

IEGULDĪJUMS TAVĀ NĀKOTNĒ

EIROPAS SAVIENĪBA Eiropas Reģionālās attīstības fonds

Methodology for the Final report on the results of implementation of post-doctoral research applications for evaluation of the scientific quality (to be completed in English)

| T'(1, of the Dessent) | C 'C d d'd | | | | | | |
|--------------------------------|--|---|--|--|--|--|--|
| Title of the Research | | e of the research application in accordance with the | | | | | |
| Application: | | ent on implementation of the research application | | | | | |
| Number and title of the | | 1.1.1.2 "Aid to Post-Doctoral Research" of the | | | | | |
| specific aid objective/measure | A | Objective "To increase the research and innovative | | | | | |
| selection: | | entific institutions of Latvia and the ability to attract | | | | | |
| | | ing, investing in human resources and infrastructure" | | | | | |
| Implementer of the Research | | al name of the implementer of the research application | | | | | |
| Application: | | vithout abbreviation | | | | | |
| Registration number/Taxpayer | Specify registration number/Taxpayer registration number: of the | | | | | | |
| registration number: | | f the research application. | | | | | |
| Type of the implementer of the | | Specify type of the implementer of the research application in | | | | | |
| Research Application: | | accordance with the signed agreement on_implementation of | | | | | |
| | research_appli | cation. | | | | | |
| Type of the Research | Specify – econ | omic activity <u>unrelated</u> or economic activity <u>related</u> | | | | | |
| Application | research application in accordance with the signed agreement on | | | | | | |
| | implementation of the research application | | | | | | |
| Research category | Specify – fund | amental or industrial research in accordance with the | | | | | |
| | signed agreement on implementation of the research application. | | | | | | |
| Field, sub-field of science | | fic field and sub-field(s) in accordance with Cabinet | | | | | |
| | Regulations No. 49 "Regulations on Latvian Scientific Fields and | | | | | | |
| | Sub-fields" | of 23.01.2018 (available: | | | | | |
| | 0 | v/doc.php?id=296661) | | | | | |
| Strategic priority or area of | | propriate strategic priority or area(s) in accordance | | | | | |
| smart specialisation | | ities, areas listed in the Latvian smart specialisation | | | | | |
| sinuit spectalisation | ÷ | nafter referred to as RIS3). If the research application | | | | | |
| | | several areas of specialisation, specify the main area. | | | | | |
| Classification of the | NACE code | Title of the economic activity | | | | | |
| implementer of the research | Code | <i>Specify the title of the economic activity applicable</i> | | | | | |
| application in accordance with | 0.000 | to the primary activity in accordance with NACE 2nd | | | | | |
| NACE general classification of | | edition, specifying a 4-digit NACE. If several | | | | | |
| economic activity: | | activities apply to the implementer of the research | | | | | |
| containe activity. | | application, specify the main primary activity in the | | | | | |
| | | form (also, if it differs from the topic of the research | | | | | |
| | | application). This information is used for statistical | | | | | |
| | | | | | | | |
| Classification of the research | Code | needs. Specify the title of the economic activity in | | | | | |
| application in accordance with | Coue | accordance with the specified NACE 2nd edition | | | | | |
| ~ ~ | | code corresponding to the industry of the economy | | | | | |
| NACE general classification of | | | | | | | |
| economic activity: | | which will benefit from the implementation results of the preserved application | | | | | |
| Desserb Application | Crassifie des | the research application. | | | | | |
| Research Application | | mber assigned by the State Education Development | | | | | |
| identification No.: | | inafter - the Agency) to the respective research | | | | | |
| | application. | | | | | | |

Paragraph 19 of Cabinet Regulations No. 50 of 19 January 2016 "On Implementation of Activity 1.1.1.2 "Post-doctoral Research Aid" of the Specific Objective 1.1.1 "To increase the research and innovative capacity of scientific institutions of Latvia and the ability to attract external financing, investing in human resources and infrastructure" of the Operational Programme "Growth and Employment" (hereinafter – Cabinet Regulation) provides for evaluation of the scientific quality of the final results of research applications for the supervision of the implementation of a research applications, implementers of research applications are urged to submit the final report on the results of implementation of a post-doctoral research application for evaluation of the scientific quality (hereinafter – the report).

The purpose of evaluation of the scientific quality of the final results of a research application is to evaluate the objectives and results reached within the scope of research applications, as well as the scientific quality of these results to enable foreign experts to use the evaluation made in decision-making about the achievement of the objective and planned results of the research application.

The report includes information about the objectives and results achieved during the implementation of the research application as at the time of closing of the research application.

If the research application in any of its activities has not been implemented in accordance with the time schedule of implementation of the research application that was planned or updated in the midterm, including due to the impact of the emergency introduced in the state and due to Covid-19, the report should provide a detailed explanation of the reasons of the failure to achieve the objectives and results, the alternatives developed during the implementation of the research application and additional actions performed to ensure the achievement of the planned objective, scientific results and output indicators of the research application in the respective stage of implementation of the research application, mentioning specific actions to be performed in the follow-up stage of the activity performed (for example, publication of a submitted scientific article).

The information on the results of implementation of the research application included in the report shall be justified by scientific results of the research application, for example, scientific articles, which are enclosed as scientific results of the report, if a scientific article or publication has been submitted, or a link shall be provided, if the scientific article or publication is available in a database. The report shall also state information, in which international databases the scientific article or publication drafted within the scope of the post-doctoral research application was included and the citation index of these articles.

The report shall be prepared in English.

<u>The information included in sections of the report shall be aligned with all sections of this report.</u> The following annexes should be appended to the report:

1) printouts of submitted scientific articles and publications (if applicable) and copies of documents confirming the submission (for example, an electronic letter);

2) drafted technological regulations/descriptions (if applicable);

3) information about submitted patent applications (if applicable);

4) agreements on the transfer of technology rights or granting of usage rights (if applicable);

5) a description of the financial management and accounting policy of the implementer of the research application (<u>to be submitted together with a report of the implementer of a research</u> application not related to economic activity, if the description about the previous calendar year has not been submitted to the Latvian Council of Science (hereinafter - the Council);

6) a turnover statement of the institution for the previous calendar year(<u>to be submitted together with</u> <u>a report of the implementer of a research application not related to economic activity, if the</u> <u>description about the previous calendar year has not been submitted to the Council</u>).

No preferable number of characters is defined for sections of the report, however, its total volume should not exceed 15 pages (font size -12).

SECTION 1 – DESCRIPTION OF IMPLEMENTATION OF THE RESEARCH APPLICA

1.1.Summary of the research application: short evaluation of the achievement of the objective of the research application and the implementation of main activities, results achieved and their sustainability

In this paragraph, the submitter of the report shall provide a short but comprehensive, structured evaluation of the implementation of the research application and a summary of the results achieved, which gives an idea of what has been done within the scope of the research application.

The summary shall state:

- information on the achievement of the objective of the research application according to the information on the planned objective indicated in the research application;

- information on the progress made in the implementation of research activities by the end of implementation according to the activities planned in the research application;

- information on the impact of research activities on the target group/societal challenges defined in the research application, usability of research results in this target group/for tackling with the societal challenges;

- information on the funding spent on the implementation of the research application.

In addition, the implementer of the research application shall provide substantial information about the involvement of a cooperation partner (if applicable) and cooperation results in accordance with the plans/mid-term updates of the research application.

Information should be briefly presented about the most essential (substantial) amendments to the research application, if any have been made after the mid-term evaluation of the scientific quality has been received, including due to the impact of the emergency introduced in the state and due to Covid-19.

The implementer of the research application shall provide information, how the recommendations of the mid-term evaluation of the scientific quality have been taken into account in the further implementation of the application. If any of the recommendations have not been taken into account, the research applicant shall provide an argumented explanation.

If the research application in any of its activities has not been implemented in accordance with the plan or the amendments made in the mid-term of implementation of the research application, the report shall provide a detailed explanation of the reasons of the failure to achieve the objectives and results, the alternatives developed during the implementation of the research application and additional actions performed to ensure the achievement of the planned objective, scientific results and output indicators of the research application.

The implementer of the research application shall provide information on sustainability and usability of the research results in further research, as well as shall specify the results, which will be achieved in the follow-up stage¹.

This section of the report shall provide a short summary of the information specified in the report below.

¹ The following research results (output indicators) can be reached in the follow-up period of the research application (5 years after receiving the final payment, but no later than 31.12.2023):

¹⁾ Number of scientific publications, for the development and publishing of which support within the scope of research applications was provided;

²⁾ technology rights;

³⁾ intellectual property licence agreements.

SECTION 2 – SCIENTIFIC QUALITY

2.1. Clarity of objectives of the research application: whether the implementation of the research application has ensured the achievement of the planned objectives and results

In accordance with Annex 4 "Research proposal" of the research application, which was submitted to the Agency during research applications selection competition 2, the report shall describe:

- how the post-doctoral researcher has developed his/her scientific capacity and has improved research competency during the implementation of the application;
- ²Compliance of the activities performed during the implementation of the research application with the scientific objective defined in Annex 4 "Research proposal" of the research application;
- characterise the objectives and results achieved, as well as the changes made (if applicable) during the implementation of the research application, justify compliance of these changes with the defined objectives;
- *list the results achieved by filling Table 1 "Output indicators" of this report:*

| 1 | `ab | le | 1 |
|---|-----|----|---|
| | | | |

| | Output indicators (in accordance with table 1.6.1 of the research application) | | | | | | | | |
|-----|---|--------------------|-------------------|--|-----------------|--|--|--|--|
| No. | Title of the indicator | Scheduled value | Achieved value | Value to be achieved during the follow-up period ³ | Unit of measure | | | | |
| | | value | value | value | | | | | |
| | Number of new | | | | | | | | |
| 1. | researchers in activities | | | | Number | | | | |
| 1. | to be supported (full- | | | | Number | | | | |
| | time equivalent) | | | | | | | | |
| 2. | Number of new researchers (the full-time equivalent) who have broadened competence within the scope of the project, including processes for career development and staff | | | | Number | | | | |
| | renewal Number of scientific | | | | | | | | |
| 3. | publications, for the | | | | Number | | | | |

² The following research results (output indicators) can be reached in the follow-up period of the research application (5 years after receiving the final payment, but no later than 31.12.2023):

¹⁾ Number of scientific publications, for the development and publishing of which support within the scope of research applications was provided;

²⁾ technology rights;

³⁾ intellectual property licence agreements.

| | | | 1 | |
|--|------|--------------------------|---|--------|
| | | development and | | |
| | | publishing of which | | |
| | | support within the scope | | |
| | | of research applications | | |
| | | was provided | | |
| | 3.1. | Number of Web of | | Number |
| | 5.1. | Science/Scopus articles | | Number |
| | | Including with the | | |
| | 3.2. | citation index of 50% of | | Number |
| | | the industry average | | |
| | | Number of new products | | |
| | | and technologies, which | | |
| | | may be marketed and for | | |
| | 4. | the development of | | Number |
| | | which support within the | | |
| | | scope of a research | | |
| | | application was provided | | |
| | | Private investments, | | |
| | | which complement | | |
| | - | public support for | | |
| | 5. | innovation or research | | EUR |
| | | and development | | |
| | | projects | | |
| | | Number of enterprises | | |
| | 6. | cooperating with | | Number |
| | 0. | research institutions | | |
| | | | 1 | |

If scientific articles or publications have been published within the scope of implementation of the research application and they are available in any database, specify the link to this database.

2.2. Clarity and scientific quality of the results of the research application: how the research results achieved are clear and unambiguous, their scientific quality is relevant, taking into account the scientific value, the level of novelty of the results achieved; whether sustainability of the achieved research results will be achieved

In accordance with Annex 4 "Research proposal" of the research application, which was submitted to the Agency during research applications selection 2, the report shall:

- describe the scientific quality and the value, the level of novelty and the degree of innovation of the results achieved at the end of implementation of the research application observing the level of analogues of existing products, processes and services and best practices on the market on the day of submission of the report, including:
 - ✓ *justify the scientific quality, novelty and the degree of innovation of the activities and the results achieved within the research application;*
 - ✓ how the information included in the scientific article corresponds to the objective and content of the research application (an explanation is necessary, if the post-doctoral researcher is one of co-authors and the scientific article is the joint results of several research applications);
 - ✓ how the new product or technology developed within the scope of the research application

corresponds to the definition of a new product⁴ or a new technology⁵ (if applicable). The information should be provided taking into account that the expert will evaluate compliance with the definition of a new product or technology taking into account: a) a comparison of equivalents of products or technologies available on the market and the target market and parameters of the prototype developed within the scope of the research application: functional description, type of usage, technical specification, components, materials, software, prime cost; b) the commercialisation potential of prototypes of the new products/technologies developed within the scope of the project, which is characterised by the technology readiness level (TRL) and the degree of innovation;

- provide information on the technology rights to be obtained, intellectual property licence agreements to be concluded as a result of the research application (for example, in which country it is planned to submit a patent application, etc.).
- provide an explanation, how sustainability of the results achieved will be ensured after the end of the research application (for example, whether it is planned to keep the newly created jobs, whether and how the development of the scientific direction of the research application is planned after the end of the application, etc.);
- *if a new products and technology is developed within the framework of implementation of the research application, to provide an explanation how sustainability of the results achieved will be ensured in one of the following ways:*
 - ✓ to protect technology rights related to the prototype;
 - ✓ to market technology rights (knowledge and technology transfer activity, if the research organisation as the owner of the technology right concludes an agreement with a cooperation partner, a subsidiary of the research organisation, a startup or a third party on the use of disposal of the technology right (intellectual property licence or transfer agreement));
 - ✓ to improve the prototype developed within the research application to introduce it into production or provision of services."

SECTION 3 – SOCIOECONOMIC IMPACT

- improvements for promotion of marketing (including aesthetic changes);
 - improvement of organisational processes in the enterprise's operations.

⁴ A new product are goods or services, which are absolutely new or which have improved functional properties or their intended type of usage has changed (including technical parameters, components, materials, added software, user-friendly properties changed or improved). A new product is not:

⁻ ceasing to use some part of a process;

⁻ capital replacement or extension (purchasing of modules identical to those that are used, minor extensions, equipment and software upgrades). New equipment or extensions should have significant improvements in specifications;

⁻ changes resulting purely from changes in prices of components (changes in the product price or productivity of the production process are not innovations in products, for example, in production of computers, when the chop price reduces, the sales prices of the same computer model reduces);

⁻ customisation of products for specific needs (for example, customisation of a product for customer's needs, which does not cause such changes in functional or technical properties of a new product, which ensure higher competitiveness of the new product in comparison with existing products);

⁻ regular, seasonal and cyclical changes improvements (for example, a new seasonal collection of clothes is not considered an innovation);

⁻ design changes (including taste and smell), which do not change functions, usage or technical properties;

⁻ reselling of goods or processes of other manufacturers;

 $^{^{5}}$ A new technology is a technology, which conforms to the definition provided in Article 2(114) of Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty (Official Journal of the European Union, 26 June 2014, L 187) i.e. a new and unproven technology compared to the state of the art in the industry, which carries a risk of technological or industrial failure and is not an optimisation or scaling up of an existing technology.

3.1. Social and economic impact of the achieved results of research applications: whether the results of the research application have fostered strengthening of the development of the post-doctoral researcher, implementer of the research application, cooperation partner, field of science or national economy sector, RIS3 goals, society

In accordance with Annex 4 "Research proposal" of the research application, which was submitted to the Agency during research applications selection competition 2, the report shall describe:

- how the planned objectives and achieved results of the research application have promoted the development of the goals, national economy transformation directions, priorities or smart specialisation areas defined in RIS3;
- how the activities for dissemination and transfer of achieved research results (including knowledge and technology transfer) have fostered securing of the needs of the cooperation partner of the implementer of the research application (if applicable), the development of the national economy and society;
- how the research results achieved, including training, international mobility, have ensured further growth and increase in scientific capacity of the post-doctoral researcher;
- how the implementation of the research application has promoted the establishment of longterm international cooperation (if applicable);
- how the implemented communication activities and involvement of the society meet the needs of the target audience."

3.2. Achievements in dissemination of the results of the research application and knowledge or technology transfer activities

In accordance with Annex 4 "Research proposal" of the research application, which was submitted to the Agency during research applications selection competition 2, the report shall describe the performed knowledge and technology transfer activities:

- what actions and activities have been performed to ensure popularisation of the results of the research application, the involvement of the target group of the research, public awareness and knowledge transfer to society, including in which communication and information dissemination activities organised by the Agency or by the Council the post-doctoral researcher participated;
- how public awareness of the results of the research application will be ensured to provide for sustainability of the results.

SECTION 4 – IMPLEMENTATION QUALITY

4. Implementation quality of the research application: efficiency of the resources used, progress of implementation of the activities performed and quality of the management system

In accordance with Annex 4 "Research proposal" of the research application, which was submitted to the Agency during research applications selection competition 2, the report shall describe:

- whether the financial resources spent on the implementation of the research application correspond to the scope of work performed and the results achieved in the research in accordance with Table 3 of this report form;
- how the fulfilment of the activities (work packages) during the implementation of the research application, tasks, deliverables and milestones corresponds to those planned in section 3.1 of Annex 4 "Research proposal" of the research application and the time diagram in accordance with Table 2 of this report;
- *methods of the verification of fulfilment of the results achieved;*
- *how the implemented system for the management of resources and results meets the objective(s) of the research application;*
- how the foreign mobility and training implemented by the post-doctoral researcher meet the set objectives, the topic of the research and the planned scope of the research application;
- *describe the risks of implementation of the research application and measures for their prevention, if those have occurred during the implementation of the research application;*
- the allocation of functions and responsibilities of cooperation partners, their contribution to the achievement of objectives and results of the research application (if applicable)

Table 2. Evaluation of the implementation of the performed activities of the research application*: results of activities, tasks fulfilled, deliverables made, milestones reached, their achievement time and verification method

The table should be filled in accordance with Annex 4 "Research proposal" of the research application, which was submitted to the Agency during research applications selection competition 2, the work plan and the time schedule specified in section 3.1.

The information specified in this table should be aligned also with the information specified in Table 1.6 of the research application, and other sections of this report. *The table may be supplemented with boxes in accordance with the specifics of the work plan specified in section 3.1 of Annex 4 "Research proposal" of your research application.

| | Research application | | Nu | merical result | | |
|-----|--|---|--|--|---|---|
| No. | activity (work package) in accordance with the work plan specified in section 1.5 of the research application and section 3.1 of Annex 4 "Research proposal" of the research application* | Result to be achieved in the activity | Initially planned | Final achievements | Partners involved (if applicable) | Information on things to be done during the follow-up period, if the results have not been achieved in full (if applicable) ⁶ |
| 1. | Specify a short description of the research (substantial) activity (work packages) included in section 1.5 and Annex 4 "Research proposal" of the research application. The table shall not include, for example, report preparation and other activities not | Describe the results achieved of each activity (work packages) in section 1.5 and Annex 4 "Research proposal" of the research application and how these work packages, tasks, deliverables and milestones corresponds to those planned in section 3.1 of Annex 4 "Research proposal" of the research application and the time diagram If amendments were made during the implementation of the research application, the information should be specified in accordance with the amendments made and the time of achievement of the updated results. | Indicate the number / unit of measure of the results planned in the research application | Indicate the number / unit of measure of the results achieved at the end of the research application If amendments were made during the implementation of the research application, the information should be specified in accordance with the amendments made. | | Indicate information about things to be done in the follow-up period of the research application. |

⁶ The following research results (output indicators) can be reached in the follow-up period of the research application (5 years after receiving the final payment, but no later than 31.12.2023):

¹⁾ Number of scientific publications, for the development and publishing of which support within the scope of research applications was provided;

²⁾ technology rights;

³⁾ intellectual property licence agreements.

| | related to research. | Describe the interdist application (if applic | ciplinarity aspect of the research able). | This information should also be aligned with the information specified in Table 1.6 of the research application, and other sections of this report. | |
|------|----------------------|--|---|--|--|
| 1.1 | Task: 1 | | | | |
| 1.2. | Task: 2 | | | | |
| 2. | | | | | |

| Table 3 | 3.1 | | | | | | |
|---------|---|--------------------------------------|----------------------|-----------------------|--------------------|-----------------------------------|-----------------------|
| | Summary budget of the res | search applicat | ion not relate | ed to economic ad | etivity | | |
| | | Use of standard | Quantity | | | Costs of the research application | |
| Code | Title of the cost item | rate of unit cost (yes or no*) | Initially planned | Final achievements | Unit of measure | Initially planned | Final achievements |
| 1. | Costs of remuneration of the research application implementation staff (gross post-doctoral researcher's wage + employer's mandatory state social insurance contributions) | No | | | "monthly wage" | | |
| 2. | Research application implementation costs (Research costs) | Yes | | | 800 | 0 | 0 |
| 3. | Research application administration and infrastructure maintenance costs | Yes | | | 185.83 | 0 | 0 |
| 4. | Investment in kind (does not exceed 5% from the eligible costs of the research application) | (if applicable) | | | | 0 | 0 |
| 4.1. | Fixed assets (tangible assets) | | | | | | |
| 4.2. | Granted materials (tangible assets) | | | | | | |
| 4.3. | Professional activities related to research within the scope of the research application | | | | | | |
| | Total | | | | | 0 | 0 |

| Table 3. | 2 | | | | | | | | |
|----------|---|-----------------|--------------------|-----------------------------------|---------------|---------------|-----------|------------|-------|
| | Summary budge | t of the resear | rch applicatio | n related to e | conomic acti | vity | | | |
| | Title of the cost item | | | Costs of the research application | | | | | |
| Code | | Quantity | Unit of measure | Planned i | n the researc | h application | Final ach | ievements | |
| | | | | Eligible | Ineligible | Total | Eligible | Ineligible | Total |
| 1. | Remuneration costs of the research application implementation staff | | | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.1. | Post-doctoral researcher's wage (gross + employer's mandatory state social insurance contributions) | | | | | 0 | | | 0 |
| 1.2. | Wages of researchers, technical and other support staff to the extent they are employed in implementation of the research application (gross + employer's mandatory state social insurance contributions) | | | | | 0 | | | 0 |
| 2. | Research application implementation costs (Research costs) | | | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.1. | Costs of materials and raw materials directly resulting from the implementation of the research application | | | | | 0 | | | 0 |
| 2.2. | External services. Costs of contracted research, know-how and patents, and other services used exclusively for the purposes of implementation of the research application | | | | | 0 | | | 0 |
| 2.3. | Costs of tools and equipment of the research application to the extent and according to the time they are used for implementation of the research application | | | | | 0 | | | 0 |
| 3. | Trainings | | | | | 0 | | | 0 |
| 4. | Costs of protection of technology rights (if applicable) | | | | | 0 | | | 0 |
| | Total | | | 0 | 0 | 0 | 0 | 0 | 0 |

The following annexes should be appended to the report:

1) printouts of submitted scientific articles and publications (if applicable) and copies of documents confirming the submission (for example, an electronic letter);

2) drafted technological regulations/descriptions (if applicable);

3) information about submitted patent applications (if applicable);

4) agreements on the transfer of technology rights or granting of usage rights (if applicable);

5) a description of the financial management and accounting policy of the implementer of the research application (<u>to be submitted together with a report of the implementer</u> of a research application not related to economic activity, if the description about the previous calendar year has not been submitted to the Council);

6) a turnover statement of the institution for the previous calendar year (<u>to be submitted together with a report of the implementer of a research application not related to</u> <u>economic activity</u>, if the description about the previous calendar year has not been submitted to the Council).