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ANNEX 39

PROGRAMME OF APPLIED RESEARCH, EXPERIMENTAL DEVELOPMENT AND ART ACTIVITIES OF VILNIUS UNIVERSITY OF APPLIED SCIENCES FOR 2022-2025

CHAPTER I GENERAL PROVISIONS

1. The Programme of Applied Research, Experimental Development (hereinafter –the R&D) of Vilnius University of Applied Sciences (hereinafter – the Vilnius UAS) for 2022-2025 (hereinafter – the Programme) lays down the purpose, principles and guidelines of applied research, experimental development and artistic activities, implementation of the Programme and its coordination in order to achieve the successful implementation of the goals and objectives of the Strategy 2021-2025 of Vilnius UAS.

2. The definitions used in the Programme include:

2.1. **Activities of participation in international programmes** – carrying out projects under international research and experimental development (R&D) programmes;

2.2. **Experimental development** means a sequence of knowledge-enhancing activities based on research and/or know-how, the aim of which is to develop new products or processes, or to improve existing products or processes, or to develop or substantially improve solutions to human, cultural and societal problems based on research and/or know-how.

2.3. **Artwork** – a publicly presented work of art, design, architecture, media art, theatre, film, dance, music or interdisciplinary art, or an act of its performance, which meets the criteria of artistry recognised in a specific field of art;

2.4. **Scientist** means a researcher holding a PhD.

2.5. **Dissemination of science (art)** – making scientific research and artistic creation known to the public.

2.6. **Recognised artist** means a creator or performer of works of art whose creative activity is characterised by works of particular significance for art and culture implemented in Lithuania and/or abroad, which have won wide recognition from the public and art professionals, which have been awarded prestigious international or national prizes and other high honours, and/or who has produced artists of distinction and who meet the requirements laid down by a higher education institution at which he pursues or holds a position.

2.7. **Social responsibility** is an integral principle of an organisation's activities that adds value to the society, based whereon the organisation voluntarily integrates social, environmental, transparency and other principles of public good into its activities in order to be a responsible, proactive, community-based, civic and public-oriented actor, focused on society's welfare and needs.

2.8. **Applied research** means experimental and/or theoretical work carried out to generate new knowledge, primarily for the purpose of achieving specific practical objectives or challenges.

2.9. **Researcher** means a person with a higher education qualification who develops knowledge, conceptualises or creates new products, processes, methods and systems, or leads research and experimental development projects.

2.10. **Research group** means a group of faculty or institutional lecturers engaged in R&D and/or artistic activities, working purposefully in accordance with the guidelines of their activities and the objectives set.

2.11. **Commissioned art activities** mean the processing of orders of art by economic entities;

2.12. **Commissioned project activities** mean the processing of R&D orders by economic entities.

3. The Programme period is 2022-2025.

4. The Programme has been prepared in accordance with the provisions of the Law on Research and Higher Education of the Republic of Lithuania, the Lithuanian Progress Strategy "Lithuania 2030", the Research Development Programme 2022-2030 of the Ministry of Education, Science and Sport of the Republic of Lithuania, the European Smart Specialisation (S3), EURASHE (European Association of Professional Higher Education Institutions), UAS4EUROPE (European Joint Initiative of Professional Higher Education Institutions), the European Research Area (ERA), the Vilnius Regional Development Strategy, the Statute of Vilnius University of Applied Sciences, and provisions of the Strategy of Vilnius University of Applied Sciences for 2021-2025.

CHAPTER II

ANALYSIS OF THE CURRENT SITUATION

5. From 2021, Vilnius University of Applied Sciences has followed the Operational Strategy 2021-2025, the second strategic goal of which is "To develop applied research, experimental development and impactful professional art relevant to the world".

6. Applied scientific research and experimental development at Vilnius UAS is a systematic and creative activity of cognition of nature, humanity, culture, the society and the use of its results.

7. The applied research, experimental development and art activities of Vilnius UAS play a key role in enhancing the institution's competitiveness, especially at the regional level, where Vilnius UAS acts as a link between the world of activity, organisations and society. R&D and artistic activities develop entrepreneurial skills of teaching staff and students and contribute to increased economic growth and job creation. The practical research skills acquired through applied research enhance the employability of graduates.

8. Researchers and/or groups of researchers carry out experimental development activities, i.e. a sequence of knowledge-generating activities based on research and/or know-how, aimed at developing new products or processes or improving existing products or processes, and at creating or substantially improving solutions to human, cultural and societal problems based on research and/or know-how.

9. Applied art activities carried out at Vilnius UAS include the presentation/performance of a work in an artistic or public space, publication in a recording studio or display at an exhibition, festival, television or radio channel. The result of this activity is an artwork. It is a publicly presented work of design, theatre, dance, music, or an act of performance that meets the criteria of artistry recognised by a particular artistic movement.

10. R&D and art activities are supervised by the Research Department, which plans and coordinates the activities, carries out monitoring and data analysis, and annually prepares and submits a report on the Vilnius UAS R&D and art activities to the Ministry of Education, Science and Sport.

11. Applied research, experimental development and art activities are carried out by 30 research teams (3 of them by art fields) in 14 research fields and 3 art fields (6 research fields and 2 art fields).

12. In 2021, there were 211 researchers involved in R&D and professional art activities, almost half of whom - 92 (44%) - have a PhD or are recognised artists.

13. In order to ensure the internal human resources of the Vilnius UAS for R&D and professional art activities, a significant share of PhDs (recognised artists) in the total number of teaching staff at Vilnius UAS has been achieved. The share of PhDs in the total number of teachers

was 18.5% in 2021, and the share of recognised artists in the total number of teachers accounted for 5.6% in 2021.

14. Cooperation agreements have been signed and executed each year to develop social responsibility and innovation partnerships in R&D, professional arts and project activities with Lithuanian research, education and business centres, national agencies, associations, confederations, the Vilnius Chamber of Industry, Commerce and Crafts, and other relevant entities. Twenty-three (23) contracts for applied consultancy (outsourcing) activities were concluded in 2021 with natural and legal persons, public bodies, businesses, municipalities and associations.

15. In 2021, Vilnius UAS carried out 15 studies on *study quality and competence assurance*, of which 3 were ongoing studies and 3 were interdisciplinary studies; 8 studies on *business environment and labour market analysis*, of which 3 were commissioned studies; 22 studies in *the field of technology and natural sciences*, of which 7 were commissioned applied studies, 1 was an ongoing study; 34 studies on applied research *on specialised topics*, of which 5 were commissioned, 8 were ongoing studies, 1 was a research-business project, 1 was an international study and 1 an interinstitutional study, and 3 were studies relating to innovations.

16. There was a total of 169 publications disseminating the results of R&D and artistic activities in 2021, of which 30 were artistic publications. There will be 5 cross-field publications in 2021 (involving at least 2 research fields) and 6 international joint publications. The share of international joint publications (%) in the total publications at Vilnius UAS increased by 3.32% in 2021.

17. In 2021, there were 1.6 publications per researcher position.

18. There were 104 presentations at national and international events and conferences in 2021, of which 26 were given at international events.

19. In 2021, Vilnius UAS held 8 international scientific conferences, two of which were international scientific-practical student conferences. 157 presentations were made at international events, and 44 presentations were made at national scientific-practical conferences (7 republican conferences), most of which were published in peer-reviewed conference proceedings from abroad and Lithuania. 201 presentations were made at international and republican scientific and/or practical conferences organised by Vilnius UAS.

20. Commissioned activities for EUR €808 307 were carried out in 2021. Socially responsible commissioning and consultancy for AR&D and arts raised EUR 629 696 (or 77.9% of the total revenue of Vilnius UAS from R&D and art activities).

21. Vilnius UAS continuously strengthens the competences of its researchers. In 2021, 7 targeted training sessions for researchers were organised. 212 teacher-researchers participated in these trainings. Six (6) teachers of Vilnius UAS have defended their PhD dissertations.

22. EUR 52 000 was allocated for 2021 to promote the scientific and artistic output of Vilnius UAS staff.

23. Students have been involved in research groups in the fields of science (arts). The number of joint publications (52) by lecturers and students in 2021 accounted for a third (29%) of the total number of publications of Vilnius UAS.

24. All faculties have Student Scientific Societies (SSS), whose members work on issues of societal interest. Currently, members of SSS actively work at the FAT, FBM, FE and FHC. In 2021, 322 presentations were made by students; thirty-six (36) students were involved in research activities together with their lecturers in 2021, whereas in previous years this indicator was not measured; 2 students carried out research work in a summer internship project.

25. Vilnius UAS is a leader in the sector of universities of applied sciences in R&D and art activities.

26. Vilnius UAS needs to strengthen the potential of researchers, develop outsourced research, experimental development and art activities, encourage student involvement in research groups, improve research infrastructure, and secure funding for R&D and art activities.

CHAPTER III

PURPOSE, PRINCIPLES, FIELDS AND GUIDELINES FOR IMPROVING ACTIVITIES

27. The aim of the programme is to strengthen R&D and the level of art activities of Vilnius UAS, in line with the Strategy 2021-2025 of Vilnius UAS and with the impact on the country and the region.

28. Principles for R&D and arts activities include practical applicability of results, interdisciplinarity, impact on studies, internationalisation, inclusiveness, social responsibility, compliance with research ethics and equal opportunities.

28.1. **Practical applicability of the results.** Applied research and experimental development is carried out in response to the needs of the world of activity, government and/or public organisations and to initiate changes in the development of the society.

28.2. **Interdisciplinarity.** After assessing the needs of their clients, in collaboration with representatives of the business world, governmental and/or public organisations, researchers from different scientific/ art disciplines of Vilnius UAS form mixed research teams.

28.3. **Impact on studies.** The researchers' experience of R&D and artistic activities, and the new practical knowledge created, complement the content of the study programmes and provide students with new competences relevant to their future professional activities.

28.4. **Internationality.** Together with international partners, researchers of Vilnius UAS carry out joint R&D, project and artistic activities and disseminate their results to the international community. The dynamics and impact of international mobility of researchers/artists and students (outgoing and incoming) on the activities of the HEI are analysed at institutional, faculty and departmental levels.

28.5. **Inclusion.** Research teams of Vilnius UAS are encouraged to involve early-career researchers and motivated students interested in research, the business world, and governmental/societal organisations in R&D and art activities.

28.6. **Social responsibility.** Researchers of Vilnius UAS integrate social, environmental and transparent principles in their R&D and art activities, with the aim of being responsible, proactive, community-based, civic, and social actors focused on the well-being and needs of the society.

28.7. **Compliance with research ethics.** Researchers of Vilnius UAS are guided by the institution's strategy, the documents governing their research activities and the Research Ethics Compliance Framework when planning applied research, and in complex cases collaborate with other institutions within their areas of competence to ensure that their research and experimental development work meets general requirements for compliance with the Research Ethics Framework.

28.8. **Equal opportunities** – at Vilnius UAS, R&D and art activities are carried out by researchers regardless of age, sexual orientation, disability, race or ethnicity, religion, beliefs, and other grounds provided for in international treaties or laws of the Republic of Lithuania.

29. Researchers of Vilnius UAS carry out R&D and art activities in 14 scientific and 3 art fields, including agronomy, veterinary science, informatics, electrical and electronic engineering, computer science, chemical engineering, materials engineering, public health, nursing, economics, management, sociology, education, philology, and music, theatre and cinema, and design arts.

30. Guidelines for improving the R&D and art activities of Vilnius UAS:

30.1. To develop partnerships in R&D, professional art and project activities with Lithuanian research, education and business centres, national agencies, associations, confederations, the Vilnius Chamber of Industry, Commerce and Crafts, Vilnius Region municipal administrations, and public organisations, promoting mutual involvement and motivation of partners to solve problems of national and regional importance;

30.2. To develop partnerships with international strategic partners in international HEI and professional networks and increase the internationalisation of R&D and art activities;

30.3. To periodically analyse the needs of the country/region(s) for commissioning R&D and art activities and develop measures to meet these needs;

30.4. To process socially responsible R&D and art orders and to provide consultations to national and regional entities.

30.5. To organise international and national conferences of scientific value and presentations;

30.6. To organise activities to develop research competences of teachers;

30.7. To ensure dissemination of R&D results, professional art and project activities and their use to the research community, the public and stakeholders (pupils, students, employers, national and international professional associations, research organisations, etc.) in scientific journals referenced in databases, on the website of Vilnius UAS, and in mass media;

30.8. To digitise the results of R&D and art activities in the public repository of R&D and art activities of Vilnius UAS;

30.9. To establish student scientific societies (SSSs) at all faculties, whose members formulate and solve problems relevant to research and education, engage in research groups, R&D, professional art and project activities in the field of science (art);

30.10. To ensure internal material resources for R&D and professional arts activities by attracting funds from international and national foundations, programmes, companies and other stakeholders;

30.11. To ensure internal human resources for R&D and professional art activities. To allocate resources for the establishment of researcher positions.

CHAPTER IV

EVALUATION CRITERIA

31. The achievement of the Programme's objective and activities will be assessed against the following evaluation criteria:

31.1. dissemination of published research results (scientific papers);

31.2. dissemination of published artworks;

31.3. commissioned design activities;

31.4. art applications;

- 31.5. participation in international research programmes;
- 31.6. improving researchers' competences;
- 31.7. involving students in R&D and arts activities;
- 31.8. qualitative analysis of the unity between the studies and the R&D and art activities at Vilnius UAS;
- 31.9. qualitative analysis of the impact of R&D and art activities of Vilnius UAS on national and regional development.

CHAPTER V IMPLEMENTATION

32. The Programme shall be implemented by planning and carrying out R&D and art activities at the institutional, faculty, departmental and teacher levels, taking into account the provisions of the Description of the Procedure for Establishing and Accounting for Full-time Workload of Teaching Staff at Vilnius UAS.

33. The Research Department of Vilnius UAS coordinates the implementation of the Programme.

34. For associate professors / recognised artists, the publication and publicity of R&D / art activities and the results of these activities is mandatory. The recommendation is for R&D/ art activities and the publication and publicity of the results of these activities to represent at least 33% of the total workload of the associate professor/ recognised artist and at least 10% of the total workload of an associate professor/ recognised artist.

35. R&D and art activities are carried out by teams of researchers approved by order of the Rector. These groups are encouraged to involve early-career researchers and motivated students interested in scientific activities.

36. Research groups are usually led by coordinators who are either scientists or established artists.

37. A Research Group Coordinator shall be responsible for drawing up, implementing and, where necessary, adjusting the guidelines for a given research area.

38. Research Group Coordinators are encouraged to bring together research groups in the context of interdisciplinary applied research, experimental development and/or artistic activities.

39. The Programme shall be implemented in accordance with the Strategic Plan of Vilnius UAS.

40. At least once a year, the implementation of the Programme shall be discussed at the UAS, Faculty and Department level.

CHAPTER VI FINAL PROVISIONS

41. The implementation of the Programme will lead to the achievement of a higher level of R&D and art activities of Vilnius UAS and will increase its impact on the development of the country and the region.
