondly, the research community will have a significant influence on the implementation process, through the existing bodies (such as the TUM Senate) in accordance with the national regulations and the TUM statute. Thirdly, the evaluation process will include interviews with research community representatives, bound to facilitate involvement in the implementation process.

A Monitoring Committee will be formed by representatives of the working groups in order to monitor and evaluate the progress of implementation, and to identify problems that may arise, in real-time. The Monitoring Committee will periodically report the progress of each action to the Steering Committee.

In order to achieve the full involvement of the academic and research community, two initiatives are planned: a presentation event for all staff of the HRS4R Strategy with the Action Plan and a synthetic presentation material of the HRS4R Strategy with its corresponding stages. Moreover, the process of the HRS4R Strategy implementation and its outcomes will be disseminated through various dissemination events carried out by TUM. In addition, a survey assessing the level of satisfaction of the TUM community with the HRS4R Strategy implementation will be conducted annually. The results of the surveys will be analyzed by the working groups upon consent of the coordination committee.

An internal review of the HRS4R Strategy will be carried out two years after the launch of the action plan. The working group will review the C&C principles and the OTM-R policy and will consider possible adaptations needed for meeting the proposed objectives.

The extent to which the action plan has been completed will be reviewed, detecting possible inadequacies and indicating the corrective actions proposed. This report will be discussed and endorsed by the Steering Committee and will be presented to the decision-making bodies of TUM for final validation.

Make sure you also cover all the aspects highlighted in the checklist below, which you will need to describe in detail:

Note: Click on each question of the checklist to open the editor.

How will the implementation committee and/or steering group regularly oversee progress?*



Detailed description and duly justification (max. 500 words)

The Steering Committee will periodically analyze the reports on the implementation progress of the Action Plan, which contain the key performance indicators and the problems arising during its implementation, in correlation with the associated / emerging risks. The Monitoring Committee will analyze the activity of each Working Group and will be responsible for drawing up the progress report and submitting it to the Steering Committee. The Steering Committee will discuss with the relevant stakeholders (for example, the Scientific Council of TUM) the results obtained at each stage to facilitate the successful implementation of the Action Plan.

How do you intend to involve the research community, your main stakeholders, in the implementation process?*



Detailed description and duly justification (max. 500 words)

The Steering Committee and each Working Group will include relevant representatives of stakeholders (management, decision-makers, researchers and administrative staff from TUM). The Steering Committee supervises and evaluates the implementation of the Action Plan. Each Working Group is responsible for the implementation of each action at all the stages defined in the Action Plan. In addition, the Working Group will oversee the implementation and of reporting to the Steering Committee. The academic community of TUM will be involved in the implementation process of the Action Plan in three ways. Firstly, the representatives of the research community will be part of the Steering Committee. The group of scientific experts who worked in the first stage to carry out the activities necessary to obtain the diploma of excellence will continue to fulfill the role of main vectors at the department / faculty level and they will disseminate and provide feedback from the scientific community to the implementing structures in the Action Plan. Secondly, the research community will have a major influence on the implementation process, through the existing bodies (such as the TUM Senate, TUM Scientific Council) in accordance with the national regulations and the TUM statute. Thirdly, the evaluation process will include periodic surveys among the research community, bound to facilitate involvement in the implementation process.

How do you proceed with the alignment of organisational policies with the HRS4R? Make sure the HRS4R is recognized in the organisation's research strategy, as the overarching HR policy.

*



Detailed description and duly justification (max. 500 words)

The proposed actions in Action Plan will represent the main vector in support of achieving the objectives defined in the TUM Strategy for Research, Development and Innovation for 2019-2023 and TUM Human Resources Strategy for Researchers and Academic Staff for 2022-2026, with direct implications for the main operational planning addressed by the university: education, research, innovation. This comprehensive approach of the three types of missions, that genuinely intertwines human capital training with high quality fundamental research and with valorisation of research with social and economic benefits, will contribute to strengthening TUM's reputation at national and regional level.

How will you ensure that the proposed actions are implemented?*



Detailed description and duly justification (max. 500 words)

The Gap analysis and Action Plan have been approved by TUM's Scientific Council. Accordingly, the proposed Action Plan is supported to be implemented by the university at its highest representative level. The Steering Committee and each Working Group will include relevant members / representatives of the university, faculties and departments, as entities that are mandated to implement the actions. The working group is made up of representative members of the departments, as decision-makers entitled to implement and develop the proposed actions as well as to represent the research staff. The implementation process will involve regular discussions with relevant stakeholders (eg. Administrative staff, researchers, PhD students, unions etc.). Members of the research community's expert group (who initially supported the gap analysis) will be invited to contribute to the periodic revisions of the Action Plan. They will continue to play an important role in the informal annual monitoring of the activity and in the official internal monitoring at the end of each cycle.

How will you monitor progress (timeline)?*



Detailed description and duly justification (max. 500 words)

In order to coordinate and monitor the implementation of actions, it is necessary to develop monitoring procedures which include:

- a common model for the annotation and verification of the progress of each action by the responsible person(s) for each action (the working group);
- biannual meetings of the working group with administration representatives on the implementation of the action, which will be scheduled and reported to TUM management bodies and to the Steering Committee;
- focus groups organized by the research team with the scientific community, including consulting them twice a year to collect information and to evaluate changes in researchers' perceptions of C&C implementation;
- periodic briefings to TUM management bodies.

The monitoring committee, which will include representatives from each Working Group, will periodically evaluate the progress of the implementation of all the steps (indicators) according to the planning, in order to identify, as quickly as possible, the problems that have arisen. The monitoring committee will periodically (quarterly) report the progress made in carrying out each action to the Steering Committee, which will be able to take decisions to mitigate the effects of not fulfilling the tasks assumed and to control the associated risks and to eliminate the problems that will arise during the implementation process respectively.

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



Detailed description and duly justification (max. 500 words)

The indicators are individually set for all the planned actions.

These indicators will be evaluated periodically by the Monitoring Committee, and the Steering Committee will be responsible for the decisions made to achieve the objectives and to implement the work schedule in line with the action plan.

Additional remarks/comments about the proposed implementation process: (max. 1000 words)

Currently, the English versions of institutional documents related to HRS4R are available on <https://cercetari.utm.md/hrs4r/> for:

- TUM Human Resources Strategy for Researchers and Academic Staff for 2022-2026, and Action Plan,

Consultation with the scientific and academic community of TUM regarding the implementation of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers

Regulation on the occupation of teaching and scientific-didactic positions in PI TUM from 22 June 2021

TUM Code on Ethics and Professional Deontology from 26 November 2019

TUM Strategy on Research-Development-Innovation for 2019-2023 (approved on 25 September 2018, modified on 22 September 2020)

The other HRS4R related documents and regulations will be translated into English during implementation of the Action Plan.