



EUROPEAN UNION
European Structural and Investment Funds
Operational Programme Research,
Development and Education



HR EXCELLENCE IN RESEARCH

CEBIA-Tech Evaluation Methodology

Project Title: Development of Capacities for Research and Development of TBU in Zlín (RoKaVaV-TBU)

Reg. no.: CZ.02.2.69/0.0/0.0/16_028/0006243

Case: 2018CZ353848

PART ONE
BASIC PROVISIONS

Article 1
Basic Definition

- (1) This document defines the basic principles of the research organisation and research teams' evaluation methodology of the Faculty of Applied Informatics – (hereinafter FAI), which is based on national procedures for evaluating science and research results which are gradually being implemented into the FAI Researcher Evaluation System.
- (2) It is based on the Methodology 17+ which is defined by the material "Methodology for the Evaluation of Research Organisations and of Targeted Support Programmes for Research, Development and Innovation", approved by Government Resolution No. 107 of 8th February 2017, available: <https://vyzkum.cz/FrontClanek.aspx?idsekce=799796>
- (3) Evaluation of research within the Czech Republic according to Methodology 17+ is performed by the Council for Research, Development and Innovation.
- (4) Among the basic principles of the said evaluation system – which is in accordance with international standards, is the implementation of evaluation at three different levels:
 - a) National Evaluation – for management and financing purposes of the entire R&D&I System, (i.e. at the Central Level),
 - b) Evaluation at the Provider Level,
 - c) Evaluation of Research Organisation (RO) Management Requirements.

PART TWO
EVALUATION OF RESEARCH ORGANISATIONS ACCORDING TO
METHODOLOGY 17+

Article 2
Research Organisations

- (1) For evaluation purposes, research organisations are divided into three segments:
 - a) Universities,
 - b) Academy of Sciences of the Czech Republic Institutes,
 - c) Departmental RO and the organisation of industrial research.
- (2) In the course of evaluating ROs, ranking on the A-D scale will be applied – while the first long-term scaling will take place in the year in which the complete evaluation in all segments shall be completed.
- (3) RO evaluation is performed using five basic modules:
 - a) Module 1 – Quality of Selected Results,
 - b) Module 2 – Research Performance,

- c) Module 3 – Social Relevance,
 - d) Module 4 – Viability,
 - e) Module 5 – Strategies and Concepts.
- (4) Although the above-mentioned modules are common to evaluations of all ROs their relevant significance for the final evaluation is different according to the type of RO.

Article 3 Evaluation Periodicity

- (1) After the implementation period (until 2020), a complete evaluation according to all modules will be performed once every five years.
- (2) On the basis of this complex evaluation, the amount of funding allocated to a given research organisation may be increased, reduced or maintained at its current level.
- (3) Between the 5-year evaluations, the amount of funding allocated does not change.

Article 4 Three Basic Evaluation Instruments

- (1) The three basic evaluation tools are:
 - a) Bibliometric Analysis,
 - b) Evaluator Assessments (remote reviews),
 - c) Expert Panel Assessments (remote, after the implementation phase and on-site).

Article 5 Entry of a RO into the Evaluation Proces

- (1) Only research organisations registered in the Register of Public Research Institutions kept at the Ministry of Education, Youth and Sports (MŠMT) are evaluated – see <https://rvvi.msmt.cz>
- (2) Only results in the Register of Information on Results (RIV) are evaluated – see <https://www.isvavai.cz/riv>
- (3) Six Expert Panels Exist:
 - a) Natural Sciences,
 - b) Engineering and Technology,
 - c) Medical and Health Sciences,
 - d) Agricultural and Veterinary Sciences,
 - e) Social Sciences,
 - f) Humanities and the Arts.
- (4) After comprehensive evaluation, research organisations are graded as follows:
 - a) A – Excellent RO,
 - b) B – Very Good RO,

- c) C – Good RO,
 - d) D – Average to Below Average RO.
- (5) The first long-term scaling took place in 2019 – the year in which the complete evaluation in all segments was completed.

Article 6 Implementation Period

- (1) This new methodology was gradually introduced over the 2017–2019 period.
- (2) In the course of the Implementation Period, emphasis was placed on Modules 1 and 2 and on minimising the burden of RO evaluation administration.
- (3) Since 2020, evaluations have been carried out on the basis of a comprehensive evaluation of all modules, in five-year cycles.

Article 7 Funding Principles based on the Long-term Conceptual Development of a Research Organisation (DKRVO) Grant

- (1) DKRVO is composed of two components – namely, Stabilisation and Motivation.
- (2) The Stabilisation Component was calculated based on the previous methodology applicable for the 2013–2016 period. It was a "Methodology for Evaluating the Results of Research Organisations and Evaluating the Results of Completed Programmes."
- (3) The Motivational Component is divided on the basis of a comprehensive evaluation result (according to the obtained qualitative category A, B, C or D).

PART THREE

DETAILED VIEW OF THE EVALUATION I.

This evaluation is realised in five modules – which are Module 1 – Module 5.

Article 8 Module 1 – Quality of Selected Results

- (1) The following hold true for Module 1:
 - a) The Valuation Principle is the assessment of selected results by an expert panel in terms of their quality, originality and relevance in comparison with the international level.
 - b) A limited number of selected evaluated results (depending on the volume of DKRVO funds in previous years).
 - c) Selected results are assessed in two differing categories:
 - Category I.: Mainly these are – (not exclusively), basic research – resp. publication results, where the main assessment criterion is the contribution of knowledge in the given fields.

- Category II.: This especially includes applied research – resp. non-publication results, where Social Relevance is the main criterion – resp. Significance for Society, or Its Impacts (economic or otherwise descriptive benefit for society).
- (2) The number of results submitted under Module 1 is based on the following principles:
- a) Their minimum number – ten submitted results for one RO, is selected from results applied in the past five years. ROs that have achieved fewer results than the set minimum number are not excluded from the evaluation if they explain this fact.
 - b) If the RO, in the year for which the results are submitted to the evaluation process, is the recipient of institutional DKRVO support higher than CZK 10 million, it must supply an additional 1 result for each additional (started) CZK 10 million of support.
 - c) For evaluations via remote reviews, the results are selected by the RO itself, which is responsible for which results it will make available for evaluation.

Article 9
Module 2 – Research Performance

- (1) For Module 2 – The following are taken into consideration:
- a) The evaluation of bibliometric data of all RO results,
 - b) Primarily articles in impacted journals – (according to WoS), with regard to their Article Influence Score (AIS),
 - c) Additionally, results in the Scopus database with a non-zero SJR,
 - d) Emphasis is placed on highly-cited results found in the first decile as well as on the other first quartile (Q1) results and the second quartile (Q2) results.
- (2) Explanation of the terms Q1, Q2 and First Decile:
- a) In the sorted list of sources in a given category – (according to IF, AIS or SJR), those in the First and Second Quartiles – (Q1 and Q2), are generally considered to be of high quality – i.e. in the first 50% of resources.

Q1	1 – 10% (First Decile)
	10 – 25%
Q2	25 – 50%
Q3	50 – 75%
Q4	75 – 100%

- b) The best 10% is then referred to as the First Decile and it is these journals that are perceived as the best and are best-rated.
- c) The Methodology 17+ system always unifies several JCR categories into so-called FORDs and sorts journals according to their AIS – see https://veda.k.utb.cz/jcr_ford_ais

- (3) Module 2 field reports include:
- a) An overall list and number of RO results,
 - b) Frequency and percentage of all results in the First Decile and in individual quartiles – according to AIS and SJR,
 - c) Discipline-separated number and percentage of results placed in the First Decile and in the First Quartile according to AIS and SJR,
 - d) Comparison of the branch median of RO with international (national) medians,
 - e) Number of publications created in cooperation with foreign research organisations,
 - f) Number of publications created in cooperation with companies.

Article 10
Module 3 – Social Relevance

- (1) For Module 3 The following are valid:
- a) This module is particularly important for ROs that carry out Applied Research and directly serve users like industry, the public sector or other ROs.
 - b) In the framework of this module, the degree of positive impacts of R&D&I and their results on society and citizens is assessed. Social Relevance is related to the Applied Research results, which are of immediate importance for the economics, state and public administration fields – as well as for the cultural policy field.
 - c) In the context of this module, it will also assess the basic research results that indirectly affect individuals and society (have an Indirect Impact).
- (2) Module 3 assesses – in particular, the parameters that monitor in particular:
- a) Transfer of Results into Working Practice,
 - b) Cooperation with the Application Sphere,
 - c) The transfer of knowledge and technology to non-academic entities activities,
 - d) Their impact on the quality-of-life of society and citizens,
 - e) Economic Benefit, Social Contribution, Contribution to the Formation of National and Cultural Identity.
- (3) Other Module 3 parameters include:
- a) The engagement of students in research activities,
 - b) Selective lectures/seminars related to the research of the given RO,
 - c) Student working practice, quality of education and engagement of Ph.D. students,
 - d) International and domestic prestigious awards for scientific contribution,
 - e) The mobility of researchers between RO and the industry and services sector – resp. research results users,
 - f) The importance of a RO in terms of the development of the region,
 - g) Popularisation and responses.

Article 11
Module 4 – Viability

- (1) Module 4 assesses the quality of the management and internal processes of the MA in the following areas:
- a) Research Environment – organisational chart, research management quality, personnel policy, Human Resources structure and development, equipment and the organisation of research infrastructure.
 - b) International and national cooperation – membership in the global and national research community, community activities.
 - c) Financing from external sources – e.g.:
 - International and national cooperation and presentation of research and cooperation activities,
 - Student and Young Researchers Internships abroad,
 - Research Prestige,
 - Success in Obtaining Projects,
 - RO position according to international indicators and statistics.
 - d) Basic costs and revenues structure in individual years of the evaluated period:
 - All grant and programme projects supported from public funds from national sources, EU sources and other foreign sources in the evaluated period; of which the workplace is the recipient or another recipient – respectively. co-beneficiary,
 - Contract Research,
 - Collaborative Research and Technology Transfer,
 - External Financing – (Special-purpose and Contractual),
 - License and Spin-off Revenues,
 - Sale of Patents and Licensing Agreements Revenues.

Article 12
Module 5 – Strategies and Conception

- (1) Module 5, which evaluates strategies and concepts according to the Methodology 17+ deals with monitoring parameters in the areas below:
- a) The adequacy and quality of the research strategy,
 - b) Organisation mission – (purpose, strategic orientation),
 - c) Concept – (steps of how the mission was fulfilled),
 - d) Fulfilment of the concept, vision for the next period,
 - e) Link to the fulfilment of the concept of the provider/founder,
 - f) Possible links to the fulfilment of higher strategic objectives and measures resulting from valid documents at the national and trans-national level.

PART FOUR
RESULTANT EVALUATION

Article 13
Scaling (Final Evaluation) of Research Organisations

- (1) A – Excellent RO, which means that in global disciplines research parameters, internationally competitive institutions and/or institutions with strong innovation potential and excellent results of Applied Research and / or institutions fulfilling an excellent mission.
- (2) B – Very good RO, which is an institution of balanced quality with excellent research results, sufficient innovation potential, and/or significant Applied Research results, the R&D&I results correspond to the purpose of the establishment.
- (3) C – A good RO – a good institution, is an institution of somewhat uneven quality which achieves excellent results in some parameters of Basic and/or Applied Research and/or an institution which fulfils the purpose of its establishment on average. A RO with a strategy and effort to eliminate weaknesses and shortcomings.
- (4) An Average to Below Average RO, is an institution which in the vast majority of the Basic and/or Applied Research parameters are Average to Below Average and/or is an institution which insufficiently fulfils the purpose of their establishment. Alternatively, it may be a RO with a number of weaknesses and shortcomings – characterised by a limited effort to eliminate them.

PART FIVE
DETAILED VIEW ON EVALUATION II.

Article 14
Definition of Types of Publication Results

- (1) The types of publication (and other admissible) results of the RO are defined in Appendix No. 4 of the Methodology 17+.
- (2) Publication Outputs are essential for Modules 1 and 2 of the RO evaluation.
- (3) Publication Outputs of the Jimp type – articles in impacted journals – are of the highest importance.

Article 15

Definition of publication results types – (according to Appendix No. 4 M17 +)

- (1) Peer-Reviewed Professional Article – J_{imp} , J_{SC} , J_{ost} :
 - a) J_{imp} – Original / Review article in a peer-reviewed professional periodical, which is contained in the Web of Science database and with an "Article", "Review", or "Letter" flag.
 - b) J_{SC} – Original / Review article in a peer-reviewed professional periodical, which is contained in the SCOPUS5 database with an "Article", "Review", or "Letter" flag.
 - c) J_{ost} – Original / Review article in a peer-reviewed professional periodical that does not fall into any of the above groups. The decisive factor is whether the peer-reviewed professional article meets the general requirements for this type of result and has passed the review process properly.
- (2) Professional Book – B:
 - a) A professional book presents the original research results carried out by the author of the book or by the author team of which the author was a member. A book is a non-periodical professional publication of at least 50 printed pages of own text without photographic, pictorial, maps, etc. and similar appendices published in print or electronically and adjudicated (reviewed) by at least one generally recognized expert in the field in the form of Lecturer.
 - b) If the book is published in the Czech Republic, a mandatory copy must be registered in the National Library of the Czech Republic. For "professional book" results published abroad, verification represents a reference to a Digital Object Identifier (DOI) or Open Access (OA), or traceability in an internationally recognised catalogue.
- (3) Chapter in a Professional Book – C:
 - a) The chapter or chapters in a professional book – (if the book meets the definition for the Type B result) this applies if the whole book has only one editor, or in cases where the author is listed as a co-author in the whole book – (albeit with a minority content), and is a member of the author's team with clearly mentioned main authors. However, the chapter must however have an individual author or author team.
 - b) Should a professional book be included in the RIV as a Type B result, its chapters cannot be included as a Type C result, in the case of the same submitter of the result.
- (4) Explanation of the term "Article in the Proceedings" – D:
 - a) "Article in the Proceedings" presents the original results of research carried out by the author or a team of which the author was a member. The article has the usual structure of scientific work with the usual way of quoting sources (not abstract) and is published in the proceedings.
 - b) The "Proceedings" is a peer-reviewed non-periodical publication, published on the occasion of a conference, seminar or symposium that contains separate articles by various authors that usually have a common element or related topic and are assigned an ISBN or ISSN, or both.

- (5) This also further applies to an Article in the Proceedings:
- a) Registered in the SCOPUS database in Book Series or Conference Proceedings type "Sources" and assigned an ISBN or ISSN, or both.
 - b) Registered in the WoS Conference Proceedings Citation Index database and assigned an ISBN or ISSN code, or both.
 - c) An article in a special issue of the journal registered in one of the above databases, which is focused on the publication of conference papers.