

Based on Article 45, paragraph three, of the Scientific Research and Innovation Activities Act (ZZrID) (Official Gazette of the RS, No. 186/21) and Article 28, paragraph one, of the Decision establishing the Public Research Agency of the Republic of Slovenia (Official Gazette of the RS, Nos. 103/22 and 125/22), the ARRS Scientific Council has, on .... meeting on ..., adopted the

## **Methodology for the assessment of applications in the procedures for the (co-)financing of scientific research activities**

### **A. GENERAL**

The Methodology for the assessment of applications in the procedures carried out by the ARRS for the (co-)financing of scientific research activities (hereinafter: the Methodology) is based on the provisions of the Scientific Research and Innovation Activities Act (hereinafter: the act), the Criteria for demonstrating internationally comparable research results and the period of eligible internationally comparable research results for the research project leader and program No. 007-5/2022-3 as of 16 May 2022, the General Legal Act on Stable Funding of Scientific Research Activities (Official Gazette of the RS Nos. 87/22 and 103/22 – corr.; hereinafter: the general act on stable funding) and the General Act on Procedures for Financing, Co-financing, Evaluating and Monitoring the Implementation of Scientific Research Activities (Official Gazette of the RS No. \_\_\_; hereinafter: the General Act on Procedures).

#### ***I. Quantitative grades***

The quantitative grades measure research performance of the researcher, i.e. published research with the emphasis on research quality (grades **A1**, **A'**, **A''** and **A<sup>1/2</sup>**), while grade **A3** is used to measure the performance of the researcher in acquiring research funding other than ARRS funding.

The bibliographical criteria for scientific and professional performance (SICRIS (COBISS) points) are determined in Annex 1, which is an integral part of this Methodology.

The threshold values are defined as follows:

Grade **A1** is composed of four elements:

- SICRIS (COBISS) points: threshold value 1875 points, grade 5
- Above average scientific excellence A'': threshold value A''/3000, grade 2
- Above average scientific excellence A: threshold value A/2250, grade 1.5
- Above average scientific excellence A<sup>1/2</sup>: threshold value A<sup>1/2</sup> /2250, grade 1.5

The joint threshold value for A1 is 10 points.

The threshold value for **A3**, which is in accordance with the General Act determined as close to the highest values achieved by Slovenian researchers, amounts to 15 FTE of the price category of the C programme in the preceding year for grade 5.

- The data for calculating the A3 grade are obtained by the ARRS directly from the research organisations (hereinafter: RO) by means of a form and instructions laid out at the beginning of each calendar year.
- If a RO carries out the role of the distributor of project funds outside the ARRS (grantholder), A3 takes into account only the RO's own use of funds (the share distributed by the RO to other project partners is not taken into account for A3). Funding from companies taken into account

must be generated as cumulative net inflows from the companies to the RO. This means that only the difference between revenues and expenses earned in operations with a company in relation to the projects for businesses and other less complex co-operation with companies taken into account for A3 can be claimed by the RO as funding from companies.

**II. Minimum quantitative entry requirements**

Unless specified otherwise in this Methodology, the entry requirement to be fulfilled by the researchers for all procedures is as follows:

$A1 \geq 0.30$ ,  $CI \geq 1$  and  $A3 \geq 0$ ,

where CI is the number of pure citations. This entry condition is also used for members of ARRS expert bodies and other expert panels (hereinafter: expert body). For researchers who have already retired and no longer fulfil this requirement, data in the year of retirement will be used.

**III. Quantitative entry requirements for mentors and programme/project leaders**

In addition to the requirement laid out in the previous paragraph, candidates for mentors and programme/project leaders must also fulfil the requirements listed below as minimum values for each parameter. Researchers with young doctor or young mentor status must fulfil the requirements for young doctors or young mentors where expressly required.

Candidates for young researcher mentors and programme/project leaders (with the exception of candidates for major project leaders) must fulfil the following requirements:

- $A^{1/2} \geq 400$  or  $A' \geq 200$  or  $A'' \geq 50$  or the basic condition and
- $A' > 0$ .

Candidates for major project leaders must also fulfil this requirement:

- $A'' \geq 50$ .

Regardless of the provisions of the second paragraph of this subchapter, the entry requirement for leaders of post-doctoral projects is:

- $A1 > 0$  and
- $A' > 0$ .

Basic requirements for candidates for young researcher mentors and programme/project leaders (with the exception of candidates for major project leaders) are:

$A1 \geq A1$  minimum,  $CI \geq CI$  minimum and  $A3 \geq A3$  minimum.

The tables below contain the information of the requirements for each discipline and field. The field is listed if it is considered an exception and therefore has different requirements than the discipline. For fields that are not listed, the requirements for the discipline are applicable.

**1. A1 grade**

a. The A1 minimum is specified in Table A1.

Table A1:

Discipline/Field	A1 minimum
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Natural Sciences, Engineering, Medical Sciences, Biotechnical Sciences, Social Sciences, Archaeology, Geography	0.50
Humanities, Law, Ethnic Studies	1

b. For researchers with young doctor status, the A1 minimum is specified in Table A2.

**Table A2:**

Discipline/Field	A1 minimum
Natural Sciences, Engineering, Medical Sciences, Biotechnical Sciences, Social Sciences, Archaeology, Geography	0.40
Humanities, Law, Ethnic Studies	1

## 2. Pure citations

The minimum number of pure citations, CI minimum, is listed in the tables. If the field is not listed in the table, the value set out for the discipline shall apply.

a. The minimum number of pure citations, CI minimum, for leaders of research projects and programmes, as well as young researcher mentors, is specified in Table A3.

**Table A3:**

Discipline/Field	CI minimum
Humanities, Law, Ethnic Studies	1
Social Sciences, Archaeology, Geography	5
Mining and Geotechnology, Geodesy, Transport, Hydrology, Psychology, Sport	15
Engineering, Biotechnical Sciences, Mathematics, Geology	50
Medical Sciences, Biology, Computationally Intensive Methods and Applications, Chemical Engineering, Energy Engineering, Materials	100
Natural Sciences, Microbiology and Immunology, Biotechnology	200

b. The minimum number of pure citations, CI minimum, for researchers with young doctor status is specified in Table A4.

**Table A4:**

<b>Discipline/Field</b>	<b>CI minimum</b>
Humanities, Law, Ethnic studies	1
Social Sciences, Mining and Geotechnology, Transport, Hydrology	5
Engineering, Mathematics, Geology, Forestry, Wood and Paper Industry, Plant Production and Processing, Geography	10
Natural Sciences, Medical Sciences, Biotechnical Sciences	20

### 3. Other quantitative conditions

A3 minimum is equal to 0 for leaders of research projects and research programmes.

#### ***IV. Verifying the fulfilment of requirements for the composition of programme and project groups***

To verify the fulfilment of requirements for the composition of programme and project groups when evaluating the interim or annual report for the past financing period or year, the composition of the programme or project group from the report on annual distribution of research hours for the past financing period and evaluation of bibliographical indicators of research performance are considered as of December 31 for the past year, or, at the latest, as of January 31 of the current year.

#### ***V. Code list for research disciplines, fields and subfields***

The code list for research disciplines, fields and subfields of the ARRS is specified in Annex 2, which is an integral part of this Methodology.

In the procedures of evaluation, the ARRS can also use the code list by ERC panel fields.

## **B. RESEARCH PROJECTS**

### ***I. Entry requirements***

The quantitative grades set out in chapter A. GENERAL of this Methodology are used as entry requirements in this methodology.

Any bibliographical units with a larger number of citations with no full bibliographical record in the WoS can be listed by the applicant as exceptional research achievements for the project leader on the application form: ARRS-RPROJ-JR-Prijava/20xx. If the A1 or CI value of a researcher is greater than the limit value, the applicant can list this as part of the exceptional research achievements on the application form.

The ARRS will assess the candidates for project leaders according to the discipline and field stated by the applicant on the application form.

The share of funding earmarked for interdisciplinary research by discipline is set by a public call (hereinafter: the call). An application for interdisciplinary research is made to the underlying discipline and field and states the additional discipline and field included in the submitted interdisciplinary research project.

The data on field capacity per research field in view of committed funds due to concluded projects is published by the ARRS in advance for each year, taking into account the value of the call.

## **II. Reviewers' assessment and application selection procedure**

The reviewers assess entries based on the application on the ARRS-RPROJ-JR-Prijava/20xx application form.

The reviewers assess the individual assessment elements by completing the evaluation form(form: ARRS-RPROJ-EvalForm-x/20xx).

Numeric and descriptive grades for each criterion are entered into the evaluation form.

The expert body divides the applications for evaluation into groups of approximately 10 applications. If there are more than 10 proposals for a research field, the expert body will divide them into subfields or integrated substantive sets assessed by the same reviewers.

In appointing reviewers for the interdisciplinary field, the expert body must take into account that the reviewers cover the main interdisciplinary fields related to the project content stated in the application form.

Reviewer assessments comprise the following:

- BT grade - for basic projects comprising three individual grades on the basis of criteria, indicators and means of grade evaluation, as is set out in Table B1 and Table B3.
- BA grade - for applied projects comprising four individual grades on the basis of criteria, indicators and means of grade evaluation, as set out in Table B2 and Table B3.

The BT or BA grade is the sum of individual scores, whereby the maximum total score is:

- 15 points for basic projects (BT = BT1+BT2+BT3), 20 points for applied projects (BA = BA1+BA2+BA3+BA4). For the Scientific excellence of researchers criterion, the project leader and the entire project group are evaluated.

## **III. Assessment elements**

### **a) Basic projects**

The assessment elements for basic projects are specified in Table B1.

**Table B1:**

<b>BT grade</b>	<b>Criterion</b>	<b>Indicators</b>	<b>Maximum No. of points</b>
BT 1	Scientific excellence of researchers	- Exceptional achievements - Proven ability to think independently and creatively - Ability to draw up a proposal of study and manage studies	5
BT 2	Scientific excellence of application	- Appropriate consideration of important research challenges - Ambitious and exceptional goals (e.g. new methods and approaches to the development of fields) - Clarity of concept, including the interdisciplinary aspect, and appropriateness of objectives - Originality of the idea	5

		- Suitability of proposed research methodology for achieving objectives	
BT 3	Quality and efficiency of implementation	- Suitability and efficiency of the work plan, including the appropriate assignment of tasks and allocation of funds - Feasibility of scientific approach	5
	<b>Total</b>		<b>15</b>

## b) Applied projects

The assessment elements for the applied projects are specified in Table B2.

**Table B2:**

BA grade	Criterion	Indicators	Maximum No. of points
BA 1	Scientific excellence of researchers	- Exceptional achievements - Proven ability to think independently and creatively - Ability to draw up a proposal of study and manage studies	5
BA 2	Scientific excellence of application	- Clarity of concept, including the interdisciplinary aspect, and appropriateness of objectives - Suitability of proposed research methodology for achieving objectives - Ambitiousness, innovation potential and exceptional nature of the project (e.g. exceeding current knowledge, new concepts and approaches)	5
BA 3	Quality and efficiency of implementation	- Suitability and efficiency of the work plan, including the appropriate assignment of tasks and allocation of funds - Suitability of project partners and project group - Suitability of management considering the risks or exceeding current knowledge	5
BA 4	Social and economic impact	- Strengthening competitiveness and company growth by developing innovations that meet the needs of European and global markets - All other environmentally and socially important impacts, including impacts on cultural development (not included in the other indicators) - Efficiency of proposed measures for applying and disseminating project results (including managing intellectual property rights), public presentations (popularisation) of the project and managing research data - Anticipated project results - Strengthening of innovativeness and integration of new knowledge	5

<b>Total</b>	<b>20</b>
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### Evaluation of application criteria

The reviewers evaluate the criteria with a grade from 0 to 5 to one decimal place, whereby they consider the descriptions, values and grade scales specified in Table B3.

**Table B3:**

<b>Grade</b>	<b>Grade description</b>	<b>Numerical grade (number of points)</b>
	The application does not meet the criterion or a grade cannot be given due to a lack of information.	0.0
Unsatisfactory	The application does not comply with the criterion or has major faults.	1.0–1.9
Inadequate	The application complies with the criterion, but has significant faults.	2.0–2.9
Good	The application complies with the criterion, but has a number of faults.	3.0–3.9
Very good	The application complies with the criterion to a large extent, but has minor faults.	4.0 - 4.6
Excellent	The application fully complies with the criterion; any faults are negligible.	4.7 – 5.0

The following projects cannot be selected as (co-)financed projects:

- a basic project with the BT grade = BT1 + BT2 + BT3 less than 10 points or an individual BT1, BT2 or BT3 grade less than 3 points.
- an applied project with the BA grade = BA1 + BA2 + BA3 + BA4 less than 12 points or an individual BT1, BT2 or BT3 grade less than 3 points.

Reviewers shall be notified about the limit values upon receiving the application.

Within each discipline, at least 12.1% of the funds must be allocated to post-doctoral projects as funding for the selected applications for minor basic and applied projects as well as post-doctoral basic and applied projects within the discipline. Of these funds, at least 30% of funding for projects in the engineering sciences, at least 15% in the biotechnical sciences, and at least 5% in social sciences, natural sciences, and medical sciences must be allocated to applied projects.

At least 20% of the approved funds in the call must be awarded for projects carried out by young doctors (maximum 7 years after the year of defending their doctoral dissertation). At least 20% of the approved funds in the call must be awarded for projects carried out by middle generation researchers (maximum 15 years after the year of defending their doctoral dissertation). At least 20% of the approved funds in the call must be awarded for projects carried out by other researchers (maximum 15 years after the year of defending their doctoral dissertation).

In the medical sciences, clinical research must demonstrate the participation of healthcare institutions/educational establishments in at least 30% of research hours. For each project application where the applicant chooses to conduct research in the field of clinical medicine, the applicant must specifically justify that it is a clinically oriented project, and the justification will be verified and confirmed/rejected by the international panel as part of the assessment process. At least 50% of funding in the field of medical sciences must be allocated to clinical research.

The candidates for (co-)financing of major projects will comprise:

- two best rated major projects, with primary natural science;
- two best rated major projects, with primary engineering science;
- one best rated major project, with primary medical science;
- one best rated major project, with primary biotechnical science;
- one best rated major project, with primary social science;
- one best rated major project, with primary humanities.

Major projects are selected according to the following procedure:

- if there are not enough applications in each discipline that could be included in the selection in each primary discipline in accordance with the previous paragraph, applications in other primary disciplines that meet the call conditions and are not graded below the prescribed project selection threshold will be included in the selection, according to the achieved grade up to the total number of applications for major projects (8 applications);
- if the draft priority project list contains fewer than 8 project submissions, the remainder of the funds for the call (the subject matter of the call "major basic research project") are proportionately divided among those disciplines of the entire call, for which the expert body did not list the planned number of submissions on the draft priority project list.

Major projects are not to be submitted under the agreement with the Hungarian agency NKFIH and under the WEAVE agreement with the Austrian agency FWF, the Polish agency NCN, the Swiss agency SNSF, the Croatian agency HRZZ, the Flemish agency FWO and the Czech agency GAČR.

### ***III. Basic research projects - Dr. Aleš Debeljak Programme***

The Call also includes allocations for basic research projects - Dr. Aleš Debeljak Programme (hereinafter: basic research projects - AD Programme). The following is taken into account:

- The value of an individual basic research project - AD Programme is €100,000.00 per annum for 2 or 3 years.
- The expert body draws up a draft priority list of projects, starting with the two highest evaluated projects per research discipline, which must concern different fields within the discipline. In case all submitted projects within the discipline concern the same field, the priority list includes two projects concerning the same field.
- If the draft priority project list contains fewer than 12 project submissions, the remainder of the funds for the call (the subject matter of the call "Minor basic research project - Dr. Aleš Debeljak Programme") are proportionately divided among those disciplines of the entire call, for which the expert body did not list the two project submissions on the draft priority project list.
- In case a basic research project - AD Programme is not selected within this programme, it can be submitted for consideration for basic research projects in line with the rules applicable for the selection of these projects.
- The international panel for each discipline including applications for (co-)financing basic research projects – AD Programme that fulfil the requirements of the call and have not been listed on the draft priority project list based on the third and fifth indent of this paragraph, additionally proposes up to three applications for the reserve list. The reserve list applications are considered by the SCA within the scope of its competence, adding on the draft priority project list up to the amount of the funds available for the call (for the subject matter of the call "Minor basic research project - Dr. Aleš Debeljak Programme"), whereby the draft priority list may include more than two projects per research discipline.
- If the number of applications that meet the conditions of the Call and are not graded below the prescribed project selection threshold is equal to or less than the maximum number of



possible selected applications in relation to the funds available, all applications will be included in the selection.

#### Requirements for submitting basic research projects - AD Programme

- On the closing date of the call, the leader of the submitted project must be living abroad for at least one year and may not be employed in the Republic of Slovenia. The requirement of living abroad for a period of one year is also considered fulfilled if the leader of the submitted project defended their doctoral dissertation abroad no more than one year prior to closure of the call.
- On the closing date of the call, the leader of the submitted project must fulfil the requirement that no more than 15 years have passed since the defence of their first doctorate.
- The leader of the submitted project must be a citizen of the Republic of Slovenia on the closing date of the call.
- The leader of the submitted project must be listed as working on the research project they lead for at least 340 effective research hours annually (20% of 1700 effective research hours). Upon concluding the agreement on (co-)financing a project successful on the call, the project leader must be listed as employed for research activities in a share of no less than 20%. The leader of the submitted project must fulfil the requirements for leaders of basic projects.
- In case of a successful application, the researchers cannot submit a second project for consideration within the same or a similar mechanism, that is a mechanism for financing projects by researchers returning to the Republic of Slovenia from abroad.