Tender Documentation

for the second round of the Internal Grant Competition

Introductory information

This tender documentation follows up on Directive No 10/2020 Internal Grant Competition. The above directive is followed up by the Manual for proposers and investigators and the Apollo IS, which are used to submit a proposal and carry out an investigation under a grant in the Apollo IS.

The submission of a grant proposal and its investigation takes place exclusively in English.

Who is the competition for (who can apply for support)

The internal grant competition is intended exclusively for students of an accredited doctoral study programme at BUT. Only students who are in the **first to third year of their study may enter the competition.**

What is the competition focused on?

The competition is focused on the support of R&D for postgraduate students, the development of their independent creative activities in the field of individual and team research and development activities at BUT.

The aim of internal grants is to increase the skill level of the Ph.D. students necessary for their future professional employment in the field of research and development, where they will be able to develop especially cross-cutting skills (communication, teamwork, problem solving, organisation, team leadership, time management, etc.)

Allocation for the second round of the competition

The expected allocation for the second round of the competition is set at 1/3 of the funds earmarked for the entire competition, which corresponds to CZK 16,674,768, of which CZK 14,567,107 is allocated for applications by doctoral students of the Faculty of Civil Engineering, Faculty of Mechanical Engineering, Faculty of Electrical Engineering and Communication, Faculty of Chemistry, Faculty of Information Technology and the Central European Institute of Technology, and the amount of CZK 2,107,661 is allocated for applications by doctoral students of the Faculty of Architecture, the Faculty of Fine Arts, the Faculty of Business and the Institute of Forensic Engineering.





Terms and deadlines of ONE-YEAR GRANTS of the second round of the competition

Beginning of the period for submitting a grant proposal (from this deadline it is possible to fill in and submit grant proposals in the Apollo IS)	15 September 2021 at 9:00
End of the period for submitting a grant proposal (latest possible moment for submitting a grant proposal in the Apollo IS)	20 October 2021 at 15:59:59

Beginning of the grant investigation	1 January 2022
Duration of the grant investigation	12 months
Deadline for completion of the grant investigation (including the maximum permissible extension of the grant investigation)	30 March 2023

1. Proposer and team members

A grant proposal may be submitted by an individual or a team of students. The team consists of the proposer (the main person responsible for the submission and subsequent investigation of the grant) and the team members. The maximum number of people in a team is 5 (1 proposer and a maximum of 4 team members).

Proposer

- The proposer is a student who submits the proposal alone or together with other member(s) of the team. In the case of the proposal implementation, the proposer becomes the investigator.
- The proposer is responsible for coordinating and leading potential team members and fulfilling all outputs.
- The degree of the proposer's participation in the grant investigation must always correspond to one half of the set weekly working hours (20 hours / week).
- During the investigation, the proposer must carry out at least one educational or research activity abroad, which means in particular an internship, a summer school, a research stay, or active participation in a conference. Educational or research activities may be carried out in the European Union or outside. If it is a country the language of which the student understands, for example Slovakia, then at least a part must be done in a foreign language (for example, presentation of a paper, text of the study).

Team member

- A team member is a student who is a part of a proposal submitted by the proposer. In the case of implementation of the proposal, each member of the team participates in the implementation, to the extent declared in the proposal and according to the instructions of the grant investigator.
- The degree of involvement of a team member is in the range of one tenth or one fifth of the set weekly working hours (4 or 8 hours / week).





- Team members may carry out educational / research activities abroad if the allocated funds and their allocation allow it.
- A team member expresses his or her consent to participate in the grant investigation in the Apollo IS.

The proposer, the investigator and a team member must be a student of a doctoral study programme at BUT at the time of submitting the proposal and for the entire period of carrying out investigation under the grant.

A student may be part of only one grant proposal in a given round of the competition. In the event that a student submits multiple grant applications or is a team member for multiple proposals, only one grant proposal will be advanced to the evaluation phase. The time of submission of the proposal is decisive. The first submitted grant proposal will be considered. It will be possible to delete a submitted project before the end of the competition period.

In the event that a student was awarded a grant in the first round of the competition, it is not possible for the student to submit a proposal or be a team member in the second round of the competition. In case the student was not successful as a proposer or as a team member, he or she may submit a new proposal or be a member of a team in the second round of the competition.

2. Mentor

The involvement of a mentor within the grant is mandatory. **The mentor provides professional and** methodological support to the proposer and the members of the grant team during its preparation and subsequently during the implementation of the grant.

The mentor is an academic staff member or a researcher at the Brno University of Technology. The minimum qualification of a mentor is the successful completion of a doctoral study programme or an adequate qualification.

- The mentor is chosen by the proposer.
- The mentor agrees to accept the role of mentor in the Apollo IS.
- The mentor confirms in the Apollo IS that the topic of a dissertation does not coincide with the topic of the grant.
- Each grant has exactly one mentor.
- The proposer shall include in the proposal at least the 3 most significant results of the mentor's R&D for the last 5 years that are related to the issue in the proposal.
- The mentor signs the Activity Report and the Final Activity Report in the Apollo IS.
- He or she comments on the investigator's requests for modifications in the investigation under the grant.
- He or she consults the drawing of funds with the investigator.
- In the Final Activity Report, the mentor provides a summary of mentored activities, including an assessment of grant implementation, acquired knowledge and outputs, recommendations for further / future research activities of the student.

3. Grant proposal

3.1. Basic parameters





- The proposer submits the proposal within the competition period exclusively digitally via the BUT Apollo information system.
- It is not possible to award a grant on a topic identical to the topic of a dissertation of the proposer or team members. This fact shall be declared by the proposers and the team members within the proposal and it is also confirmed by the trainer of the proposer and the team members. However, a student may use the results / outputs of grants (i.e. measurement results) in his or her dissertation, but the output of the grant must not be the dissertation as a whole. It is also possible for the student to fulfil the partial obligations of his or her individual study plan (publishing activities, active participation in a conference, etc.) using the grant outputs.
- The grant proposal shall be submitted in **English**. All information provided in the proposal must correspond to the reality as of the date of the proposal submission.
- The submitted proposal shall include the consent of the mentor and team members to participate in the grant.
- All team members have access to the proposal in the Apollo IS. It can be actively edited by the proposer.
- The proposer classifies his or her proposal according to the affiliation to the faculty in one of the mentioned areas in accordance with the Frascati manual according to the diagram below:
 - A. Proposers belonging to the Faculty of Civil Engineering, the Faculty of Mechanical Engineering, the Faculty of Electrical Engineering and Communication, the Faculty of Chemistry, the Faculty of Information Technology and the Central European Institute of Technology classify their proposal in one of the areas listed under points 1–4.
 - B. Proposers belonging to the Faculty of Architecture, the Faculty of Fine Arts, the Faculty of Business Administration and the Institute of Forensic Engineering classify their proposal in one of the areas listed under points 5—6.

Areas according to the Frascati manual:

- 1. Natural sciences
- 2. Engineering and technology
- 3. Medical and health sciences
- 4. Agricultural and veterinary sciences
- 5. Social sciences
- 6. Humanities and arts

3.2. Content of the grant proposal

The grant proposal must include:

- identification of the proposer and potential team members (including their consent to involvement and demonstration of previous experience)
- annotation, grant objectives, keywords;
- information about the mentor (including his or her consent to involvement and demonstration of previous experience);
- summary of the educational objectives of the proposer and individual team members;
- excellency;





- impact;
- implementation (including expected outputs, if planned);
- description of the risks of the grant investigation;
- grant budget including its justification.

3. Grant financing

In accordance with the rules of the OP RDE project call, within which this Internal Grant Competition is implemented, the budget is determined according to the following parameters, where the amount of unit cost corresponds to a working capacity of 0.1 FTE / month.

Unit cost	0.1	CZK 7,986.00
Wage costs (minimum)	0.1	CZK 4,667.00
Other costs (maximum)	0.1	CZK 3,319.00

Model example – annual individual grant	CZK 479,160.00	
12 months / 0.5 FTE	Agreement to complete a job	Employment contract
Wages	CZK 216,000.00	CZK 216,000.00
Charges	CZK 73,915.20	CZK 77,155.20
Total wage costs (including charges)	CZK 289,915.20	CZK 293,155.20
Mentor's reward	CZK 16,286.40	CZK 16,286.40
Other direct expenses (travel expenses, materials, literature, SW, small equipment)	CZK 101,084.40	CZK 97,844.40
Costs associated with the organisation and administration of grants (overheads, ensuring the	674.74.074.00	071/74 074 00
payroll of researchers, etc.) in the amount of 15%	CZK 71,874.00	CZK 71,874.00
Total other costs	CZK 189,244.80	CZK 186,004.80

In the case of a higher degree of work participation, the amount is multiplied proportionally.

4.1. Eligible costs

Eligible costs include personnel costs and other costs.

- Personnel costs consist of the item: salary and compulsory charges
 - The amount that may be used to cover the investigator's (student's) salary is CZK 3,600 to CZK 4,000 for a work capacity corresponding to 0.1 FTE / month. The amount in the stated range may be applied differently by individual faculties.
 - Compulsory charges are intended for social and health insurance, social fund and statutory employer's liability insurance (according to the type of labourlaw relationship).





• Other costs include:

- Mentor's personal expenses mentor's reward. It is set at a fixed amount of CZK 200 / month for every 0.1 FTE. If team members are involved 100 CZK / month for 0.1 FTE. The amounts are stated without mandatory statutory charges, which will be added automatically in the Apollo system.
- Other direct expenses (e.g. material, small equipment, software, literature, travel expenses, external training, and other services).
- Costs associated with the organisation and administration of grants (overheads of 15%).
- Only non-investment costs are eligible.

4.2. Funding rules:

- All resources must be used efficiently, effectively and economically, in accordance with the grant and its scope.
- Personnel costs may be paid to researchers and team members only on the basis of a labour-law relationship (Agreement to perform work or Employment Contract).
- It is prohibited to combine sources of funding during the grant investigation (e.g. with sources of targeted support for specific higher education research). Involvement in a thematically different project of Specific University Research is possible. If the grant does not meet the set parameters specified in this Tender Documentation (for example, implementation of research / educational activities abroad, participation in at least one of the training courses carried out by the Rectorate within the BUT Quality Internal Grants project), or if its outputs are not satisfactory or it is terminated prematurely, e.g. because the proposer terminates his or her Ph.D. studies, the unit costs for the last month of the grant implementation will be considered ineligible (in case of team grants, this includes all persons involved in the grant) and they shall be borne by the faculties to which the grant proposers belong. After the grant has been awarded, the grant proposer becomes the principal of the operations.
- It is not allowed to increase the total budget of the grant after it was awarded.
- During the investigation under the grant, the amount of work capacity of other team members can be adjusted, but their workload cannot reach 0.3 FTE.

5. Evaluation and announcement of results

5.1. Formal evaluation

The formal evaluation of the proposals is performed by the competition administrator.

If the proposal has formal deficiencies, the administrator will ask the proposer to eliminate them. The proposer shall eliminate the deficiencies within 5 calendar days. If the proposer fails to do so, the administrator will propose to the Evaluation Discipline Panel (EDP) the exclusion of the grant proposal from the competition.



5.2. Opponents' evaluation

After removing any formal deficiencies, the competition administrator addresses 2 opponents, of which at least one is external. The proposed opponents are approved by the EDP.

The opponent may not participate in the preparation of the grant proposal. External opponent may not be in a labour-law relationship with BUT (the opponent declares this fact in the form of a statement when accepting the opponent's grant) at the time of the grant evaluation (in the given month). There is an exception in the form of labour-law relationship, the subject of which is the evaluation of grant proposals within this call or the evaluation of grants within other grant competitions at BUT.

The opponent shall perform the evaluation in three separate criteria – Excellence, Impact, and Implementation, in which all items of the grant application will be reflected (i.e. outputs, budget, qualifications of applicants, grant risks, etc.).

Each criterion may be awarded with up to 5 points. The smallest unit of evaluation is 0.5 points. The minimum threshold for success of the criterion is 2.5 points.

In the event that the evaluation of both assessments differs significantly, i.e. the sum of points of individual assessments differs by 5 or more points, the proposal for evaluation is forwarded to a third opponent (arbitrator). The arbitrator shall perform an independent assessment of the proposal; the final assessment is a sum of the arbitrator's assessment and of that opponent, whose assessment is closer in its points.

5.3. EDP evaluation

The evaluation of proposals will take place in two Evaluation Discipline Panels (EDP): Panel A and Panel B. The allocation of funds is determined separately for each panel.

Panel A covers the field of Natural Sciences, Engineering and Technology and the field of Medical and Health and Agricultural and Veterinary Sciences.

Panel B covers the field of Social Sciences, Humanities and Arts.

Panel A includes the following components of BUT: Faculty of Civil Engineering, Faculty of Mechanical Engineering, Faculty of Electrical Engineering and Communication, Faculty of Chemistry, Faculty of Information Technology and the Central European Institute of Technology.

Panel B includes the following components of BUT: Faculty of Architecture, Faculty of Fine Arts, Faculty of Business and Department of Forensic Engineering.

The final order of grant proposals is determined by the EDP on the basis of the sum of the points of both grant assessments. In the event that an arbitrator intervenes in the evaluation, the arbitrator's points and points of the report to which he or she gave preference shall be added up. In the case of further points equality, the final ranking shall be determined by the number of points in the Excellence criterion. In the event that the proposals continue to be equal in terms of points, the final ranking shall be determined by the number of points in the Impact criterion.





Financial support may only be obtained by grants for which all individual criteria were evaluated above the threshold in both (in the case of 3 assessments at least two) assessments.

In the event that the points of several grants are equal above the point limit and at the same time the financial requirements of these equally awarded grants do not fit into the allocation for the round, the EDP may approve an increase in the allocation so that all grants of the same point award are eligible for funding.

The EDP is entitled to reduce the proposed budget during evaluating.

5.4. Results announcement

The results of the competition shall be announced no later than 31 December 2021.

6. Implementation of the grant

- The Rector shall decide on proposals that will be financially supported and implemented on the basis of EDP's recommendations.
- The proposer, whose proposal is chosen by the Rector to be implemented, becomes the investigator.
- Each investigator and team member must attend at least one of the educational courses carried out by the Rector's Office within the BUT Quality Internal Grants project. In the 2nd round of the competition, this obligation only applies to investigators and team members who are involved in the solution of the grant for a period longer than 6 months.

6.1 Grant monitoring

Activity report

The activity report shall be prepared by the investigator and each team member on the last day of the month and submitted to the administrator for approval via the mentor.

The activity report shall contain at least the following:

- activities implemented in a given month;
- the amount of the researcher's work capacity for a given month expressed in FTE;
- evaluation of progress on outputs;
- plan of activities for the following period;
- summary of team members' activities (only for reports submitted by the grant investigator).

6.2. Suspension and extension of the grant investigation





- If the investigator cannot continue the implementation of the grant, it is possible to suspend it.
- The grant may be suspended at a request (minor modification).
- The maximum period for which the grant may be suspended and subsequently extended is 3 months.
- The minimum length of a request for suspension or extension is 1 month.
- In case of grant suspension, a student may request an extension. The duration of the extension may not be longer than the period for which the grant was suspended and at the same time it may not exceed 3 months.
- Application for an extension may be submitted repeatedly, up to the amount of the maximum permitted extension period.
- In the event that the grant is suspended on the part of the grant investigator, the entire investigation under the grant is automatically suspended.
- In the event of a suspension of the grant by one of the team members, the grant will not be suspended, but no wage costs will be paid to this team member for the given period.
- No costs (personal or otherwise) may be drawn when the grant is suspended and no activity report is submitted.
- In case of grant suspension without an extension, grant finances will be reduced.

6.3. Grant modifications

The modifications are either substantial or minor.

A request for a modification shall be submitted via the Apollo IS no later than at the end of the month in which it occurred. A request for a substantial modification shall be approved by the EDP; a minor modification shall be approved by the competition administrator.

The investigator is obliged to state all substantial and minor modifications, including their justification, in the Activity Report or in the Final Activity Report.

Specific items that were reduced / cancelled in the budget based on the EDP's evaluation may no longer be increased / renewed by the investigator in the form of a minor / substantial modification during the grant implementation (this does not apply to social and health insurance, employer liability insurance, which were reduced in connection with a reduction of another wage item).

Substantial modifications shall include the following:

- change of the investigator or a team member during the implementation of the grant, it is permissible to replace the grant investigator with another existing team member; if there is only one person carrying out the investigation under the grant, it is not possible to replace the investigator; team members may be replaced by other doctoral students;
- change of the mentor;
- division or combination of already approved working capacity of grant team members;
- change of grant outputs.

Minor modifications shall include the following:

- change of place of the visit abroad (EU or outside the EU);
- change in the amount of personnel costs;





- transfer between items in the amount of more than 10% of the total funds;
- investigation suspension;
- grant extension;
- other changes not listed among the substation modifications above.

6.4. Early grant termination

- A grant is terminated prematurely in the event that the investigator terminates or suspends his or her studies, or if his or her studies are terminated or suspended, or by a decision of the EDP in the event that serious facts have occurred that make it impossible to carry out the investigation under the grant.
- The EDP decides on the early termination of the grant in cases where:
 - the Activity Report is not submitted or contains significant defects;
 - termination is proposed by the investigator / mentor.
- Ineligible costs incurred in connection with the early termination of the grant shall be borne by the component where the investigator's workplace is located.

7. Completion and final evaluation of the grant

The deadline for the proper termination of the grant is set on 31 December 2022. In the event of suspension and subsequent extension of the grant, the deadline for the end of the grant is 31 March 2023. All planned activities must take place before the end of the grant.

Final activity report

The final activity report shall be prepared by the investigator as of the last day of the investigation under the grant. In the case of team grants, only one final report shall be submitted. The final report shall be approved by the investigator, team members, mentor and administrator.

It shall contain a summary of the following:

- grant implementation;
- achieved outputs;
- activities of team members;
- fulfilment of the educational objectives set out in the proposal;
- from the mentor's position: a summary of mentored activities, including an assessment
 of grant implementation, acquired knowledge and outputs, recommendations for
 further research activities of the student.

Based on the Final Activity Report, the EDP evaluates the success of the grant implementation and confirms its successful completion.

If the EDP evaluates the grant as unsuccessful, i.e. it notes that the outputs and objectives of the grant were not met, the costs for the last month of the investigation become ineligible and shall be borne by the component where the investigator's workplace is located.





prof. Ing. Lubomír Grmela, CSc.

Vice-Rector for Research and Development

List of documents related to the competition:

- 1. Directive n. 10/2020 Internal Grant Competition
- 2. Manual for proposers and investigators of Internal Grants of the 2nd round of the competition
- 3. Apollo IS visual manual for the 2nd round of the Internal Grant Competition

