



MINISTRY
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[RECOVERY
AND RESILIENCE]
PLAN



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Manual for Evaluators Participating in the *Periodic Assessment of Research, Development, Artistic and Other Creative Activities*

Applications, applicants and outputs

Periodic Evaluation of Research, Development, Artistic and Other Creative Activities is a pilot project, carried out by the Ministry of Education, Science, Research and Sport of the Slovak Republic. It's a peer-review evaluation of the publishing and other creative activities of the Slovak higher education institutions (universities) and research institutions, while the time range of the evaluation of these activities is between the years 2014 and 2019.

This assessment process is divided into seven scientific fields – panels, and twenty-eight scientific areas – subpanels (which fall under these panels). These panels and subpanels are as follows:

Panels	Subpanels
Natural Sciences	Physical Sciences
	Chemical Sciences
	Mathematics
	Biological Sciences
	Earth Sciences
	Environmental and Ecological Sciences
Technical Sciences	Civil Engineering and Architecture
	Metallurgy and Materials Science
	Mechanical Engineering
	Electrical Engineering
	Computer and Information Sciences
Medicine	Basic medicine
	Clinical medicine
	Health Sciences
Agricultural, Forestry and Veterinary Sciences	Agricultural, Forestry and Veterinary Sciences
Social Sciences	Political Science
	Media and Communications
	Sociology and Social Anthropology
	Psychology and Cognitive Sciences
	Education
	Social Work
	Economics and Business
	Law
Humanities	Philosophy and Theology
	Languages and Literature
	History and Archaeology
Arts and Theory of Art	Performing Arts and Related Art Fields
	Visual Arts and Related Art Fields

The higher education and research institutions (or its parts) submitted applications for evaluation until 15 August 2022. Each scientific team consisting of at least 5 members had the opportunity to submit the application in any scientific area, while the maximum number of scientific (or artistic/other) outputs for each application was 25. Authoritative for the scientific area to which the application was

submitted was not the organisational structure of the institutions (its parts, faculties, or departments), but the content of the scientific, artistic or other outputs.

Applicants were required to observe the principles of representativeness and of even distribution during the process of selection of outputs (which they submitted for the evaluation). It means that each set of outputs within applications consists of outputs of diverse quality, and representativeness was also employed in terms of authorship of the outputs. In practice, this is to avoid the situation when those authors who produce the best outputs are the only ones presented within the application's set of outputs.

Hence, the objective of this Periodic Assessment practice is not to evaluate only the top ('high-graded') outputs, but to get an image of how the quality of research and science looks like at Slovak universities and research institutions, and in particular scientific fields. We expect that the results of this evaluation practice would have an impact on the funding of the Slovak universities and research institutions in future, although probably not in such strict and profound fashion as it is, for example, with the REF (Research Excellence Framework) in the United Kingdom.

Quality dimensions, quality grades, quality profile and assessment criteria

For evaluation of the outputs, there is basically only one general requirement – and it is that each output should be read and evaluated at least by two members of the subpanel.

All of the outputs should be evaluated in terms of their **originality, significance** and **rigour**.

Within this assessment process:

Originality is understood as the extent to which the output makes an important and innovative contribution to understanding and knowledge in the field. Research outputs that demonstrate originality may do one or more of the following: produce and interpret new empirical findings or new material; engage with new and/or complex problems; develop innovative research methods, methodologies and analytical techniques; show imaginative and creative scope; provide new arguments and/or new forms of expression, formal innovations, interpretations and/or insights; collect and engage with novel types of data; and/or advance theory or the analysis of doctrine, policy or practice, and new forms of expression.

Significance is understood as the extent to which the work has influenced, or has the capacity to influence, knowledge and scholarly thought, or the development and understanding of policy and/or practice.

Rigour is understood as the extent to which the work demonstrates intellectual coherence and integrity, and adopts robust and appropriate concepts, analyses, sources, theories and/or methodologies.

All three of these quality dimensions must be considered in the evaluation, even though each of the evaluated outputs is eventually marked with just one quality assessment grade. The quality assessment grades within this assessment process are as follows:

- 'World leading quality'
- 'Internationally excellent quality'
- 'Internationally recognised quality'
- 'Nationally recognised quality'
- 'Below the standard of nationally recognised work'

As the evaluators were selected with regard to their professional expertise, we rely on their competence to determine what 'quality' would exactly mean within their subpanel in an unbiased way, and also to calibrate across the quality grades during the evaluation of the outputs. It is up to the evaluators, and their consensus within the subpanel, which qualitative criteria they would use for the evaluation of the outputs as well.

The selection of these criteria is expected to be the result of the discussion, and mutual agreement between the members of the subpanel. It would be probably for the best of the process that all these matters related to the methodology of evaluation would be discussed between subpanel evaluators during their respective first regular meetings, and noted in these first meetings' minutes. Selected criteria should be applied to all of the outputs within the respective subpanel's field uniformly, consistently, and throughout the whole duration of the assessment process.

Hence, each subpanel chooses its own methodology of evaluation and evaluation criteria. These, then, may differ across the sub-panels. There will not be any exercise oriented on the calibration of these criteria and methodologies across the subpanels (so, the calibration/tensioning is to be carried out only within the individual subpanels).

The only quantifiable criterion, which the subpanel evaluators may consider during the evaluation of the outputs, is citation statistics (numbers, counts). If the subpanel consensually decides to consider the citation statistics as one of the evaluation criteria, they notify the Ministry's personnel who would provide them with these. By no means are the evaluators to contact the applicants (representatives of the Slovak higher education and research institutions who submitted the applications). If the subpanel consensually decides to consider the citation statistics as one of the evaluation criteria, they should also notify the relevant panel about this fact.

If there is difficulty to come up with an assessment quality grade for some individual output (i.e., if there is a huge discrepancy in grading between the two subpanellists assessing the output), they discuss this matter within the subpanel (on its meeting). Should necessity still arise, the subpanel may also ask for the help of the members of the respective panels in resolution of such matters.

Within this project of Periodic Assessment, the assessment itself is a collective process. It does not result in evaluations of individual authors of outputs, or individual outputs. The product of the evaluation is the quality profile, which is created for each one of the applications for evaluation in the relevant research areas. This quality profile expresses the overall extent to which the submitted outputs jointly meet the criteria of originality, significance and rigour, according to the level of quality of the outputs. It is a percentage expression of the degree of output quality levels represented in the evaluated research team (application). The quality profile will be published for each submitted research area for each workplace and each applicant on the Ministry's website after the end of the

periodic evaluation. Procedures for the evaluation of research evaluation panels (or subpanels) and classification of individual outputs are not published. Thus, the Slovak universities and research institutions will not be informed about the quality grades which will be assigned to particular outputs.

Interdisciplinary outputs

There are a few outputs that the very applicants deem as interdisciplinary. In this case, we will send the output for assessment also to the other sub-panel, whose proposed grade of the output may be taken into consideration by the sub-panel to which the output is originally assigned. Besides making sure that the evaluation process (and application of the evaluation criteria to outputs) runs consistently, the panel member who would work with individual subpanel should also observe the consistency in its dealing with these interdisciplinary outputs.

All responsibilities of members of subpanels/panels, and of chairs of subpanels/panels

Member of the subpanel

- in cooperation with the other subpanel members, determines a uniform methodology and assessment criteria for the outputs in the respective research field,
- in cooperation with the other subpanel members, provides the uniform methodology and assessment criteria for the outputs in the respective research field to the assigned Panel,
- in cooperation with the other subpanel members, assesses the applications for assessment of outputs of research, development, artistic and other creative activities (hereinafter referred to as 'Application for Assessment') in the respective research field,
- in cooperation with the other subpanel members, determines the resulting quality profiles of the research teams of applicants for the periodic assessment in the respective research field,
- in cooperation with the other subpanel members, coordinates the finishing of the resulting quality profiles,
- in cooperation with the other subpanel members, provides the resulting quality profiles of the research teams of applicants for the Periodic Assessment in the respective research fields to the Ministry of Education, Science, Research and Sport of the Slovak Republic and the assigned panel,
- participates in subpanel meetings,
- if delegated by the subpanel chairman, chairs the subpanel meeting for which they receive the delegation,
- in cooperation with the other subpanel members, determines operating procedure, meeting frequency and other aspects in relation to the organisation of the subpanel functioning at the subpanel's first meeting,
- in cooperation with the other subpanel members, coordinates the preparation of supporting documents for the subpanel meetings,
- in cooperation with the other subpanel members, secures the organisational and administrative preparation of the subpanel meetings,
- if instructed by the subpanel chairman, prepares the draft of meeting minutes of a subpanel meeting,
- fulfils orders of the subpanel chairman,

- fulfils orders of the chairman and the member of the assigned panel.

Member of the panel

- in cooperation with the other panel members, ensures coordination of activities of the Sub-Panels in the respective research fields,
- in cooperation with the other panel members, oversees the adherence to a uniform methodology and assessment criteria in the individual Sub-Panels in the respective research fields,
- assigns interdisciplinary outputs of research, development, artistic and other creative activities to the subpanels,
- in cooperation with the other panel members, coordinates the preparation of the final versions of the resulting quality profiles,
- in cooperation with the other panel members, provides the resulting quality profiles of the research teams of applicants for the Periodic Assessment in the respective research fields to the Ministry of Education, Science, Research and Sport of the Slovak Republic,
- participates in panel meetings,
- if delegated by the panel chairman, chairs the panel meeting for which they receive the delegation,
- in cooperation with the other panel members, determines operating procedure, meeting frequency and other aspects in relation to the organisation of the Panel functioning at the Panel's first meeting,
- in cooperation with the other panel members, coordinates the preparation of supporting documents for the panel meetings,
- in cooperation with the other Panel Members, secures the organisational and administrative preparation of the panel meetings,
- if instructed by the panel chairman, prepares the draft of meeting minutes of a panel meeting,
- if instructed by the panel chairman, participates in a meeting of a subpanel in the respective research field,
- fulfils orders of the panel chairman.

Chair of the subpanel

- manages the activities of the subpanel,
- in cooperation with the other subpanel members, determines a uniform methodology and assessment criteria for the outputs in the respective research field,
- in cooperation with the other subpanel members, provides the uniform methodology and assessment criteria for the outputs in the respective research field to the assigned panel,
- in cooperation with the other subpanel members, assesses the applications for assessment of outputs of research, development, artistic and other creative activities in the respective research field,
- in cooperation with the other subpanel members, determines the resulting quality profiles of the research teams of applicants for the periodic assessment in the respective research field,
- in cooperation with the other subpanel members, coordinates the finishing of the resulting quality profiles,



- in cooperation with the other subpanel members, provides the resulting quality profiles of the research teams of applicants for the Periodic Assessment in the respective research fields to the Ministry of Education, Science, Research and Sport of the Slovak Republic and the assigned panel,
- convenes and chairs subpanel meetings, and proposes the meeting agenda,
- sends invitations for the subpanel meetings to the subpanel members before these meetings and participates in these meetings,
- delegates the chairing of a subpanel meeting to another subpanel member,
- in cooperation with the other subpanel members, determines operating procedure, meeting frequency and other aspects in relation to the organisation of the Sub-Panel functioning at the subpanel's first meeting,
- in cooperation with the other subpanel members, coordinates the preparation of supporting documents for the subpanel meetings,
- in cooperation with the other subpanel members, secures the organisational and administrative preparation of the subpanel meetings,
- in cooperation with the other subpanel members, prepares the draft of meeting minutes of a subpanel meeting, and approves the meeting minutes of the subpanel meeting,
- fulfils orders of the chairman and the member of the assigned panel.

Chair of the panel

- manages the activities of the panel,
- in cooperation with the other panel members, ensures coordination of activities of the subpanels in the respective research fields,
- in cooperation with the other panel members, oversees the adherence to a uniform methodology and assessment criteria in the individual Sub-Panels in the respective research fields,
- assigns interdisciplinary outputs of research, development, artistic and other creative activities to the subpanels,
- in cooperation with the other panel members, coordinates the preparation of the final versions of the resulting quality profiles,
- in cooperation with the other panel members, provides the resulting quality profiles of the research teams of applicants for the Periodic Assessment in the respective research fields to the Ministry of Education, Science, Research and Sport of the Slovak Republic,
- convenes and chairs panel meetings, and proposes the meeting agenda,
- sends invitations for the panel meetings to the panel members before these meetings and participates in these meetings,
- delegates the chairing of a panel meeting to another panel member,
- in cooperation with the other panel members, determines operating procedure, meeting frequency and other aspects in relation to the organisation of the panel functioning at the Panel's first meeting,
- in cooperation with the other panel members, coordinates the preparation of supporting documents for the panel meetings,
- in cooperation with the other panel members, secures the organisational and administrative preparation of the panel meetings,

- in cooperation with the other panel members, prepares the draft of meeting minutes of a panel meeting, and approves the meeting minutes of the panel meeting,
- participates in meetings of a subpanel in the respective research field.

Organisation of the meetings

There is no fixed schedule of meetings, as we expect evaluators within the respective panel/subpanel would agree on these consensually. We expect each panel and subpanel to meet at least four times during the period of evaluation, which is between 1st of September and 1st of December.

Each meeting needs to be held online, and mapped via meeting minutes. These meeting minutes should contain only the most essential information on what the panellists/subpanellists agreed upon during a particular meeting, while it should also contain an attendance list. Draft of these minutes should be prepared by the selected member of the subpanel, and sent to all other attendees of the meeting within five days; while the chair gives at least five days from the date of reception of this draft to comment on it. The chair, then, provides meeting minutes and a video recording of the meeting to the Ministry. Each meeting minutes delivered to the Ministry must be signed by the chair of the respective panel/subpanel. Meeting minutes from the last meeting of each subpanel must contain the quality profiles of the evaluated applications.

For subpanel meetings' quorum to be met, it is required that two-thirds of the subpanel members are present, and at least one member from the panel (to which the subpanel belongs) also always has to be present there. This panel member of the panel is expected to work in collaboration with the subpanel, and is delegated to a particular subpanel meeting by the chair of the respective panel. The role of this panel member in these meetings will be to ensure that the particular criteria of evaluation (on which subpanels would collectively agree) are applied uniformly to all evaluated outputs and applications throughout the evaluation period.

For the panel meetings' quorum to be met, it is required that all of the panel members are present.

For panel and subpanel meetings, evaluators may use basically any software (MS Teams, Zoom, Webex, etc). There are no restrictions for the communication outside of the panel/subpanel meetings for the evaluators – so, they can communicate according to their own preferences.

Workload and its distribution

We value highly the expertise which the evaluators bring into the evaluation process, and because of that, we provide the evaluators with as much autonomy during the evaluation process as we can. In this regard, the way in which the panels/subpanels organize their work and distribute the workload between themselves is completely up to consensual agreement between its members.

VER 2022 software

The assessment is carried out in a software titled *VER 2022* (it stands for the *Verification of Excellence in Research*). All evaluators are able to access the evaluation applications and individual research outputs within their respective panels/subpanels through their personal accounts. In *VER*, only the

subpanel chairs dispose of the permission to assign the grades to individual outputs and to upload the quality profiles (of course, after the consensual decision between them and their subpanel colleagues).

If the evaluator finds the output or its part unreadable, they should notify their contact person at the Ministry (by no means the applicants themselves). Also, if the evaluator seeks some additional information about the output (e.g., citations), they should notify their contact person at the Ministry as well.

Conflict of interests

Within this evaluation process, the evaluators are required to declare the conflict of interests, if there is some in their case during the evaluation process. Within *Periodic Evaluation of Research, Development, Artistic and Other Creative Activities* conflict of interests shall mean a research evaluator or their dependents:

are the authors or co-authors of the output included in the evaluation application or participate in the evaluated activity; or

assess the outputs, societal significance or research environment of the applicant with whom the research evaluator or his dependents are in an employment relationship.

If the evaluator finds a conflict of interest, they notify the ministry without delay, do not evaluate the relevant applicant and refrain from expressing opinions on the applicant during their evaluation.

The Ministry shall inform the person who reports the conflict of interest of the handling of the complaint within 15 days of its delivery.

Undeclared conflict of interest can eventually lead to loss of the position of the evaluator.

Communication with Ministry

In case of some further questions, inquiries, or difficulties using *VER 2022* software, please write to nominations@minedu.sk, while always add the e-mail address of designated contact person from the Ministry of Education, Science, Research and Sport of the Slovak Republic into the copy of your message.

Panels	Subpanels	Contact person
Natural Sciences	Physical Sciences	Marek Kotman marek.kotman@minedu.sk
	Chemical Sciences	
	Mathematics	
	Biological Sciences	
	Earth Sciences	
	Environmental and Ecological Sciences	
Technical Sciences	Civil Engineering and Architecture	Štefan Korbel' stefan.korbel@minedu.sk +421 918 792 251
	Metallurgy and Materials Science	
	Mechanical Engineering	
	Electrical Engineering	
	Computer and Information Sciences	
Medicine	Basic medicine	Štefan Korbel' stefan.korbel@minedu.sk +421 918 792 251
	Clinical medicine	
	Health Sciences	
Agricultural, Forestry and Veterinary Sciences	Agricultural, Forestry and Veterinary Sciences	Marek Kotman marek.kotman@minedu
Social Sciences	Political Science	Matej Butko matej.butko@minedu.sk +421 947 903 377
	Media and Communications	
	Sociology and Social Anthropology	
	Psychology and Cognitive Sciences	
	Education	
	Social Work	
	Economics and Business	
Law		
Humanities	Philosophy and Theology	Matej Butko matej.butko@minedu.sk +421 947 903 377
	Languages and Literature	
	History and Archaeology	
Arts and Theory of Art	Performing Arts and Related Art Fields	Marek Kotman marek.kotman@minedu
	Visual Arts and Related Art Fields	