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R&D Evaluation Methodology and Funding Principles

Background Report 5: Evaluation Handbook



INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

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1. Introduction

This background document holds the guidelines and templates for the implementation of the National Evaluation of Research Organisations (NERO), for the use of the main actors involved.

These guidelines and templates reflect the Evaluation Methodology in its final version, as it is described in the Summary Report and the Final report 1- *The R&D Evaluation Methodology*. They are intended as a basis for the guidelines and evaluation protocols that will need to be developed for future evaluation exercises.

The report is structured as follows:

- Section 2 holds the Guidelines for the Evaluation Management. These Guidelines complement the indications on the role and tasks of the Evaluation Management structure provided in the Final report 1- *The R&D Evaluation Methodology*. It provides further information and concrete operational suggestions
- In Section 3 we write out the guidelines for the panel experts
- Section 4 holds the guidelines for the referees
- Section 5 comprises the detailed Guidelines for the Research Organisations

There are appendixes to this report:

- Appendix A contains the template for the Subject panel report and its components, i.e. the calibration exercise report, the RU panel report and the Remote Review report
- Appendix B shows the template for the conclusive analytical reports at Evaluated Unit, field and disciplinary area level
- Appendix C holds the forms for the submission of the self-assessment by the Evaluated Units participating in the evaluation

The bibliometric data report template and manual can be found in the report *Bibliometrics on and for the Czech Republic* (Background report 3).

2. Guidelines for the Evaluation Management

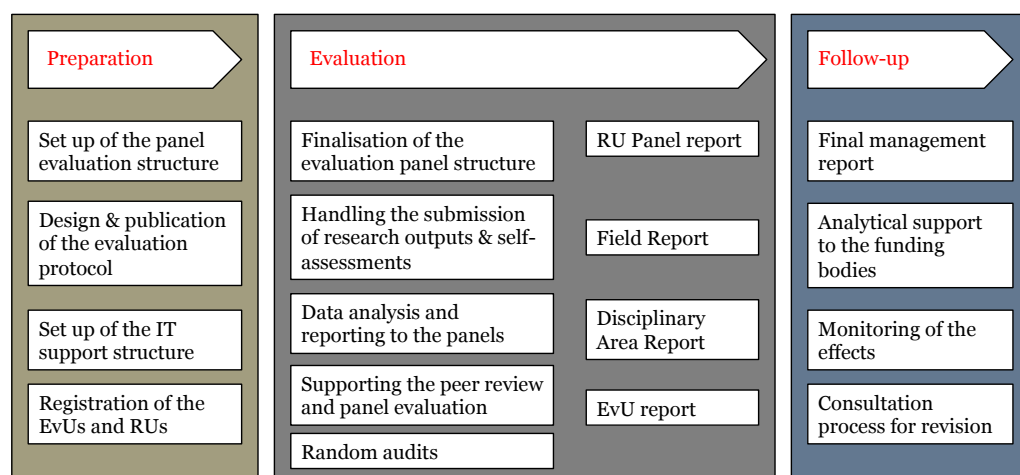
We defined the entities responsible for the governance and management of the National Evaluation of Research Organisations (NERO) implementation as follows:

- An Evaluation Management Board will act as overall governance and supervisory body
- An Evaluation Management Team will be responsible for the operational management of evaluation

In the Final report 1 – *The R&D Evaluation Methodology* we emphasise that the role of the Evaluation Management Team should be seen in a longer-term perspective. In fact, the implementation of the National Evaluation of Research Organisations is one of the elements in an **evaluation cycle**: an evaluation is followed by follow-up monitoring and impact analysis activities which feed into the preparation phase for the next run of the evaluation.

Each of these phases is composed of a number of stages or main activities as shown in Exhibit 1. We broadly describe these main activities and tasks of the Evaluation Management Team in the Final report 1.

Exhibit 1 Main tasks in the evaluation cycle



In the sections below we complement the information provide some concrete operational suggestions and guidelines for the most important of these tasks, i.e.

- The timing and planning (Section 2.1)
- The evaluation methodology and its revisions (Section 2.2)
- The management of the evaluation panels (Section 2.3)

2.1 Timing and planning

As in any management task, an appropriate timing and planning is key for success. In the context of a (panel) evaluation management, there are 3 key factors that need to be taken into account for the planning of the tasks and the exercise as a whole, i.e.

- The *volume of the work*, i.e. the number of Evaluated Units and Research Units, which influences the workload for the panels and therefore the number of panels to be managed and panel members to be selected
- The *need for a lapse time* between the time of nomination of the panel experts and their active involvement – the golden rule is at least 3 months
- The *need for a lapse time* between the launch of the evaluation (with the publication of the evaluation protocol) and the submission of the Research Units' research outputs and self-assessments. The Research Units need to be given the needed time to collect their data, select the research outputs to submit and run their internal self-assessment process. Three months need to be considered as an absolute minimum

We have estimated that the evaluation process will need **three years** for its completion (i.e. from the preparatory phase to the publication of the reports). Roughly, one year will be needed for the preparation phase, one year for the evaluation and one for the reporting. This calculation is based on the criteria set out above and counts with a full-scale evaluation, i.e. the simultaneous coverage of **all** Research Organisations.

The set of influencing factors outlined above imply that if the volume of work is smaller than the one we envisaged (e.g. only a set of Research Organisations are involved in the evaluation), the time needed for the evaluation process will be shortened.

The workflow of the different steps in the evaluation process shown in **Exhibit 2** highlight the fact that there are also certain milestones in the process that determine when the subsequent tasks can start. For example, referees can be selected and appointed only when the most outstanding outputs are submitted and the Evaluation Management Team will have defined and analysed the workload per sub-field.

We highlighted these milestones in blue, with the red arrows pointing at the activities that can follow once the milestones have been achieved.

A way to shorten and accelerate the whole evaluation process is also to bring forward the registration of the Research Units. In the UK REF, for example, HEFCE held a survey of the HEIs asking them about their submission *intentions*. This allowed them to reach a view of the focus of the Subject panels and the number of panel members needed *before* the evaluation was launched officially.

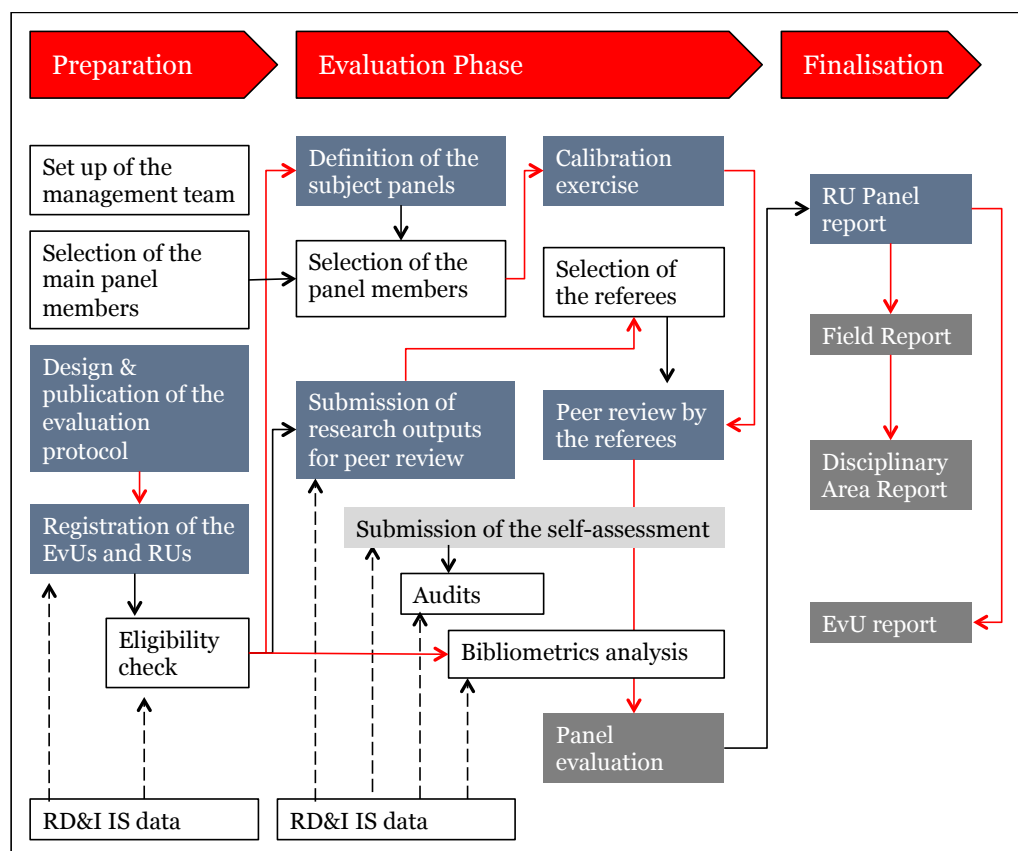
Exhibit 2 Milestones in the evaluation process

Exhibit 3 shows the detailed time-line of the evaluation process. Milestones are written in bold and the colour coding is as follows:

- Boxes in grey relate to activities to be implemented by the Evaluation Management Team
- Boxes in orange are activities of the evaluation panels
- Boxes in green are activities of the participating Research Units

Exhibit 3 Detailed time-line of the evaluation process

	Preparatory phase		Evaluation phase								Finalisation		
	Year 1				Year 2				Year 3				
Task	Mth 1-3	Mth 4-6	Mth 7-9	Mth 10-12	Mth 1-3	Mth 4-6	Mth 7-9	Mth 10-12	Mth 1-3	Mth 4-6	Mth 7-9	Mth 10-12	
Set up of the Evaluation Secretariat & Management Board													
Selection & contracting of the Main panel Chairs and members													
Finalisation of the evaluation methodology													
Development of the evaluation protocol													
Launch of the evaluation													
Set up of the information system & platforms													
Data support to the Research Organisations													
Registration of the EvUs – indicating the RUS													
Eligibility check													
Helpdesk for the Evaluated Units													
Definition of the Subject panels													
Kick-off meetings of Main panels													
Selection & contracting of the Subject panel Chairs													
Handling of applications for IRU & cross-referrals													
Data support to the Research Organisations													
Selection & contracting of the Subject panel members													
Submission of the research outputs for review													
Selection of the referees													
Submission of the self-assessment forms													
Quality check & audits													
Bibliometrics at the level of Disciplinary Area, Field, RU													
Panel secretariats													
First meeting of Main panels with Subject panel chairs													
Kick-off meeting of the Subject panels													
Remote review & Review reports													
Remote assessment & draft RU reports													
Subject panel evaluation meetings													
RU Panel reports - finalisation & approval													
Second meeting of Main panels with Subject panel chairs													
Analytical reports at EvU, Field & Disciplinary Area level													
Publication results on the website													

2.2 The evaluation methodology and its revisions

Especially because the evaluation results will inform the performance-based research-funding component of the institutional funding system, the National Evaluation of Research Organisations needs to be considered as a policy intervention. As a consequence, to a certain extent the evaluation methodology will be ‘dynamic’, i.e. acting upon and reflecting changing policy needs as well as upon the outcomes of the impact assessment of the previous evaluation run.

Each evaluation run will therefore be launched through the publication of an Evaluation Protocol, setting out the updated methodology, and updated guidelines for the involved actors will need to be developed. We describe the contents of these documents in Section 2.2.1.

In Section 2.2.2 we indicate some characteristics of the evaluation methodology that need to be taken into account during the process of the design of a revised methodology.

2.2.1 Design and publication of the Evaluation Protocol and Guidelines

The **Evaluation Protocol** explains the approach to the evaluation. It normally holds

- The objectives of the evaluation and its key principles
- The framework for the assessment, including the scope of the evaluation, the unit of assessment, the field structure, the measures for interdisciplinary research, etc
- The assessment criteria and their description, including the indicators used
- Rulings on eligibility criteria (thresholds, outputs, etc)
- A description of the evaluation process and the implementation procedures, including the role of the evaluation management structure
- The main changes in the methodology compared to the previous run of the evaluation
- The planning of the evaluation and deadlines for registration and submission of information.
- The follow-up to the evaluation, including when and how the evaluation results will be made public and the monitoring procedures

Together with the Evaluation Protocol (as alone-standing documents or incorporated in the Evaluation Protocol), the Evaluation Management Team will publish the Guidelines for the Evaluated Research Organisations and the Guidelines for the Evaluation Panels.

The **Guidelines for the Research Organisations** typically set out the process and criteria for the registration to the evaluation and the submission of the requested information, indicate the time line, and provide detailed descriptions and instructions for the information to submit and the self-assessment. An example is the Guidelines provided in Section 5.

The **Guidelines for the Evaluation Panels** set out the tasks and responsibilities of the different panels and panel members, explain the work process and the support provided by the Evaluation Management Team, and the timeline with specific deadlines for the different steps in the process. The Guidelines will also contain the templates for the remote assessment reports and the panel reports. An example of these Guidelines is provided in Section 3.

The panels should also receive

- Background information on the RD&I system and the (previous) evaluation and funding system in the Czech Republic, in order to understand the historical background and context
- The evaluation protocol i.e. the full description of the evaluation methodology, including the field categorisation
- The Guidelines for the Research Organisations, in order to have a view on what was requested from the ROs and the instructions given
- The template of the Submission Forms and the bibliometrics data report, in order to have a view of the data they can expect to receive
- The Guidelines for the Referees

The **Guidelines for the Referees** hold the description of their tasks, the process for the remote review, the assessment criteria for the review, the timeline and deadlines, and the template for the remote review report.

2.2.2 Revision or extension of the evaluation methodology

One can envisage changes over time to the evaluation methodology in order to reflect changing policy priorities and/or comments or reflections in RD&I community regarding the adequacy or user-friendliness of certain indicators or eligibility criteria.

In the Final report 1 – *The R&D Evaluation Methodology* we have taken care to indicate the criteria that guided our selection and definition of assessment criteria and indicators. In this section we mention some of the most important ones that should be considered during the revision of the methodology.

A first topic regards the **interconnectedness** of the indicators. We selected a mix of quantitative and qualitative indicators that are intended *jointly* to provide the needed information to the evaluation panels. Several of the quantitative indicators will provide the panels with information that will be of use against multiple assessment criteria and are therefore collected in a consistent manner throughout the evaluation exercise. Exhibit 30 in the Final report 1 – *The R&D Evaluation Methodology* illustrates this concept.

This has as a consequence that changes to one of these indicators will affect the capacity of the panels to reach the comprehensive view. For example, qualitative information gives the panel experts a view on the reasons for certain trends in the quantitative data.

Important in this context is also the **variable** that we used for the collection of quantitative data. There are two approaches possible:

- *Time series*, i.e. asking data for each year in the evaluation period, or
- *Census data*, i.e. establishing a specific date (eg 31 December of the year preceding the evaluation) and ask for data at that specific time. Census data can be used for the collection of data on FTE researchers
- *Total data*, i.e. asking data for the entire evaluation period. This can be used, for example, for data on external funding or on research outputs

We opted for the time series approach because 1) we considered that the view on trends was important for the evaluation, and 2) time series data can be used for all types of quantitative data and therefore allow for interconnection. As an example, the panels will have a view on research productivity by looking into the number of research outputs versus the number of FTE researchers in a specific year and over time.

In other words, the use of different variables for the different indicators will require careful consideration whether all the needed information remains available to the panels. Ideally, one should have a consistent use of one type of variable only.

A second topic regards the unit of assessment, i.e. the **Research Unit**. Unless the decision is taken that the methodology should use another unit of assessment, the Research Unit needs to be the central focus for all information collected – both quantitative and qualitative and no matter whether decision-making on a specific topic is competence of the institutional management.

In our design the RU is the basic building block of the whole evaluation. These building blocks can largely be combined to give pictures of the EvU, RO and field levels. Substituting this with EvU-level information logically interferes with building field-based pictures. Furthermore, we would generally expect the Research Unit to be the operative level at which (group-based) research is conducted. The view and description of institutional practices by researchers belonging to the Research Unit is of more value to the panels than an ‘official’ description at institutional level.

Closely linked to this topic is the ruling that an Evaluated Unit can register only one Research Unit per field, no matter how large or small the RU is. This may lead to objections in the community, or even to the decision of allowing registrations against subfields rather than fields. We strongly advise against such an approach. Defining RUs at sub-field level will cause a proliferation of RUs, with an associated increase in cost and complexity.

A third topic is the **user-friendliness** of the information for the panels. There is a need to strike the balance between the volume of information required for a proper evaluation and the time and effort required from the panels to absorb this information. The rule of thumb is that the panels should be provided only with information that is of direct interest for them. Overloading them with too much information inevitably is counterproductive and will influence the cost of the evaluation.

Finally, we suggest extreme caution in adding on indicators to the evaluation methodology. The more sophisticated the evaluation methodology is made, the more complex and difficult it will be for all actors to understand and manage – and the more costly it will be.

2.3 Management of the evaluation panels

In this section we go into the detail of three main tasks of the Evaluation Management Team related to the evaluation panels, i.e. the definition of the Subject Panels (Section 2.3.1, the staffing of the expert panels (Section 2.3.2) and the delivery of support to the evaluation panels (Section 2.3.3).

2.3.1 Definition of the Subject panels

The structure of the OECD disciplinary areas and fields will define the work and coverage of the main panels and panels in the evaluation, respectively.

Subject panels are defined at the level of OECD field. However, this does not imply that 36 panels will be established. In the preparatory phase of the performance assessment, Subject panels will need to be defined, taking into consideration the volume of the research conducted in the CR in the specific fields, in terms of number of research units and research outputs produced over the evaluation period. This will be based upon input from the research organisations on the fields they wish to be assessed against, i.e. at the moment of registration of the research unit(s). The intent is to spread the assessment workload over the different panels as much as possible on an equal basis as well as reach the maximum level of efficiency.

As much as possible, there will be a one-to-one alignment also between scientific fields (as defined by the OECD) and the expert panels at that level, organised in Subject

panels. However, panel evaluations are expensive exercises, in particular when involving foreign experts, and depending on the budget that is set aside for the evaluation, the number of panels at the field level needs to be limited, as does the number of panel members. This implies that a number of Subject panels will cover more than one OECD field. The identification of the subject panels will

- Be in line with the OECD categorisation of scientific fields in disciplinary areas and sub-fields into fields
- Spread the assessment work for scientific fields with exceptionally high research volume over two or more subject panels
- Concentrate the assessment work for scientific fields with exceptionally low research volume into one subject panel

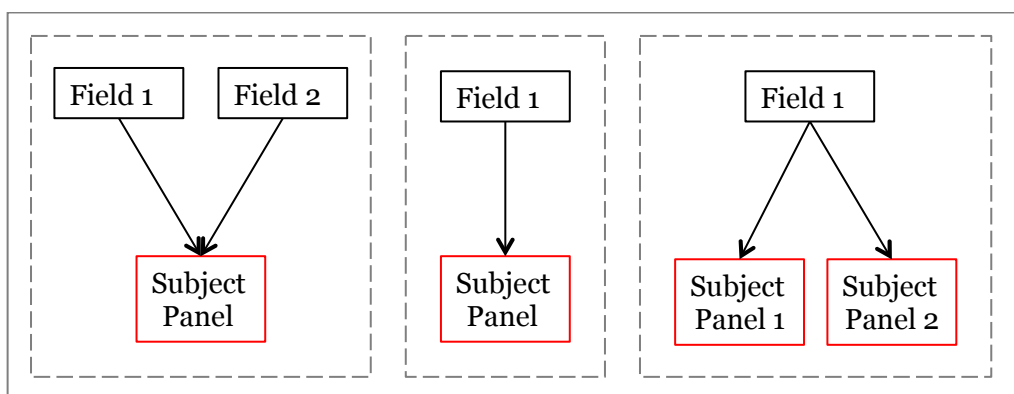
There are various scenarios: two or more ‘small’ fields, i.e. for which a small number of Research Units are registered, can be covered by 1 subject panel; average sized fields are covered by 1 subject panel; particularly ‘large’ fields can be covered by two (or more) subject panels (see Exhibit 4, below, from left to right).

In order not to loose the value of the ‘larger’ OECD field in covering interdisciplinary research between the sub-fields, the last scenario (large fields covered by 2 Subject panels) should **not** be understood as a split of a field into various sub-fields covered by different Subject Panels.

Rather, it should be understood as a distribution of the RUs in the field over different Subject Panels. This will imply the need for an intense collaboration among the Subject Panels and their Chairs as well as a strong supervision by the Main panel Chair in order to ensure consistency in the assessments. Ideally, the Subject Panels should run the calibration exercise jointly or at least in the presence of the Chairs of the other Subject Panel(s) (see Section 3.4.3, below).

Our recommendation for future revisions of the number of Subject panels and their members - provided the evaluation budget allows it - is to prioritise breadth over depth. In other words, higher evaluation budgets should be used for the involvement of more panels rather than more members per panel.

Exhibit 4 Scenarios for the definition of Subject panels



2.3.2 Staffing the expert panels

The Final report 1 – *The R&D Evaluation Methodology* sets out the expected profiles of the panel chairs and members.

The requirements are set high, in order to ensure a high quality level of the assessments taking the needs of the different categories of Research Organisations into account as well as the developments in research, such as the increase in interdisciplinary research.

A key task of the Evaluation Management Panel will therefore be the identification and contracting of the international experts with the needed expertise.

There is a certain '*review fatigue*' in the international research community, with many researchers involved in peer review appraisals of project proposals and various evaluation exercises requiring external experts. This implies that the identification and nomination of evaluation experts is not an obvious task.

We have included a number of measures in the design of the evaluation system that are intended to facilitate this task. This regards in particular measures related to the **amount of time and effort** that is required from these experts in order to overcome the major hindering factor, i.e. time availability.

This regards in a first instance their limits of *availability*. Experience tells us that especially the time that the experts are requested to spend in the country is critical. Rule of thumb is that international experts should spend only 5 days in the country for their meetings at a time, for preferably 1 maximum 2 meetings. A maximum (realistic) expected time investment is to be set at around 20 mandays in total, especially for the Chairs.

In order to reach these parameters, we have

- Set a strong focus on the remote preparatory work for the final assessment (i.e. remote assessment and remote review), which will need to be as complete as possible and of the needed quality level to allow for short meetings
- Foreseen as many Subject panels as the budget allowed for in order to allow for the distribution of the workload (RU assessment) to as many Subject panel members as possible
- Spread the tasks over Subject panel members, Subject panel chairs, and Main panel Chairs
- Assigned wherever possible preparatory work and report drafting work to the Evaluation Management Team
- Ruled out onsite visits

Second, there is the **financial incentive**. In this context we have foreseen day rates that reflect the level of expertise required from the experts and are 'realistic, i.e. in line with average day rates for these experts in Western Europe. In 2014, appropriate day rates for international experts range between a maximum of €1000 and a minimum of €500.

We are well aware that this is considerably higher than the EC standard rate of €450 a day. However, one should consider that these rates are for the delivery of specialist support to the Commission. There are multiple reasons why people are willing to take up the task even at such low rate (for Western European standards), the most important one being the prestige of supporting the Commission and the importance for networking and future contracts.

In the context of this evaluation, we consider a day rate of €450 to be unrealistic. Especially when one wishes to have a *geographical spread* of the involved experts (which should, indeed, be an objective) and when setting high requirements for the competence profile of the experts in order to guarantee a *quality evaluation*, the budget should count on paying out higher rates.

2.3.3 Support to the evaluation panels

The Evaluation Management Team has specific tasks to fulfil in support of the evaluation panels. These include:

- To ensure coordination of the Main subject panel chairs, in particular in relation to
 - The approach taken to the assessment in the Subject panels (calibration), for the sake of consistency
 - Decision-making on the eligibility of applications for Interdisciplinary Research Units and the division of the work
- To take minutes of all meetings of the Evaluation Management Board, the main panels and subject panels
- The support to the subject panels by the Panel Secretariats
- The organisation of the panel meetings

Support staff members are needed also to support the panels during the reporting phase. Ideally, these will be the same members of the Panel secretariats. They will support the panels in writing the RU, Field and Area analytical reports. They will also draft the analytical reports at the EvU level, in order to limit the level of time investment required from the Subject panel chairs.

The role of the **Panel Secretariat** and its importance for the quality and efficiency of the evaluation panel process should not be underestimated.

The task of the panel secretariat is to support the panels in their work, in particular during the subject panel meetings, taking notes on the panel discussions and registering the scores decided. The notes taken during the panel discussions constitute an important source for the drafting of the panel reports.

The panel secretariat also acts as a bridge between the Evaluation Management Team and the panels whenever problems occur, and has an important role in ensuring that the panels follow the rules, supporting consistency in the approach among different panels.

There will be 2 panel secretariat members per Subject panel and they should have sufficient knowledge on the matter adequately to support the panels.

For the RAE and REF exercises in the UK, HEFCE had an interesting approach for the staffing of the panel secretariats that could be of interest also in the Czech Republic: members of the panel secretariats were employees in the Research Councils that were ‘outsourced’ to HEFCE for the duration of the evaluation.

Translating this approach in the context of the Czech RD&I system, this would mean an ‘outsourcing’ of personnel in the Science Foundation, the Technology Agency, or the ministries, i.e. staff members that have a knowledge of panel reviews and an understanding of the terminology in the field.

3. Guidelines for the panel experts

The objective of these Guidelines is to support the panel experts in their assessment by ensuring a correct understanding of the Evaluation Methodology, the evaluation process and the tasks they will be in charge of. This regards the experts in both the Main panels and Subject panels.

The present Guidelines reflect the Evaluation Methodology as it is described in the Final report 1 – The R&D Evaluation Methodology. They are structured as follows:

Section 3.1 describes the role of the Main panels, its members and Chairs. In Section 3.2 we do the same for the Subject panels, members and Chairs.

In Section 3.3 we give a view of the timeline for the activities to be implemented by the panel experts, set in the context of a full-scale evaluation.

We also identify the main operational steps in the evaluation process for the panel experts; these are described in detail in Section 3.4, in chronological order.

In order to avoid redundancy in our reports, we do not repeat here the details of the evaluation methodology such as the assessment criteria, indicators and data sources.

Attached to this report are

- The template for the Subject Panel Report and its components, i.e. the calibration report, the RU evaluation report, and the Review report (Appendix A -)
- The template for the conclusive analytical reports, i.e. the report at Evaluated Unit level, field level and disciplinary area level (Appendix B -)

3.1 The role of the Main panels (chairs and members)

The Main panels, organised at the level of disciplinary areas, are made up of a Main panel Chair (an international expert) and three Main panel members (national experts). The national experts are representatives of the different stakeholder communities in the Czech RD&I system. One member originates from the national research community and two members are ‘outsiders’ to the research communities, e.g. one member of the user communities (such as industry) and one member from a relevant funding agency or ministry. At least one expert in the Main panel (Chair or member) will have expertise in inter-disciplinary research.

The key role of the Main panel is to moderate. It has an **auditing** function and provides a bridge between the Evaluation Management Team and the Subject panels.

Core tasks of the Main panels are

- To review the nomination of the Subject panel chairs by the Evaluation Management Team, with a specific focus on the adequacy of their expertise and the inclusion of experts with experience in applied/industrial research
- To review the reports on the calibration exercises in the Subject panels on quality and consistency and ensure that any inconsistencies in the assessment standards are investigated and explained and/or amended
- To review the assessments at RU level as they emerge throughout the assessment phase with a specific focus on the implementation of the established procedures and criteria, and on the consistency in the application of the overall standards of assessment in the Subject panels (especially related to the outcomes of the calibration exercises)
- To discuss and take decisions in matters of conflicts of interest and other sensitivities
- To discuss and take decisions in eventual cases of gaming or insufficient fairness during the process

The Main panels will have 3 (physical) **meetings**:

- One kick-off meeting where all Main panels will come together (see Section 3.4.1)
- One meeting mid-term in the evaluation process – for each Main panel separately and *before the Final Subject panel meetings*. During this meeting, the draft RU reports will be discussed exclusively in relation to the consistency in the assessment approach related to the outcomes of the calibration exercise and the standards defined for the evaluation. Any inconsistencies or problems will be discussed with the relevant Subject panel chair
- One final meeting – for each Main panel separately, where the conclusive reports at EvU and field levels will be discussed, in order to support the Main panel Chair in the drafting of the report at Disciplinary Area level (see Section 3.4.8). Depending on the time line and progress, this meeting can be combined with the second cross-panel meeting

It is foreseen that Main panel meetings will take a maximum of 2 days each.

Virtual meetings will be set up depending on the needs and on an ad-hoc basis. These can be meetings among the Main panel Chairs with the purpose of ensuring close communication and collaboration, addressing any issues, and ensuring that procedures are followed and/or of a Main panel Chair with the Members,

The **Main panel Chair** will

- Chair the physical and other meetings of the Main panel
- Decide on the acceptance or refusal of Interdisciplinary Research Units applications (together with the other relevant Main panel Chairs – see Section 3.4.1) and chair the Ad-hoc panels if appropriate
- Decide on the acceptance or refusal of requests for the involvement of Specialist Advisors by the Subject panel(s)
- Closely monitor matters related to timing and progress, supported by the Evaluation Management Team staff, and report back to the Evaluation Management Team
- Hold a kick-off meeting with all Subject panel chairs (see Section 3.4.2)
- Participate as observer in the First Subject panel meetings in order to ensure that the approach in assessment is consistent among all Subject panels (see Section 3.4.3)
- Have the deciding voice on actions to be taken if issues arise with the quality of the draft RU reports
- Quality control the Subject panel reports and upon approval, forward the report to the Evaluation Management Team
- Have the deciding voice in matters of conflicts of interest and confidentiality
- Have the deciding voice in the decision to sign off the RU panel reports
- Draft the conclusive analytical report at the Disciplinary Area level, based on the Subject panel reports at field level and a meeting with all Subject panel Chairs, and supported by bibliometric data at the national level (see Section 3.4.8)

The **Main panel members** (national experts)

- Constitute an additional ‘auditing’ element to the panel review
- Have a purely advisory function and will have no voice in the assessments
- Participate in the first meeting of the Subject panels providing information on the national context

- Advise on matters relating to insufficient or unclear information in the RUs' submissions

In the event that a panel chair is unable to perform a task, because of illness or other reasons, the Evaluation Management Team will appoint an acting chair from the other members of the main panel.

3.2 The role of the Subject panels (chairs and members)

The Subject panels have the primary function of conducting the performance assessments. They are to make collective judgements on the performance of each RU in their field.

The Subject panels will hold two physical **meetings**: a First (kick-off) meeting (see Section 3.4.3) and a Final meeting (see Section 3.4.5).

Subject panel Chairs will

- Chair the Subject panel meetings
- Have the last voice in the allocation of work among the panel members (see Section 3.4.3)
- Have the last voice in the decision on requesting involvement of a specialist advisor. This request needs to be submitted to the Main panel Chair and the Evaluation Management Team. It requires the agreement from the Main panel Chair
- Have 2 meetings with the other Subject panel chairs and the Main panel (chair): at the beginning of the process and at the end (see Section 3.4.2 and Section 3.4.8)
- Report to the Main panel on the outcomes of the calibration exercise (see Section 3.4.3)
- Report to the Main panel Chair and the Evaluation Management Team on progress and eventual issues emerging where decision making by the main panel Chair and/or the Evaluation Management Team is required (eligibility, quality of the submission, conflicts of interest, gaming)
- Ensure that the Main panel Chair and members receive the draft RU evaluation reports in time for their mid-term meeting
- Quality review and sign off the Subject panel report and the RU reports it contains, and forward the report to the Main panel Chair for final acceptance
- Quality review and sign off the conclusive analytical reports at the Evaluated Unit level that were assigned to them. Staff members of the Evaluation Management Team will write these reports (see Section 3.4.7)
- Write out a conclusive analytical report on the state of research in their field, based on the RU assessment reports and supported by bibliometric data at the national field level (see Section 3.4.6)
- Support the Main panel Chairs in their writing of the conclusive analytical report at the disciplinary area level (see Section 3.4.8)

Subject panel members

- Act as Lead assessor or Second assessor for the Research Units (RU) in their field of expertise, as agreed upon in the Subject panel meeting
- Perform the remote assessment and draft the individual evaluation reports for the RUs assigned to him/her (see Section 3.4.4)
- Write out the draft evaluation reports at RU level for scrutiny by the Main panel and as a basis for discussion in the Final Subject panel meeting (see Section 3.4.4)

- After the Final Subject panel meeting, finalise the RU evaluation reports for the RUs where he/she has the role of Lead assessor and contributes to the RU evaluation reports where he/she has the role of Second assessor
- Support the Subject panel Chair in his/her writing of the conclusive analytical report at field level (input of clarifications upon request, final review) (see Section 3.4.6)
- Provide advice to other Subject panels in the case of cross-referrals – if requested and agreed upon in the Subject panel meeting (see Section 3.4.3)
- Be part of an Ad-hoc panel covering Interdisciplinary Research Units – if requested and agreed upon in the Subject panel meeting (see Section 3.4.3)

Subject panels can ask for the involvement of a limited number of **Specialist advisors** in order to complement their expertise in a specific field or interdisciplinary research (the international advisors) or their knowledge of the research in the national context (the local advisors). These experts will have a limited involvement in the process: they will have an advisory function only. One subject panel can call in the support of maximum 2 international Specialist Advisors and 2 national ones.

3.3 Timeline of the evaluation

[Note: This section will need to be updated by the Evaluation Management Team for each evaluation exercise. It should indicate the timeframe for the entire evaluation process and its various phases (preparatory phase, evaluation phase, and finalisation phase).

Most important, it should specify the deadlines for the finalisation of each of the main steps in the evaluation process. It should also specify the exact dates for the meetings foreseen.]

3.3.1 Overview of the timeline

Exhibit 5, below, shows the Gantt chart with a specific focus on the activities of the evaluation panels. The timing for the main activities of the evaluation panels is indicated through boxes in red, those of the participating Research Organisations through boxes in green, and those of the Evaluation Management Team through boxes in grey. The milestone activities for the evaluation panels are written in bold. We cover these further in Section 3.4, below.

Exhibit 5 Gantt of the evaluation process – main tasks of the evaluation panels

	Preparatory phase		Evaluation phase							Finalisation phase		
	Year 1				Year 2				Year 3			
Task	Mth 1-3	Mth 4-6	Mth 7-9	Mth 10-12	Mth 1-3	Mth 4-6	Mth 7-9	Mth 10-12	Mth 1-3	Mth 4-6	Mth 7-9	Mth 10-12
Selection & contracting of the Main panel Chairs and members												
Launch of the evaluation												
Registration of the EvUs – indicating the RUs												
Definition of the Subject panels												
Kick-off meeting of all Main panels												
Selection & contracting of the Subject panel Chairs												
Handling of applications for IRU & cross-referrals												
Selection & contracting of the Subject panel members												
Submission of the research outputs for review												
Submission of the self-assessment forms												
Cross-panel kick-off meeting												
First Subject panel meetings												
Selection of the referees												
Bibliometrics at the level of Disciplinary Area, Field, RU												
Remote review & Review reports												
Remote assessment & draft RU reports												
Mid-term Main panel meeting												
Final Subject panel meetings												
RU Panel reports - finalisation & approval												
Analytical reports at EvU and Field level												
Final Main panel meeting												
Final cross-panel meeting												
Analytical reports at Disciplinary Area level												
Publication results on the website												

3.3.2 The time line in detail

The evaluation experts should receive a timeline for their work *as detailed as possible* in order to facilitate the monitoring of progress (task of the Evaluation Management Team and the Main panel Chairs). This means that not only deadlines for the main steps but also deadlines for the **steps in between** that will allow for matching the deadline for the main step should be indicated.

The definition of deadlines for the intermediate steps is of *critical* importance for any activity where coordination among the panel experts and other actors (such as the Referees) is required. This is especially the case for activities across fields or disciplinary areas such as the Interdisciplinary Research Units and the cross-referrals among Subject panels.

An example is the implementation of the remote reviews and assessments (see the process description in Section 3.4.4). Intermediary deadlines need to be defined for

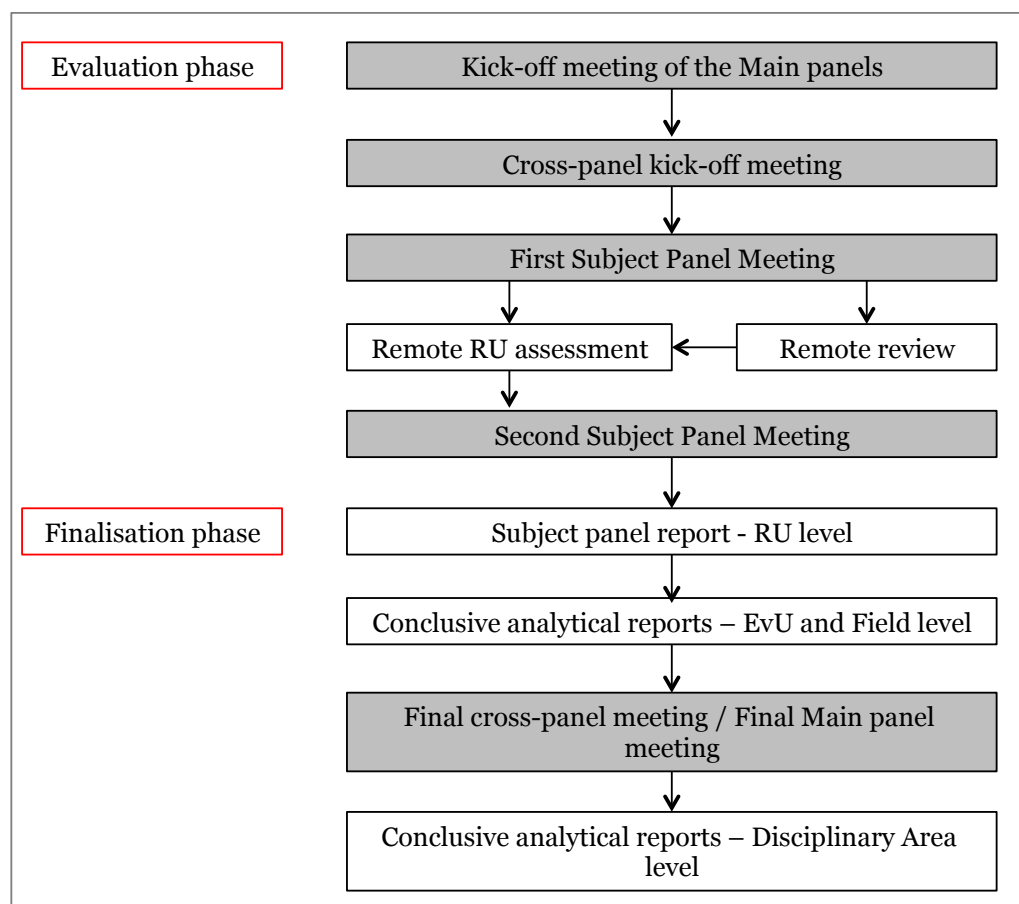
- The finalisation of the individual remote assessment without the criterion Scientific Research Excellence
- The finalisation of the remote reviews
- The finalisation of the individual remote assessment including the criterion Scientific Research Excellence
- The finalisation of the draft RU report to be submitted to the Main panels and discussed during the Final Subject panel meeting

In Section 4.2 we give an example of such detailed planning for the Review process by the Referees.

3.4 The main steps in the panel evaluation process

In this section we describe the envisaged process for the panel evaluation, i.e. the process of the panels' work and go into detail of the main steps in the process.

The main steps in the evaluation process for the evaluation panels are shown in Exhibit 6, below. They are further explained in the sections below.

Exhibit 6 Key steps in the panel evaluation process**3.4.1 Kick-off meeting of the Main panels**

Timing: Yr1, Mth 10-12, i.e.:

- After the registration of the EvUs and RUs and the definition of the focus for the Subject panels by the Evaluation Management Team

Participants: Joint meeting - All Main panel Chairs and Members

Objectives: This meeting serves to **finalise the structure for the evaluation exercise**. The main intent is to finalise the structure of the Subject panels (suggested by the Evaluation Management Team) and to decide on the applications for Interdisciplinary Research Units.

Tasks and process:

The responsible manager of the Evaluation Management Team chairs this meeting.

The Evaluation Management Team will draft minutes of this meeting, which will be forwarded after the meeting to the participants as well as the Evaluation Management Board.

The following topics will be covered:

1. The meeting will start with a brief overview of the RD&I background and context, evaluation methodology and the envisaged evaluation process and timeline by the Evaluation Management Team.

The participants will receive the information listed in the introduction to these Guidelines **prior** to this meeting.

The participants will have the opportunity to ask any question on topics or points where clarification is needed. Also operational details will be provided (the platform used for the transfer of documents, contact details of the Evaluation Management Team and Main panel Chairs and members etc).

2. The Evaluation Management Team informs the participants of the number of RU registrations received and for which fields, and will present their (draft) proposal for the definition of the Subject panels.

The participants will have received the print-out of the RU registrations forms, ordered per envisaged Subject panel, **prior** to the meeting.

The participants will therefore have the possibility to give suggestions for changes in the Subject panel set-up. The Evaluation Management Team will have the final voice.

3. The Evaluation Management Team informs the participants of the applications for Interdisciplinary Research Units received and indicates which disciplinary areas it concerns.

The relevant Main panel Chairs will have received the application(s) and all relevant information from the Evaluation Management Team **prior** to the meeting.

The relevant Main panel Chairs will jointly decide

- Whether the application(s) can be accepted
- Which is the most relevant Main panel Chair who should chair the Ad-hoc panel (normally, the Main panel chair of the major research area in the RU)
- Which competences at field level are required for the other Ad-hoc panel members (maximum 5)

Decision should be taken in agreement by the relevant Main panel chairs. If consensus cannot be reached, decisions will be taken by majority vote. The Main panel members can advise but have *no voting right*.

The Evaluation Management Team will take the minutes of this meeting and draft a report for each IRU application. This will include the final decision of the Main panel Chairs and an explanatory text on the discussion and voting process and results. If the application is accepted, the name of the Main panel Chair that will chair the Ad-hoc panel and the competences required for the panel members will be listed. This report will be approved and signed by all Main panel Chairs involved and forwarded to the Evaluation Management Board and the concerned Evaluated Units. There will be no right for appeal

4. The Main panels will discuss and agree on which Main panel should nominate the Subject panel Chair that will be responsible for the quality review and approval of the conclusive analytical report at EvU level. Typically this will be the Subject panel Chair for the most important Research Unit in the Evaluated Unit. Reports at Evaluated Unit level will be written only for Evaluated Units that register more than one Research Unit for evaluation. Evaluation Management Team staff members will be in charge of drafting these reports.

For this purpose, the Evaluation Management Team will draft a list of Evaluated Units that have Research Units spanning over various disciplinary areas and provide **prior** to the meeting all relevant information on the size of these Research Units (volume of output production, number of FTE researchers) as well as the background information that the Evaluated Units (Q2A.1-3) and the Research Units (Q3A.1 -3) provided on their profile.

5. Finally, each Main panel will *separately* consider the proposal by the Evaluation Management Team for the nomination of Subject panel Chairs and Members.

The Main panel Chairs and Members will have received *concise* information on the profiles of the proposed Subject panel chairs and members **prior** to the meeting, including of information on which candidates were proposed or objected to by the Evaluated Units.

The Main panel will dedicate specific attention to the scientific profile of the experts as well as the involvement of experts with relevant expertise in applied/industry research. Also potential conflicts of interest will be subject of scrutiny. The Main panels will decide on the approval of the list of candidates. If consensus cannot be reached, decisions will be taken by majority vote, in which the Chair holds a casting vote

Minutes of the discussions and the decision-making will be drafted by the Evaluation Management Team, signed by the participants and forwarded to the Evaluation Management Board

3.4.2 The Cross-panel kick-off meeting

Timing: Yr2, Mth 4-6, i.e.

- After the submission of the ‘most outstanding’ research outputs and the self-assessment forms

Participants: For each disciplinary area separately – the Main panel Chairs and Members and all Subject panel chairs

Objectives: This meeting sets the basis for the future work of the Subject panels in terms of **consistency in the approach and cross-panel cooperation**. The main intent is to reach a common understanding of the evaluation methodology and context, and to decide on the members of the Interdisciplinary Research Units and the procedures for cross-referrals

Tasks and process:

The Main panel Chair chairs this meeting.

The Evaluation Management Team will draft minutes of this meeting, which will be forwarded after the meeting to the participants as well as the Evaluation Management Board.

The following topics will be covered:

1. The meeting will start with a brief overview of the RD&I background and context, evaluation methodology and the envisaged evaluation process and timeline by the Evaluation Management Team.

The participants will receive the information listed in the introduction to these Guidelines **prior** to this meeting.

The participants will have the opportunity to ask any question on topics or points where clarification is needed. Also operational details will be provided (the platform used for the transfer of documents, contact details of the Evaluation Management Team and Main panel Chairs and members etc).

The procedure for the calibration exercise will be explained (see Section 3.4.3), but the exercise itself will be performed at *Subject panel level* during the first meeting.

2. The Evaluation Methodology Team will present the recommendations for cross-referrals received from the Evaluated Units.

The Main panel experts and the Subject panel Chairs will have received all relevant information from the Evaluation Management Team **prior** to the meeting.

The Chairs of the relevant Main Panel and Subject Panels will use this information to allocate the RU to one of the Subject Panels that will act as 'host' Subject panel and bear the key responsibility for the assessment. They will ensure that the Subject Panel members have sufficient expertise to assess the RU and that panel members of a second or third Subject Panel are involved in the assessment of the RU where necessary. The operational procedures for this cross-panel collaboration and especially the timing for requests for support and the delivery of the support will be defined.

Where parts of the submission are cross-referred, the 'host' Subject Panel will specify the scope of advice that it is seeking: this may range from advice on the RU performance against specific assessment criteria or sub-criteria, to advice on specific features of the narratives or data provided. The 'host' Subject Panel will retain responsibility for the decision on the quality level assigned.

3. The Evaluation Management Team will draft a list of Evaluated Units that have registered more than one Research Unit in the disciplinary area and will provide **prior** to the meeting all relevant information on the size of these Research Units (volume of output production, number of FTE researchers) as well as the background information that the Evaluated Units (Q2A.1-3) and the Research Units (Q3A.1 -3) provided on their profile.

The list will include also the Evaluated Units for which the Main panel needs to nominate a responsible Subject panel chair, based upon the decisions taken in the Kick-off meeting of the Main panels (see above). Reports at Evaluated Unit level will be written only for Evaluated Units that register more than one Research Unit for evaluation.

For each Evaluated Unit, the Subject panel Chairs will discuss and agree upon which Subject panel should be responsible for the quality review and approval of the conclusive analytical report at EvU level. Attention will be paid to reaching a fair distribution of the workload. Evaluation Management Team staff members will prepare these reports.

3.4.3 First Subject panel meeting

Timing: Yr2, Mth 4-6, i.e.

- After the submission of the 'most outstanding' research outputs and the self-assessment forms, and
- After the Cross-panel kick-off meeting

Participants: For each Subject panel separately – the Subject panel Chair and all Subject panel Members. The Main panel Chair and members will participate as observers.

Objectives: This meeting **launches the work** of the Subject panels. The main intent is to agree on the distribution of the workload and to perform the calibration exercise.

Tasks and process:

The Subject panel Chair chairs this meeting.

The Panel Secretariat will draft minutes of this meeting, which will be forwarded after the meeting to the participants as well as the Evaluation Management Board.

The following topics will be covered:

4. The meeting will start with a brief overview of the RD&I background and context, evaluation methodology and the envisaged evaluation process and timeline by the Evaluation Management Team.

The participants will receive the information listed in the introduction to these Guidelines **prior** to this meeting.

The participants will have the opportunity to ask any question on topics or points where clarification is needed. Also operational details will be provided (the platform used for the transfer of documents, contact details of the Evaluation Management Team and Subject panel Chairs and members etc).

5. The Subject panel Chair will present the Interdisciplinary Research Unit(s) where one or more of the fields in the disciplinary area are involved.

The Subject panel will receive the relevant application(s) and all information from the Panel Secretariat **prior** to the meeting.

The participants will jointly decide on the Subject panel members that have the most appropriate profile to be members (also) of the Ad-hoc panel that will assess the Interdisciplinary Research Unit.

6. The Subject panel Chair will inform on the recommendations for cross-referrals received from the Evaluated Units that involve the Subject panel, as 'host' Subject panel or support panel. He/she will also clarify the procedures for the cross-referrals, defined during the cross-panel kick-off meeting.

The Panel Secretariat will send this information to all participants **prior** to the meeting.

The Subject Panel will agree on who among the Subject panel members will be involved in these cross-referrals.

7. The Evaluation Management Team will present the list of Research Units that will be assessed by the Subject Panel. This will include the background information that the Evaluated Units (Q2A.1-3) and the Research Units (Q3A.1 -3) provided on their profile.

The Panel Secretariat will send this information to all participants **prior** to the meeting.

The Subject panel will agree on the distribution of the work among the panel members, upon proposal of the Evaluation Management Team and taking into account their expertise. This includes the nomination of a Lead assessor and a Second assessor for each Research Unit. The panel will dedicate due attention to a fair distribution of the work. Each member must be allocated a significant volume of material to assess, so that each makes a significant contribution to the panel's assessment work.

8. The Subject panel Chair will launch the calibration exercise, explaining the objective and procedure. It will be carried out under supervision of the main panel chair and in the presence of at least one Main panel chair member.

The calibration exercise is key for the evaluation process in the Subject panels. Its purpose is for the Subject panel members to discuss the field-specific definition of key words in the assessment criteria as well as the importance attributed to specific sub-criteria depending on the field characteristics and the missions of the types of research organisation.

The outcomes of this discussion set the background for the evaluation against the assessment criteria and give a view on the reasoning underlying the panel's assessment. It also provides an opportunity for the creation of a common understanding of the indicators among the panel members and their interpretation and use in the context of the field.

During this exercise, the reference of the Subject panels should be their international practice and experience. They should **not** consider concrete cases of Research Organisations in the Czech republic nor set the criteria in the context of the Czech RD&I system.

The process is as follows:

- As a first step, the Subject panels will decide on the *field-specific* interpretation and understanding of the key words in the formulation of two assessment criteria (scientific research excellence and societal relevance – see the template for the Calibration Exercise report - Appendix A.2).
- As a second step, the Subject panels describe the importance that should be attributed to the sub-criteria in the three other assessment criteria when deciding on the overall quality profile– in relation to the *fields* and (within the fields) for the different *RO typologies*. For efficiency sake, the panels should take into consideration only the types of Research Organisations that are active in their field of competence in the Czech Republic.

The Subject panels define the importance in the form of %. The panel can also decide that all sub-criteria are equally important or that no distinction is to be made for the different RO typologies. It should be noted that during the assessment, it is not the intention that these weights will be applied for the calculation of the overall score for the criterion. The assessment will **not** be based on arithmetic.

The panel secretariat takes note of the discussions among the panel members and of their agreement and interpretations. Based on these minutes, the panel secretariat drafts the report on the calibration exercise. This report is to be agreed upon by all panel members, signed off by the Subject panel chair and transmitted to the Main panel chair and members for quality control and an ultimate check on consistency. Finally, it is transmitted also to the referees as a basis for their review.

3.4.4 Remote Assessment

Timing: Yr2, Mth 7-12, i.e.

- After the First Subject panel meeting and the finalisation of the calibration exercise report
- After the self-assessment reports and bibliometric data reports will be developed and transmitted

Participants: All Subject panel members

Objectives: The outcome of the remote assessment for each RU will be a **draft RU evaluation report** that will be submitted to the Main panels for scrutiny during their mid-term meeting (see Section 3.1, above) as well as (subsequently) discussed during the Final Subject panel meeting.

Two referees will remote review the selected research outputs submitted by the Research Units. The process for their work is described in the Guidelines for the Referees (Section 4). The Review reports will inform the draft RU evaluation report.

Tasks and process:

There will be 2 Subject panel members assigned for the remote assessment of each RU. One is the 'lead' remote assessor.

The steps for the remote assessment of each RU are:

- In the early assessment phase, the two panel members will jointly consider the breadth of work in the submissions and ensure that they have the appropriate expertise for the assessment. If not, they will inform the Subject panel Chair and suggest that advice is sought through cross-referrals to another Subject panel or that Specialist advisors be involved.

Where cross-referral was already foreseen, based on the recommendations by the Evaluated Unit, the assessors will define the elements of the submitted information and assessment criteria for which the opinion of the other Subject panel is requested. The 'lead' assessor will be in charge of the communication with

the member(s) of the supporting Subject panel(s), with the help of the Panel Secretariat. The panel members will take the decisions made during the Cross-panel meeting on the procedures to follow into account during this process (see Section 3.4.2)

- The two panel members do their assessment separately based on the information submitted by the Research Units and the Bibliometric Data Report. For this purpose, they will use the template of the RU report shown in Appendix A.3.

They assign the quality level score and give their explanatory statement for each quality criterion. This will exclude the criterion Scientific Research Excellence for which they need input from the Referees. They will also draft conclusions and recommendations.

The two panel members will dedicate specific attention to identifying the strengths and weaknesses in the RU performance as well as the opportunities and threats they can see for future performance development, and take note of them in their draft explanatory statements, conclusions, and recommendations.

If one or both of the assessors consider that some information is missing or needs clarification, they will ask the panel secretariat to contact the RU and ask for correction/additional information.

If they notice incorrect information or have the suspicion that false information is provided, they will immediately inform the panel secretariat and the Subject panel chair. The Evaluation Management Team will then ask for clarifications to the Evaluated Unit and/or perform an audit on the information provided, and agree with the Subject panel Chair on the next steps.

- When they receive the Review reports from the Referees on the outputs submitted by the RU they will decide *individually* also on the quality level score for the Scientific Research Excellence criterion. For this purpose, they will
 - Define a quality level score for each research output, based on the suggestions of the referees
 - Calculate the **average** of the quality level scores for all the submitted research outputs
- In the case of cross-referrals, they will take into account the information from the supporting Subject panel members for the drafting of their final individual RU assessment report. They also draft a conclusion and recommendation.

Contributions to cross-referrals, both given as received, must be shared with the Subject panel Chair, as this will constitute important information for his/her drafting of the analytical report at the field level.

The same sharing of information with the Subject panel Chair should take place related to the assessment of research in the field in the context of Interdisciplinary Research Units.

- Once the two panel members have finalised their individual remote assessment, they come to an agreement (remotely) on the RU assessment for *all* assessment criteria and write the draft RU report, including the explanatory statements, conclusions and recommendations. The *lead assessor* has the responsibility for this draft RU report.

The two panel members will dedicate specific attention to highlighting the strengths and weaknesses in the RU performance, as well as the opportunities and threats they can see for future performance development. This way they will provide the needed input for the conclusive analytical reports at the Evaluated Unit and field levels (see Section 3.4.7 and Section 3.4.6).

In case the two assessors have difficulties in reaching a common view against one or more criteria, they will state so in their report and explain their different views.

They will also indicate whether there is a need for more context or specialised information in order to reach a final assessment. In that case, the Panel Secretariat will contract a Specialist advisor with the requested expertise to participate in the Subject panel meeting. Prior to the meeting, the Lead assessor will clarify with the Specialist Advisor for which aspects their input is needed

- The draft RU report will be forwarded to the Main panel for scrutiny of the consistency in the procedure and standards for the assessment during their mid-term meeting
- All Subject panel members will have access to the RU draft reports ahead of the Final Subject panel meeting

3.4.5 Final Subject panel meeting

Timing: Yr3, Mth 1-3, i.e.

- Upon conclusion of the remote assessments, and
- After the mid-term panel meeting

Participants: All Main panel Chairs and Members

Objectives: This meeting is the final step in the work of the Subject panels. Decisions are made on the **evaluation of all Research Units**.

Tasks and process:

The Subject panel Chair chairs this meeting.

The Panel Secretariat will draft minutes of this meeting, which will be forwarded after the meeting to the participants as well as the Evaluation Management Board.

During the Final Subject panel meeting

- The Subject panel members responsible for the RUs will present their assessment and draft RU report to the other panel members and Chair.

In those cases where they considered that there was a need for more context or specialised information in order to reach a final assessment, the contracted Specialist advisor with the requested expertise will provide and explain his/her response to the questions posed by the Lead assessor.

- The Subject panel will collectively agree on the final assessment of each RU and will debate the reasoning behind the quality profiles in order to reach consensus.

If consensus cannot be reached, decisions will be taken by majority vote, in which the Subject panel Chair holds a casting vote

- The Subject panel Chair, supported by the Panel Secretariat, will keep under review the consistency of the scoring patterns with the outcomes of the calibration exercise throughout the entire process

Following the meeting, the panel members that were assigned the role of 'Lead' assessor for the different Research Units will finalise their **RU reports** and submit them to the Subject panel Chair.

The Subject panel Chair will quality review these RU reports and sign them off.

The Evaluation Management Team collates the report of the calibration exercise and the RU reports into the Subject Panel Report (see the template for this report in Appendix A -).

3.4.6 Development of the conclusive analytical reports at the Field level

The Subject panel Chairs will be responsible for writing out the **conclusive analytical report** at their field level. These reports will take the form of a conclusive aggregation of RU-level judgement to the higher field level.

Targeted readers of these reports are the bodies active in RD&I policy or programme development at the national level, i.e. the agencies, ministries, the Academy of Sciences, the RD&I Council, and the Office of the Government.

The report will take the form of a **SWOT analysis** of performance in the field in the Czech republic. This should **not** be confused with the SWOT analyses provided by the Research Units in their self-assessment reports: it will be based on

- The RU reports and especially the explanatory texts to the RU quality levels for each criterion and the panel conclusions and recommendations
- The reports on the Interdisciplinary Research Unit assessments including research in the field
- The input provided to other Subject panels during the cross-referrals

In case clarifications are needed, the Subject panel Chair can consult the lead RU assessors or the Subject panel members that were involved in cross-referrals or Interdisciplinary Research Unit assessments.

The Subject panel Chair will also be able to use the results of the bibliometric analysis at the field level, covering national performance in the different sub-fields and setting the field in the context of research in the disciplinary area (Indicator Groups A and B in the bibliometric data report).

The Panel Secretariat will support the Subject panel Chair with this analysis, providing synthetic analyses against specific topics and operational assistance wherever requested and needed.

In the SWOT analysis, the sections on Strengths and Weaknesses will refer to the performance in the Czech Republic; Opportunities and Threats refer to the relevant external factors that may influence future performance (see the report template in Appendix B.2).

The strengths, weaknesses, opportunities and threats will be analysed from a scientific focus as well as systemic point of view. The Subject panel Chair will consider the following topics during the analysis:

- The availability of appropriate scientific equipment and research infrastructure
- The adequacy of research management in the Research Organisations, including human resources management
- The adequacy of education and training of future researchers in the field
- The overall structure of the RD&I system in the field (islands of excellence, overlaps, gaps, collaboration in the research community at the national level)
- The internationalisation of the research activities
- The quality and competitive positioning of research in the field at an international level
- The alignment of the scientific focus with international trends
- The adequacy of research strategies and the role of interdisciplinary research
- The value of the research activities for society, including research-industry collaboration and knowledge/technology transfer, collaboration with government bodies and input for policy making in the field, collaboration with citizen associations, and/or outreach to the broader society

He/she will cover in the report only those topics where he/she identified significant elements of strength, weakness, opportunities or threats. In the final section, he/she will summarise the main points of reflection related to past performance and provide recommendations for future improvement. This can refer to both the scientific focus of the research and improvements needed to the structure of the RD&I system in the field.

The analysis will **not** result in an aggregated score against the criteria at a field level nor is it the intention of this report to perform a comparative analysis of strengths and weaknesses in the Research Units involved. Specific Research Units may be referred to, but the reasoning relates to performance in the field at a national level.

The RU reports related to the field will be provided as an Appendix to the report.

3.4.7 Development of the conclusive analytical reports at the Evaluated Unit level

Designated Subject panel Chairs will be responsible for the **conclusive analytical reports at the Evaluated Unit level** (see Section 3.4.1 and Section 3.4.2).

Reports at Evaluated Unit level will be written only for Evaluated Units that register more than one Research Unit for evaluation.

Similar to the conclusive analytical reports at the field level, these reports will take the form of a conclusive aggregation of RU-level judgement to the institutional level. The staff members of the Evaluation Management Team will be able to use also the results of the bibliometric analysis, i.e. the indicator group B in the bibliometric data report which will give an overview of the relative contributions of each Evaluated Unit to each field in the Czech Republic.

Targeted readers of these reports are the institutional management of the Evaluated Unit (at the different levels in the structure of the research organisation) as well as the bodies active in RD&I policy or programme development at the national level, i.e. the agencies, ministries, the Academy of Sciences, the RD&I Council, and the Office of the Government.

Similar to the report at the field level, the report will take the form of a **SWOT analysis** of performance in the Evaluated Unit. This should **not** be confused with the SWOT analyses provided by the Research Units in their self-assessment reports: it will be based on the RU reports - and especially the explanatory texts to the RU quality levels for each criterion and the panel conclusions and recommendations. This will include eventual Interdisciplinary Research Unit assessments.

Staff members of the **Evaluation Management Team** will write these reports. The designated Subject panel Chairs will have mainly an auditory and quality control function, i.e.

- To check whether the conclusions of the RU panel reports are adequately and rightfully taken into consideration in the SWOT analysis
- To provide feedback and suggestions on which findings related to strengths, weaknesses, opportunities and threats merit specific emphasis in the report
- To provide feedback and suggestions for conclusions and recommendations
- To quality control the final EvU report

For this purpose the designated Subject panel Chair will receive from the Evaluation Management Team and provide feedback on

- A first synthetic report, covering all topics to be considered in the SWOT analysis (listed below) and indicating what the authors consider to be the most important findings
- A draft version of the EvU report, including the draft conclusions and recommendations

- A final version of the EvU report

In case of difficulties for the Subject panel Chair to ensure appropriate quality of the EvU report, he/she will inform the Main panel Chairs and the management of the Evaluation Management Team.

A template of the EvU report is provided in Appendix B.1.

The strengths, weaknesses, opportunities and threats will be analysed from a scientific focus as well as systemic point of view. The staff members of the Evaluation Management Team will consider the following topics during the analysis:

- The availability of appropriate scientific equipment and research infrastructure for the fields of research in the Evaluated Unit
- The adequacy of human resources management in the Evaluated Unit
- The adequacy of education and training of future researchers in the Evaluated Unit (if relevant)
- The quality and competitive positioning of research in the Evaluated Unit at the national level, including collaborations
- The internationalisation of the research activities in the Evaluated Unit
- The quality and competitive positioning of research in the Evaluated Unit at an international level
- The alignment of the scientific focus in the Evaluated Unit with international trends
- The adequacy of research strategies and the role of interdisciplinary research
- The value of the research activities for society, including research-industry collaboration and knowledge/technology transfer, collaboration with government bodies and input for policy making in the field, collaboration with citizen associations, and/or outreach to the broader society

Only those findings where significant elements of strength, weakness, opportunities or threats were identified will be covered in the report.

The analysis will **not** result in an aggregated score against the criteria at the level of Evaluated Unit nor is it the intention of this report to perform a comparative analysis of strengths and weaknesses in the Research Units.

The RU reports related to the Evaluated Unit will be provided as an Appendix to this report.

3.4.8 Final cross-panel meeting / Final Main panel meeting

Timing: Yr3, Mth 7-9, i.e.

- After the finalisation of the Subject Panel Reports, and
- After the finalisation of the conclusive analytical reports at field level

Participants: If possible, this meeting will combine the Final Main panel meeting with the Final cross-panel meeting, for the sake of efficiency. Participants will therefore be – for each disciplinary area: the Main panel Chair and Members and all Subject panel Chairs.

Objectives: During this meeting, all participants will contribute to the conduct of a SWOT analysis on performance in the disciplinary area in the Czech republic, thus providing input to the **conclusive analytical report at Disciplinary Area level**.

The template for this report is provided in Appendix B.3 to these Guidelines.

Tasks and process:

The Main panel Chair chairs this meeting.

The Evaluation Management Team will draft minutes of this meeting, which will be forwarded after the meeting to the participants as well as the Evaluation Management Board.

During this meeting:

- The Subject panel chairs will present the main conclusions of their analytical reports at the field level.

All participants will receive the field reports from the Evaluation Management Team **prior** to the meeting.

- The Main panel Chair will present the outcomes of a first synthetic report covering each of the SWOT analysis topics.

The Evaluation Management Team will be in charge of drafting this synthetic report, under the guidance of the Main panel Chair. This report will also include the outcomes of the bibliometric analysis at the disciplinary area (including the fields).

All participants will receive this first synthetic report **prior** to the meeting.

- The Subject panel Chairs and Main panel members discuss and provide their view and reflections. The discussion will be structured following the topics and structure of the SWOT analysis.

The participants will jointly consider which findings related to strengths, weaknesses, opportunities and threats merit specific emphasis in the report and which conclusions and recommendations can be drawn from them.

The discussions during the meeting will result in a preliminary draft of the analytical report at disciplinary area level, written by the Evaluation Management Team on the basis of the minutes taken during the meeting.

The Main panel Chair will review and eventually revise and complete this report and send it to the Subject panel Chairs and main panel members for consultation.

Based on the comments and feedback, the Main panel Chair will then finalise the report.

Similar to the other analytical reports, the strengths, weaknesses, opportunities and threats will be analysed from a scientific focus as well as systemic point of view.

The panel experts will consider the following topics during the analysis:

- The availability of appropriate scientific equipment and research infrastructure
- The adequacy of research management in the Research Organisations, including human resources management
- The adequacy of education and training of future researchers in the field
- The overall structure of the RD&I system in the field (islands of excellence, overlaps, gaps, collaboration in the research community at the national level)
- The internationalisation of the research activities
- The quality and competitive positioning of research in the field at an international level
- The alignment of the scientific focus with international trends
- The adequacy of research strategies and the role of interdisciplinary research

- The value of the research activities for society, including research-industry collaboration and knowledge/technology transfer, collaboration with government bodies and input for policy making in the field, collaboration with citizen associations, and/or outreach to the broader society

The Main panel Chair will cover in the report only those topics where he/she identified significant elements of strength, weakness, opportunities or threats.

In the final section, he/she will summarise the main points of reflection related to past performance and provide recommendations for future improvement. This can refer to both the scientific focus of the research and improvements needed to the structure of the RD&I system in the field.

The Panel Secretariat will support the Main panel Chair with this analysis, providing synthetic analyses against specific topics and operational assistance wherever requested and needed.

4. Guidelines for the Referees

There will be two Referees for each submitted research output: a First and a Second reader. The First reader has the core responsibility for the Review report and acts as 'lead' referee.

It is the task of the Evaluation Management Team to nominate the referees and assign the First and Second Reader, based upon the Referees' expertise and with the support of the Main panel and Subject panel chairs.

Prior to their work, the referees will receive

- The Evaluation Protocol, setting the overall context for their work
- The Guidelines to the panel experts, so that they understand how their work will feed into the overall evaluation
- Information on the instructions that were given to the Research Organisations for the submission of their 'most outstanding' outputs, including the definition of eligible outputs
- The Calibration exercise report of the relevant Subject panel

4.1 The role and tasks of the Referees

The methodological approach to the review process

The referees will have the exclusive role of assessing the scientific research excellence of a set of submitted research outputs. They will therefore focus exclusively on the assessment of each submitted research output against one of the five assessment criteria, i.e. the Scientific Research Excellence criterion.

The formulation of this assessment criterion and the values of the 5 quality levels are defined in the Evaluation Protocol and shown in the Review report (see Appendix A.4).

The key terms 'originality', 'significance' and 'rigour' are at the core of the assessment of the submitted research output and the assignment of the quality level against this criterion.

The evaluation methodology foresees that each Subject panel will define each of these key terms, setting them in the context of the practice and characteristics of their field. The Subject panels will do so during their 'calibration exercise' in their First Subject panel meeting.

The referees will receive the report on the outcomes of this calibration exercise in order to guarantee the consistency of their interpretations and assessment with the panel's decisions. They will apply rigorously the field-specific definitions of these key terms during their assessment. They can ask the Evaluation Management Team for clarifications if needed.

The process for the drafting of the Review report

The two referees will work separately and write out their section of the Review report for each submitted output. This will entail the assignment of a quality level score and an explanatory text for each research output.

All submitted research outputs will be delivered electronically and the Evaluation Management Team will arrange access to these outputs for the Referees.

The final step in the review process consists in the two Referees jointly agreeing upon a **suggestion** for a final quality level score for each submitted output. This suggestion will be included in their final Review report. The Review report (one per submitted output) will always include the assessment of both Referees. In case the Referees

cannot agree on such a suggestion, they will mention so and describe the reasons why. The First reader will be in charge of this report.

This suggestion for a final quality level score will be taken into consideration by the Subject panel members in their process for the definition of a final score of the Research Unit against the criterion Scientific Research Excellence.

[Notes: The calibration exercise is described at length in Section 3.4.3 of the Guidelines for the panel experts; the process for the remote assessment in Section 3.4.4. Even though the referees will receive the Guidelines for the evaluation panel experts, it may be worthwhile to repeat these two elements in the Guidelines that are specifically for the referees' use. We do not do so in this report in order to avoid redundancy.]

Doubts on the eligibility of the submitted outputs

In case the Referees doubt that a submitted research output assigned to them responds to the eligibility criteria set out for these outputs, they should immediately inform the Evaluation Management Team and the relevant Subject panel Chair.

The selected research outputs should correspond to the following criteria:

- Research Unit researchers should be among the main authors, preferably the main author(s)
- The publication should be based on research conducted at least partly in the Research Organisation
- The authors should be trained researchers that are employed by the EvU (so, not PhD students or visiting researchers)
- All submissions should be provided in electronic format and submitted in full, including books
- The language must be English; exception can be made for some fields in the Social Sciences and Humanities. This will be decided by the Evaluation Management Team

4.2 Timeline for the review process

The timing for the transfer of information and the research outputs to the Referees and for the finalisation of the individual Review reports and the final Review report is as follows:

Task	No later than:
Delivery of the calibration exercise report to the Referees	XX
Access to the submitted research outputs	XX
Finalisation of the individual review reports	XX
Finalisation of the final review report and delivery to the Evaluation Management Team	XX

5. Guidelines for the Research Organisations

This document contains the guidelines for the Research Organisations participating in the evaluation. Objective is to support the organisations in their participation to the evaluation and ensure a correct understanding of the information that is requested and the use the external evaluation panels will make of that information for their assessment.

It is intended as a template for future developments of the gGuidelines and reflects the Evaluation Methodology as it is described in our study reports. In future evaluation exercises, the methodology will be described in the Evaluation Protocol. In these Guidelines, we therefore refer to such protocol rather than to our study reports.

Key terms in the Evaluation Methodology are:

- Evaluated Unit (EvU), i.e. a Research Organisation or for the public HEIs, the organisational unit at the second level of the organisation's structure (faculties, centres, institutes etc).
- A Research Unit (RU) means the group or groups of staff in the EvU that conduct their *primary* research in a specific field, and by extension, the structures and environment that support their research and its application or impact. A Research Unit may comprise staff that work in multiple departments or organisational units in the EvU. An EvU staff member can be part of one RU only.

We have structured the Guidelines following the evaluation implementation process from the participating Research Organisations' perspective and provide instructions on how to submit the information required for each step, question and sub-question.

The intent is that the Guidelines can – and should - be consulted while filling in the forms for the submission of data and information. References are therefore made throughout the text to the relevant submission forms, questions and sub-questions. We start all instructions in the guidelines with a reference to the related question(s) (QX.X). The submission forms are annexed to this report as Appendix C.

The structure of the Guidelines is as follows:

- The process for the registration of the Evaluated Units and Research Units for evaluation is described in Section 5.2 (Form 1)
- Section 5.3 explains the process and requirements for the submission of the 'most outstanding' research outputs, which constitutes the key input for the Scientific Research Excellence assessment criterion
- In Section 5.4 we cover the questions set out in Form 2, covering background information on the 'Research environment in the Evaluated Unit'
- Section 5.5 gives indications on how to fill in Form 3 with data and information related to the 'Research environment for the Research Unit' assessment criterion
- Section 5.6 to Section 5.8 contain guidelines for the submission of data and information related to the 3 other assessment criteria, i.e. Membership of the research community (Form 4), Overall research performance (Form 5), and Societal relevance of the research activities (Form 6)
- Section 5.9 describes the process for the implementation of the Research Unit's SWOT analysis (Form 7)

We start the guidelines with an overview of the evaluation process and the relevant key concepts of the evaluation methodology.

5.1 Overview of the evaluation process for the Research Organisations

The evaluation is structured around 5 assessment criteria that jointly enable the fulfilment of the strategic objectives of the evaluation and funding system, i.e. to reward excellence in research, to improve research and performance building up capacity, and to enhance the value of research for society.

A core objective of the evaluation is the improvement of research and research management. To meet this objective, the evaluation system entails a self-assessment and an expert panel review. Input for the expert panel evaluation is, therefore, not only a set of data and information submitted by the participating Research Organisations, but also and foremost the participants' self-reflections on their performance. The final outcome of the evaluation system will be an assessment of past performance but will also have a forward-looking component, as a result of both the self-assessment and the panel evaluation.

5.1.1 Tasks in the evaluation process

Specific tasks of the participating Research Organisations in the evaluation process are:

- To identify and register the researchers forming the Research Unit(s)
- To coordinate the collection of information in order to justify recommendations for cross-referrals and/or the application for the registration of an Interdisciplinary Research Unit, if appropriate
- To set up the criteria and processes for the selection of the Research Units' most outstanding research outputs for review
- To coordinate the collection of the required data and information, controlling and guaranteeing their completeness and correctness
- To set up an internal self-assessment system, focusing on the identification of the Research Units' competitive positioning in the national and international environment
- To conclude the self-assessment process with a SWOT analysis, based on the data and information collected for the panels combined with the outcomes of the self-assessment, and define areas and actions for improvement

For this purpose, the Research Organisations and their Evaluated Units (EvU) will need to set up a structure, i.e. 'committees', at the level of the EvU and for each Research Unit.

These committees should include the relevant representatives of the research organisation's management as well as lead researchers in the different fields (Research Units). Their task is to coordinate the evaluation process within the institution, including the management of the self-assessment. Ideally, the latter will include all researchers forming the specific RU(s).

5.1.2 Data and information required

Quantitative data are asked in the form of time series, i.e. covering the 4 or 5 years (depending on the evaluation frequency) prior to the evaluation year (i.e. the 'evaluated period'). Break-off date is December 31 of the previous year.

Quantitative data is asked for the following:

- *Research and support staff* and the researchers' profile, at Evaluated Unit and Research Unit(s) level
- *PhD students* - enrolled, awarded, 'recruited' or trained by researchers in the Research Unit (only for Research Units teaching or training PhD students)

- *Total institutional funding*, at Evaluated Unit and (estimates) at Research Unit(s) level
- *External competitive and contract research funding*, at Research Unit(s) level

In order to reduce the burden on the Research Units, these data will be complemented with data directly extracted from the national RD&I Information System (IS) related to

- The *number and types of research outputs* by the researchers in the Research Unit during the evaluation period. These data will constitute the basis for the bibliometric analyses
- *Competitive funding* attained from national public sources for projects or grants where the researchers in the Research Unit acted as Principal Investigators

It is the responsibility of the Evaluated Unit to ensure that registration of research outputs in the RD&I Information System are made on a regular basis and are complete and correct.

The Evaluation Management Team will support the Evaluated Units in their data collection by providing

- The *list of all researchers* registered in the RD&I IS as affiliated to the Evaluation Unit, including their Identification number and gender
- The *list of all eligible research outputs* that are registered in the RD&I IS against the name of the researchers included in the RU

Qualitative information is requested for the following topics:

- Background information on the Evaluated Unit and the Research Unit(s) (organisational structure, scientific focus, history)
- Human resources management, for all researchers and for PhD students and postdoctoral fellows (the latter only for universities and university hospitals), at the Evaluated Unit and the Research Unit(s) level
- Research infrastructure, available and used by the Research Unit
- Research strategy and plans for the Research Unit
- National and international collaborations and esteem measures
- Knowledge and technology transfer activities to non-academic actors in society

For this qualitative information, word limits are given. These need to be considered (also) as an indication for the level of detail in the description that is required.

Results of the **self-assessment** should be reported regarding

- The adequacy of the research infrastructure in the Evaluated Unit for research in the field
- Key value and relevance of the RU activities for research and development
- The RU competitive positioning in the national and international context
- Societal value of the RU activities and research
- The final SWOT analysis and conclusions

More detailed information is provided in the next sections.

5.2 Registration to the evaluation (Form 1)

5.2.1 Contact persons for the Evaluated Unit overall and each Research Unit (Q1.1)

In order to manage the evaluation process internally, the Evaluated Units (EvU) need to set up a structure ('committees') at the level of the EvU and in case more than one Research Unit (RU) is registered, at the level of each RU. These committees should include the relevant representatives of the research organisation's management as well as lead researchers in the different fields (Research Units). Their task is to coordinate the evaluation process within the institution, including the management of the self-assessment. Ideally, the latter will include all researchers forming the specific RU(s).

For each of these committees, a contact person will be assigned. The Evaluation Management Team will contact these persons in case issues arise with the accuracy of the data or the evaluation panels have additional questions on the activities of the RUs and its outputs.

5.2.2 Type of Research Organisation (Q1.2)

The EvU is expected to position itself in the RD&I system by applying for the category of research organisation that best describes its key mission and main area of activity.

This information is fundamental for the evaluation panel to take into account the mission of the research organisation, based on the outcomes of the calibration exercise. It will also have its effects on the criteria applied for the performance-based component of the institutional funding for Research Organisations.

Types of Research Organisations are: Scientific Research Institutions, Industry & Business services Research Organisations, Public Service Research Organisations, and Natural Resources. The Evaluation Protocol holds the description of these Research Organisation types.

The following rules apply:

- Research institutes at the Academy of Sciences, Universities (public and private), Hospitals and medical research institutes that (also) provide medical services as hospitals, and Research Infrastructures should register as Scientific Research Organisations (mandatory)
- Museums, libraries, archives and other similar Research Organisations in the cultural sphere should register as National Resources (mandatory)
- The other Research Organisations can choose their categorisation based on their main field of activity and target customer (e.g. the industry or public sector).

5.2.3 Registration of the Research Unit(s) (Q1.3)

Participation to the evaluation is on a voluntary basis.

Evaluated Units can participate in the evaluation – and register one or more RU – only if they have published at least 50 eligible outputs during the evaluated period.

They can

- Register a Research Unit only if the researchers forming the RU have published at least 50 eligible outputs in a *specific field* during the evaluated period.
- Apply for the participation in the evaluation of an Interdisciplinary Research Unit if there is a minimum of 50 eligible research outputs in *two or more fields* (see below)

The eligible research outputs and the rulings for the volume calculation as well as the structure of disciplinary areas and fields are defined in the Evaluation Protocol. The field allocation of the research outputs is the one chosen by the author(s) upon registration of the output in the RD&I Information System.

The Evaluation Protocol published by the Evaluation Management Team at the launch of the evaluation process will list the fields and their categorisation in disciplinary areas.

5.2.4 Suggestions / oppositions to panel members / referees for the RU(s) evaluation (Q1.4)

The Evaluated Units can provide suggestions or oppose to certain people to be part of the evaluation panels. The Evaluation Management Team, Main Panel Chairs and Panel Chairs will take these suggestions into account when nominating the experts.

Information required is the title and name, function or job title, institution of affiliation, country, email address, field (and for referees sub-field) of expertise, as well as the reason for the suggestion or opposition.

5.2.5 Recommendation for cross-referral (Q1.5)

This question should be compiled for each RU for which cross-referral is recommended.

Research Units can recommend cross-referrals for their assessment among Subject Panels in the disciplinary area.

For this purpose they should

- Describe which part of their research is inter-disciplinary (word limit: 50 words) (Q1.5.a)
- Explain the reasons for their recommendation, i.e. for which assessment criteria or sub-criteria is cross-referral recommended? (Word limit: 50 words) (Q1.5.b)
- Suggest the field (within the disciplinary area) that is most relevant for the RU (the host field) and up to two additional fields (Q1.5.c)

The Chairs of the relevant Main Panel and Subject Panels will use this information to allocate the EvU to one of the Subject Panels that will have key responsibility for the assessment. They will consider whether the Subject Panel members have sufficient expertise to assess the RU and if not, whether panel members of a second or third Subject Panel should be involved in the assessment of the RU.

Where parts of the submission are cross-referred, the 'host' Subject Panel will specify the scope of advice that it is seeking: this may range from advice on the RU performance against specific assessment criteria or sub-criteria to advice on specific features of the narratives or data provided. The 'host' Subject Panel will retain responsibility for the decision on the quality level assigned.

5.2.6 Application for the registration of an Interdisciplinary Research Unit (Q1.6)

An Evaluated Unit can apply for the participation of Inter-disciplinary Research Unit in case it conducts at least 30% of its research activities *across* disciplinary areas.

The EvU will need to make a **convincing case** that interdisciplinary research is a significant feature of the research in the IRU and demonstrate that there is a strategic connection and strong collaboration between the researchers active in the different fields.

Information that is required is:

- A general statement explaining the reasons why the status of IRU is justified and indicating the lines of research concerned and the objectives (word limit: 50 words) (Q1.6.a)
- Data on research outputs/bibliometrics, where 30% of the output production should cover more than 1 disciplinary area. For this purpose, the EvU is required

to present the breakdown of the total volume of eligible research outputs over the evaluation period by the researchers in the IRU (see below) (Q1.6.b)

- The scientific background of the lead researchers involved, by means of concise extracts of CVs containing the relevant information (the lead researchers should be named) (word limit: 200 words) (Q1.6.c)
- Co-publications of researchers active in the different fields, with researchers in the EvU or externally (Q1.6.d)
- A statement of research strategy for the evaluation period where the intention to conduct interdisciplinary research is apparent (word limit: 200 words) (Q1.6.e)
- Indication of which field is most relevant for the IRU (the host field) and up to three additional fields in (an)other disciplinary area(s) (Q1.6.f)
- Present the list of researchers included in the IRU. The list should include name and surname, ID number in the RD&I IS, function or job title (at present), the researcher's *main* and *additional* field(s) of expertise (Q1.6.g)

Data on the research outputs should apply the rulings on eligible outputs for participation and volume calculation as defined in the Evaluation Protocol. Source for the field allocations is the RD&I Information System. The EvU can ask support to the Evaluation Management Team in relation to the data on research outputs/bibliometrics, if needed.

The relevant Main Panel Chairs will decide – based on the *total* of the information submitted - whether to accept the application for the IRU. There will be no right of appeal to their decision.

For the assessment of the Interdisciplinary Research Units (IRU), ad-hoc panels will be installed. These Ad-hoc panels will be chaired by the most relevant Main panel Chair and will include members from two or more Subject Panels, covering two or more fields.

5.2.7 Declaration of the accuracy of the information (Q1.7)

The signature of this statement is mandatory for participation in the evaluation. It needs to be signed by the head of the EvU Committee who holds overall responsibility for the correctness and completeness of the information provided for this evaluation.

5.2.8 Listing of the researchers forming the RUs (Q1.8)

The Evaluation Management Team provides each EvU with the list of researchers affiliated to the EvU based on data in the RD&I IS prior to or at the moment of the launch of the evaluation exercise. This list includes the researchers' ID number in the RD&I IS and their gender.

The EvU should validate this list and complete it with

- The researchers' function and/or job title (at present)
- To which Research Unit it registers the researchers

The list of researchers included in the Research Unit and their Unique Identifiers is the basis for the extraction of information directly from the RD&I Information System, allowing for

- The identification of all research outputs by the researchers in the Research Unit during the evaluation period
- The calculation of the competitive funding attained from national public sources for projects or grants where the researchers in the Research Unit acted as Principal Investigators

5.3 Submission of the ‘most outstanding’ research outputs

The process for the *selection* of the RU ‘most outstanding’ research outputs is as follows:

1. For each Research Unit, the Evaluation Management Team will provide the list of all eligible research outputs (no matter the field) that are registered in the RD&I IS against the name of the researchers included in the RU. It is the responsibility of the Evaluated Unit itself to ensure that the registrations in the RD&I IS are complete.
2. This list forms the basis for the selection of the *most outstanding* research outputs for peer review and therefore the assessment of the RU against the criterion of Scientific Research Excellence (see the Evaluation Protocol). The research output is selected from eligible research outputs published in the field of the RU.

Research outputs in other fields can be submitted only if the Research Unit has been granted the status of Interdisciplinary Research Unit or if cross-referrals have been accepted (see Sections 5.2.5 and 5.2.6, above). In these cases, research outputs can be submitted also for the fields that were indicated in the application

The process for the *submission* of the selected outputs will be described in the Evaluation Protocol.

Selected research outputs should have the following characteristics:

- RU researchers are among the main authors, preferably the main author(s)
- The publication is based on research conducted at least partly in the Research Organisation
- The authors are trained researchers that are employed by the EvU (so, not PhD students or visiting researchers)
- All submissions need to be provided in electronic format and need to be submitted in full, including books
- The language must be English; exception can be made for some fields in the Social Sciences and Humanities, upon decision by the Evaluation Management Team

Eligible research outputs are defined in the Evaluation Protocol. The field allocation of the research outputs is the one chosen by the author(s) upon registration of the output in the RD&I Information System.

For each Research Unit, the Evaluated Unit will submit for review a number of research outputs that accounts for minimum 1% and maximum 2% of the **total** number of eligible scholarly outputs by the researchers in the Research Unit over the evaluation period - but no less than 3 and no more than 20.

‘Total number’ means that all eligible research outputs published by the researchers forming the Research Unit should be counted, no matter the field in which they were published.

5.4 Research environment in the Evaluated Unit (Form 2)

All Evaluated Units should fill in this form.

5.4.1 Background information on the Evaluated Unit (Q2A)

This section collects key background information on the Evaluated Unit in terms of its historical context, research focus, and organisation structure. It provides important information for the evaluation panels to understand the broader context of the research conducted in the Research Unit(s).

Q2A.1: Description of the Evaluated Unit

Provide a short description of the Evaluated Unit. What is its legal entity and how does it fit in the Czech Research and Development System? What is its long-term mission? What are the main fields and foci of research?

Word limit is max 500 words.

Q2A.2: Organogram of the Evaluated Unit

Please provide an organogram, i.e. organisational chart, of the Evaluated Unit (in English), indicating also the foci of research in the different organisational units.

Q2A.3 – Historical background of the Evaluated Unit

Describe the historical (i.e. past 10 years) development of the Evaluated Unit and the development and trends in importance of the organisational units.

Word limit is max 500 words.

5.4.2 Research and support staff in the Evaluated Unit (Q2B)

Focus for this section is the *research capacity* of the Evaluated Unit and balance in terms of expertise of the researchers involved.

For EvUs that register more than 1 Research Unit, these data set the basis for the understanding of the positioning of the RUs within the institutional context.

In case the EvU registered only 1 Research Unit covering all the EvU research activities, this information will inform the evaluation panels for their assessment of the RU Research Environment. Data on the total FTE researchers will also be used to assess the *research productivity* of the RU.

Staff overview (Q2B.1-3)

Q2B.1: Headcounts; Q2B.2: FTE; Q2B.3: Eventual clarifications on trends

Data on the EvU staff is collected using the definitions set by the Czech Statistical Office for the comprehensive statistical survey on R&D:

- *Researchers*: professionals engaged in the conception or generation of new knowledge, products, processes, methods and systems or managing of such projects. They are mostly scientific specialists or heads of R&D departments
- *Technicians and equivalent staff (referred to as “technicians”)*: persons who participate in R&D activities by performing scientific and technical tasks involving the application of concepts and operational methods (usually under the supervision of researchers)
- *Other supporting staff (referred to as “other personnel”)*: skilled and unskilled craftsmen, secretarial and clerical staff participating in R&D activities or directly associated with such activities; included are also managers and office staff who provide direct support for R&D

These data need to be provided in terms of Headcounts and FTE.

Full-time equivalent (FTE) brings information about real volume devoted to research and development activities. One FTE is equal to one year of work fully devoted to R&D.

For example: if a person's working time in the research organisation is 40% of that of normal working time (i.e., 16 h/week), but 4 hours are spent in different work for example, teaching, administrative duties, consultations, this is calculated as 0.3 FTE.

This variable is important especially to measure volume of R&D activities by persons who do not devote to R&D fully but are engaged also in other activities (for example, professors who teach as well as do research).

The data should cover all contracted staff members in the EvU; excluded are only visiting professors/ scientists.

For the sake of consistency and comparability with data provided by the HEIs, **all** Research Organisations should count in contracted PhD students under the category of researchers.

Comments and clarifications on the trends in the evaluated period can be given in Q2B.3 if considered useful information for the evaluation panels (word limit: 50 words).

Profile of the researchers (Q2B.4-10)

Q2B.4: Headcounts; Q2B.5: FTE; Q2B.6: Contracted PhD students in the HEI; Q2B.7: Eventual clarifications on trends

These data relate **only** to the staff members counted under the category “researchers” in the preceding sub-section.

The EvU is asked to indicate their job titles and function in the organisation. Also in this case, data in Headcounts and FTE are required (see the sub-section above for definitions).

Three typologies of research staff categories are provided: the one in use in the HEI, the one used in the Academy of Sciences research institutes, and a ‘general’ one for use of the other Research Organisations. Research Organisations can use the typology that suits them best.

For the Academy of Sciences research institutes and the ‘standard’ typology, contracted PhD students form a separate category within the typology. Higher Education Institutes are asked to indicate the number of contracted PhD students that are counted in as researchers (Q2B.6).

Typology of functions in the HEI:

English	Czech
Professors	Profesoři
Associate professors	Docenti
Assistant professors	Odborní asistenti
Instructors	Asistenti
Scientific workers (not academic staff defined by the Act No. 111/1998 Coll.	Vědečtí pracovníci (nejsou akademickými pracovníky dle § 70 zákona č. 111/1998 Sb., o vysokých školách)

Typology of functions in the Academy of Sciences

	Degree	English	Czech	Definition
	1.	Research assistant	Odborný pracovník výzkumu a vývoje	Employee with completed university degree
	2.	Graduate student	Doktorand	Employee – PhD student
RESEARCHERS	3a	Postdoctoral fellow	Postdoktorand	Employee with PhD degree; works usually under a leadership of experienced researchers (max. up to 5 years after obtaining PhD)
	3b	Associate scientist/scholar	Vědecký asistent	Employee with PhD degree who has not been assigned to the degree 4 or 5 in 5 years after obtaining PhD
	4	Scientist/scholar	Vědecký pracovník	Employee with PhD degree, works independently, publishes in international journals, usually leads research projects
	5	Senior scientist/scholar	Vedoucí vědecký pracovník	Employee meeting the criteria for degree 4 who is a leading person in particular scientific field and significantly contributes to that field internationally

Comments and clarifications on the trends in the evaluated period can be given in Q2B.7 if considered useful (word limit: 50 words).

5.4.3 Human Resource (HR) management (Q2C)

Data in this section provides information to the evaluation panels on how the institutional management (the EvU) develops and maintains structures and practices that foster good research in the field and (in the case of HEIs and university hospitals) has in place the adequate management structure and processes to help early-career researchers making their way into the profession.

HR arrangements are normally defined at the level of Evaluated Unit. This information therefore will inform the evaluation panels for their assessment of the Research Environment of the Research Unit. EvUs that register more than 1 Research Unit can indicate RU-specific arrangements for HR management in Form 5 (see Section O, below).

Q2C.1-4: Career development

The questions in this section ask for a statement on the policy in the EvU in relation to career development of researchers in general.

Word limit for each of these questions is 300 words.

The specific questions are:

- The appraisal and monitoring system - Is there an appraisal and monitoring system in place? Do you have a competency framework for different job roles? (Q2C.1)
- Process and frequency of performance reviews - How often is employee performance reviewed? How often do employees provide feedback on potential concerns, issues, challenges related to their jobs? (Q2C.2)

- Promotion procedures - What are the promotion criteria? Are there individual targets set? How else do you tackle the career development of your employees? (Q2C.3)
- General support to the researchers and their work - How do you develop and maintain structures and practices that foster good research? Are the employees consulted on their needs? (Q2C.4)

Q2C.5-8: Career development of PhDs and post-docs

Only for Higher Education Institutes and University Hospitals:

The specific questions related to the career development of PhDs and Postdocs are:

- The PhD programme - What are the objectives and outcomes of the PhD programme? (in particular mission of the programme and career destination of PhD-graduates) (Q2C.5)
- Support for work placement - How does the EvU help early-career researchers to make their way into the profession? (Q2C.6)
- Supervision - What are the rights and obligations of both supervisors and PhD candidates? (Q2C.7)
- Educational components for the training of PhDs (Q2C.8)

Word limit for each of these questions is 300 words.

5.4.4 Total institutional funding (Q2D.1-2)

Data on institutional funding gives the evaluation panels and indication on the long-term financial sustainability of research in the Evaluated Unit.

For EvUs that register more than 1 Research Unit, these data set the basis for the understanding of the positioning of the RUs within the institutional context.

In case the EvU registered only 1 Research Unit covering all the EvU research activities, these data will inform the evaluation panels on the long-term financial sustainability of research in the Research Unit. In combination with the other funding mix data, it also indicates the level of dependence on this type of funding.

Q2D.1: Institutional funding

Please indicate the total amount of institutional funding for research received by the Evaluated Unit, i.e. the ‘institutional funding for the long-term development of research organisations’.

Indicate separately the total amount of other institutional funding. ‘Other funding’ can comprise funding for teaching in universities, acquisition of equipment, etc. Please specify in the table which ‘other’ institutional funding is referred to.

Data need to be provided in raw numbers, in thousands Czk.

Q2D.2: Eventual clarifications on trends

Comments and clarifications on the trends in the evaluated period can be given in Q3C.2 if considered useful (word limit: 200 words).

5.5 Research Environment for the Research Unit (Form 3)

Responsibility: the RU Committee

This form needs to be filled in by **all Evaluated Units and for each RU** registered.

Only if the data required is fully identical to the data provided in Form 2 (the Research Environment in the EvU) can the question be left open. It is mandatory to indicate this in the space provided for the question that has been left open.

We give indications in the text below when this may be the case.

5.5.1 Background information on the Research Unit (Q3A)

Q3A.1 – Historical background of the Evaluated Unit

Describe the historical (i.e. past 10 years) development of the Research Unit and the development and trends in importance in the context of the Evaluated Unit.

Word limit is 200 words.

Q3A.2 - Fields and foci of research in the RU

Describe the main fields and foci of research in the Research Unit. In case the research carried out is clearly specialised, describe each sub-field separately. Describe the role of multidisciplinary or interdisciplinarity and the role of basic and applied research.

Word limit is 200 words.

Q3A.3 - Organisational structure for the researchers in the Research Unit

Please list the organisational units where researchers included in the Research Unit are active, their foci of research in the field of the Research Unit, and the number of RU researchers employed.

Q3A.4 - Peer-reviewed journal published in the field

If the research organisation publishes a peer-reviewed journal in the field in-house please provide the following information:

- What is the name of the journal (in full and in English)
- What is the language for publication?
- When was it established?
- What is its scientific focus?
- Is it listed in an international journal database? If yes, which one?
- What type of peer-review is exercised? Indicate whether it is international with external committee members, national with external committee members, or internal.

5.5.2 Research and support staff

These data inform the evaluation panel on the *research capacity* of the RU and the balance in the Research Unit in terms of expertise of the researchers involved. Data on the total FTE researchers will also be used to assess the *research productivity* of the RU.

Staff overview (Q3B.1-3)

The data required in this sub-section are identical to the ones asked in Form 2 (Section 5.4.2, above). This sub-section should not be filled in only in case **all** researchers in the Evaluated Unit are part of the Research Unit and therefore the data in Form 2 and this sub-section would be fully identical.

Q3B.1: Headcounts; Q3B.2: FTE; Q3B.3: Eventual clarifications on trends

Data on the EvU staff is collected using the definitions set by the Czech Statistical Office for the comprehensive statistical survey on R&D:

- *Researchers*: professionals engaged in the conception or generation of new knowledge, products, processes, methods and systems or managing of such projects. They are mostly scientific specialists or heads of R&D departments

- *Technicians and equivalent staff (referred to as “technicians”)*: persons who participate in R&D activities by performing scientific and technical tasks involving the application of concepts and operational methods (usually under the supervision of researchers)
- *Other supporting staff (referred to as “other personnel”)*: skilled and unskilled craftsmen, secretarial and clerical staff participating in R&D activities or directly associated with such activities; included are also managers and office staff who provide direct support for R&D

These data need to be provided in terms of Headcounts and FTE.

Full-time equivalent (FTE) brings information about real volume devoted to research and development activities. One FTE is equal to one year of work fully devoted to R&D.

For example: if a person’s working time in the research organisation is 40% of that of normal working time (i.e., 16 h/week), but 4 hours are spent in different work for example, teaching, administrative duties, consultations, this is calculated as 0.3 FTE.

This variable is important especially to measure volume of R&D activities by persons who do not devote to R&D fully but are engaged also in other activities (for example, professors who teach as well as do research).

The data should cover all contracted staff members in the EvU; excluded are only visiting professors/ scientists.

For the sake of consistency and comparability with data provided by the HEIs, **all** Research Organisations should count in contracted PhD students under the category of researchers.

Comments and clarifications on the trends in the evaluated period can be given in Q3B.3 if considered useful information for the evaluation panels (word limit: 50 words).

Functions of the researchers (Q3B.4-7)

The data required in this sub-section are identical to the ones asked in Form 2 (Section 5.4.2, above). This sub-section should not be filled in only in case **all** researchers in the Evaluated Unit are part of the Research Unit and therefore the data in Form 2 and this sub-section would be fully identical.

Q3B.4: Headcounts; Q3B.5: FTE; Q3B.6: Contracted PhD students in the HEI; Q3B.7: Eventual clarifications on trends

These data relate **only** to the staff members counted under the category “researchers” in the preceding sub-section.

The EvU is asked to indicate their job titles and function in the organisation. Also in this case, data in Headcounts and FTE are required (see the sub-section above for definitions).

Three typologies of research staff categories are provided: the one in use in the HEI, the one used in the Academy of Sciences research institutes, and a ‘general’ one for use of the other Research Organisations. Research Organisations can use the typology that suits them best.

For the Academy of Sciences research institutes and the ‘standard’ typology, contracted PhD students form a separate category within the typology. Higher Education Institutes are asked to indicate the number of contracted PhD students that are counted in as researchers (Q2B.6).

Typology of functions in the HEI:

English	Czech
Professors	Profesoři
Associate professors	Docenti
Assistant professors	Odborní asistenti
Instructors	Asistenti
Scientific workers (not academic staff defined by the Act No. 111/1998 Coll.	Vědečtí pracovníci (nejsou akademickými pracovníky dle § 70 zákona č. 111/1998 Sb., o vysokých školách)

Typology of functions in the Academy of Sciences

	Degree	English	Czech	Definition
	1.	Research assistant	Odborný pracovník výzkumu a vývoje	Employee with completed university degree
	2.	Graduate student	Doktorand	Employee – PhD student
RESEARCHERS	3a	Postdoctoral fellow	Postdoktorand	Employee with PhD degree; works usually under a leadership of experienced researchers (max. up to 5 years after obtaining PhD)
	3b	Associate scientist/scholar	Vědecký asistent	Employee with PhD degree who has not been assigned to the degree 4 or 5 in 5 years after obtaining PhD
	4	Scientist/scholar	Vědecký pracovník	Employee with PhD degree, works independently, publishes in international journals, usually leads research projects
	5	Senior scientist/scholar	Vedoucí vědecký pracovník	Employee meeting the criteria for degree 4 who is a leading person in particular scientific field and significantly contributes to that field internationally

Comments and clarifications on the trends in the evaluated period can be given in Q3B.7 if considered useful (word limit: 50 words).

Profile of the researchers (Q7D.1-4)

Data required in this sub-section are additional to the ones asked in Form 2; therefore, this sub-section needs to be filled in by **all Evaluated Units**.

These questions relate only to the staff members counted under the category “researchers”. They aim at providing the evaluation panels with a view on the constituency of the Research Unit - beyond the job titles. The data on the gender balance are an indication for the attention to equity in the Research Unit. The question on inbreeding aims at understanding the openness of the RU to researchers, theories and methods in other research organisations. The question is to what extent the Research Unit is made up of researchers who received their PhD or degree training in the same Research Organisation.

Q3B.8: Age of the researchers

Please provide the data in terms of Headcounts. The total number of researchers should be the same as the totals in Q5A.4, above.

The breakdown of the researchers by age group follows the format used in university annual reports, i.e.

- Less than 29 years
- 30-39 years
- 40-49 years
- 50-59 years
- 60-69 years
- 70 years and more

Q3B.9: Gender balance

Please provide the data in terms of Headcounts. The total number of researchers should be the same as the totals in Q5A.4, above.

Q3B.10: Inbreeding

Only Research Organisations that teach and/or train PhD students should fill in this question.

Please provide the data in terms of Headcounts. The total number of researchers should be the same as the totals in Q5A.4, above.

Q3B.11: Eventual clarifications on trends

Comments and clarifications can be given (word limit: 50 words).

5.5.3 HR management in the Research Unit (Q3C)

HR arrangements are normally defined at the level of Evaluated Unit. For this reason, the core information on this topic is collected at the level of Evaluated Unit, i.e. in Form 2 (see Section 5.4.3, above).

Topics that were covered in that section included the appraisal and monitoring system, the process and frequency of performance review, the promotion procedures, and the general support to the researchers and their work in terms of structures and practices.

In this section the opportunity is provided for indicating any additional or different HR management policies and processes that regard the researchers included in the Research Unit.

Word limit is 200 words.

5.5.4 Total institutional funding (Q3D)

Data on institutional funding gives the evaluation panels an indication on the long-term financial sustainability of the Research Unit. In combination with the other funding mix data, it also indicates the level of dependence on this type of funding.

The data required in this sub-section are identical to the ones asked in Form 2 (Section 5.4.2, above). This sub-section should not be filled in only in case **all** researchers in the Evaluated Unit are part of the Research Unit and therefore the data in Form 2 and this sub-section would be fully identical.

Q3D.1: Institutional funding for research; Q3D.2: Eventual clarifications on trends

Based on the indications of the institutional funding at EvU level indicated in Form 2 (see Section 5.4.4, above), please estimate the amount of institutional funding in all its components allocated to the RU. Please provide an estimate of the raw data, in thousands of CZK.

Q3D.2 gives the opportunity for clarifications or comments (word limit: 50 words).

5.5.5 Research Infrastructure (Q3E)

Research infrastructure is an important component for research in any field of science. Information on the availability of up-to-date research infrastructure to the Research Unit is an indication of the extent to which the Research Unit is adequately supported by its institution. This information will therefore influence the evaluation panels' assessment of the Research Environment for the Research Unit.

Critical for the evaluation panels is the information provided in the self-assessment on this topic, assessing the adequacy of the research infrastructure in the Evaluated Unit, relating it to the research needs of the Research Unit.

The shared or collaborative use of research infrastructure, in the EvU or in other institutions, gives a view on the efficient use of expensive equipment in the country. The use of major research infrastructures (including e-infrastructures) on a competitive basis testifies also the quality of the research in the Research Unit and its level of competitiveness.

Q3E.1: Relevant research infrastructure in the EvU

This question regards the availability and use of research infrastructure in the EvU, in terms of research equipment, computer resources, databanks, material collections, archives, etc, both for researchers in the Research Unit and for outside users.

Please select and describe only the most important pieces of equipment or resources that researchers in the Research Unit use for their research – and however no more than 10. The word limit for the description is 50 words.

Also please indicate whether the use of the research infrastructure is shared with researchers from other Evaluated Units and give the name of the institution.

Q3E.2: Other national research infrastructure (non-competitive access);

Please indicate whether researchers in the Research Unit use research infrastructure located in other Czech research organisations for their research. Select only the most important cases – and however no more than 10.

Give the name of the research infrastructure and the institution where it is located (the 'owner'), describe it and indicate for which research activities it was used. Word limit for the descriptions is 50 words.

Q3E.3: Use of major research infrastructures (competitive access)

Please indicate whether researchers in the Research Unit gained competitive access to major research infrastructures - be they single site, distributed or e-infrastructures, in the Czech Republic or abroad. Select only the most important cases – and however no more than 10.

Give the name of the research infrastructure and the institution where it is located (the 'owner'), the time awarded and describe the purpose of its use. Word limit for the description is 50 words.

Q3E.4: Adequacy of the research infrastructure (self-assessment)

Please make an overall comment on the adequacy of the research infrastructure in the Evaluated Unit for research in the Research Unit, relating it to the research needs of the Research Unit.

Questions are to what extent the research infrastructure in terms of buildings, equipment and other physical infrastructure is adequate to respond to the needs of the Research Unit. Which equipment is missing or should be updated, and why (i.e. related to ongoing or planned research activities)?

The word limit is 500 words.

Q3E.5 gives the opportunity for clarifications or comments (word limit: 50 words).

5.5.6 Research strategy for the Research Unit (Q3F)

A critical factor for performance in research is the establishment of a long-term research strategy and the identification of the roadmap (the ‘research plans’) to reach the defined objectives. The existence and quality of such strategy and plans constitutes a key criterion for the evaluation panels’ assessment of the quality of the institutional management, and thus the Research Environment.

Evaluation panels are especially interested in understanding whether strategic, long-term research plans have been defined for guiding the research in the RU, how and upon which basis they have been developed, what they entail and how the researchers in the RU and their management seek to realize those plans.

Q3F.1-6: Description of the research strategy for the RU

In this section, the research strategy for the next 5 years should be described. The following topics should be covered:

- Process for the research strategy and plan development: What has been the process for the development of the long-term research strategy and plans for research in the RU? Which actors were involved in the process (internal and/or external to the Research Organisation)? How were they consulted/involved? Has there been use of evidence data? (Word limit: 200 words) (Q3F.1)
- Research strategy and plan description: Upon which main considerations is the strategy based? What are the key research objectives for research in the RU? What means have been defined to achieve these objectives? Are performance indicators in place to measure progress? What are they? (Word limit: 500 words) (Q3F.2)
- The research strategy in the context: How is the research strategy for the Research Unit aligned with the national priorities? (Word limit: 200 words) (Q3F.3)

Q3F.4 gives the opportunity for additional clarifications or comments (word limit: 50 words).

5.6 Membership of the (global & national) research community (Form 4)

Responsibility: the RU Committee

This form needs to be filled in by all Evaluated Units and for each RU registered.

5.6.1 National research presence and esteem (Q4A)

This section collects data on the main channels through which the researchers in the Research Unit interact with the national research community. It informs the evaluation panels on the competitive positioning of the Research Unit in the national R&D system and the extent to which it is involved in the national networks. It therefore shows the extent to which researchers in the Research Unit actively *exchange knowledge* with their peers in other organisations. In combination with the information collected on the international research presence and esteem, it also suggests the role of the RU researchers in *transferring knowledge* gained during their international collaborations to the national R&D system.

Several funding bodies in the Czech Republic have launched programmes of centres of excellence or competence (academic-industrial research) centres as well as research infrastructures bringing together multiple researchers into large teams and often crossing the boundaries of sub-disciplines and even disciplines. Also programmes funding projects directed at providing and developing various kinds of research infrastructures in the context of the Czech Republic, Europe or worldwide. Participation of researchers in the Research Unit in these programmes are therefore an important indication of the extent to which the Research Unit is involved in these efforts to enable Czech teams better to compete on a level footing with teams abroad

and be better equipped to exchange and cooperate with them, as members of the relevant global research communities.

Information in this section will primarily inform the assessment of the RU Membership of the research community, but will also provide background information for the assessment of the Overall research performance and (in the case of Centres of Competence) for the Societal relevance assessment criteria.

Q4A.1: Participation in national Centres and Research Infrastructures

This question collects information on participation by researchers in the RU in a Research Centre, Centre of Excellence, Centre of Competence or Research Infrastructure in the past five years.

Please select only the most important cases – and however no more than 10.

Indicate the name of the Centre or Research Infrastructure (the full name, in English), the focus of the research, the names of the main project partners (in English), the total funding for the Centre or Research Infrastructure (over all years, in thousands CZK), the share for the researchers in the Research Unit (over all years, in thousands CZK), and describe the role of the RU researchers in the Centre or Research Infrastructure activities.

For all descriptions, a word limit of 50 words applies.

Q4A.2: Most important national collaborations and partnerships

This question asks for details on *important* national collaborators or partners of the researchers in the Research Unit, i.e. an institution or research team with whom the cooperation has either generated or is expected to generate a research output or outcome. These institutions may be public or private research organisations or other private (commercial) entities with which researchers in the Research Unit have set up R&D collaborations.

Please list only the most important national collaboration partners – and however no more than 10. Names should be indicated in English. Provide also the name and details (telephone number) of a contact person in that organisation.

Indicate the core type of collaboration, for example joint research projects, researcher mobility, shared use of resources or infrastructure, etc., and describe the most important outcomes of these collaborations, for example key joint publications, researcher or PhD training, adoption and use of new technologies or new approaches, etc.

Word limit for the description is 50 words.

Q4A.3: Most important scientific prizes, honours and scientific positions of trust

Please list Scientific Prizes, honours and scientific positions of trust awarded to researchers in the Research Unit over the evaluated period. Please select the most important cases – and however no more than 10.

Indicate the name of the prize or position (in English), the name of the organisation awarding the prize (in full and in English) and the name of the researcher and his/her function or job title.

Q4A.4: Most important memberships of scientific advisory boards

Please list the organisations in which researchers in the Research Unit are members of scientific advisory boards, in academia or R&D governance bodies (e.g. the Science Foundation – GACR or the Technology Agency – TACR). Please select the most important cases – and however no more than 10.

Provide the name of the organisation (in full and in English) and describe the organisation. Give the name of the researcher or researchers and his/her/their

function or job title, and indicate the type of membership, i.e. the role taken up in the advisory board.

Word limit for the organisation's description is 50 words.

5.6.2 International research presence and collaboration (Q4B)

This section collects data on the main channels through which the researchers in the Research Unit interact with the international research community. It informs the evaluation panels on the competitive positioning of the Research Unit internationally and the extent to which it is involved in European or global networks. It shows the extent to which researchers in the Research Unit have access to the state-of-the-art in their field of research, to the benefit of their (future) research performance and the development of future research capacity in the country. The profile of the international partners and the intensity of the collaboration as well as the outputs and outcomes of these collaborations will give the evaluation panels a view on their potential value in terms of knowledge gain and exchange.

Information in this section will primarily inform the assessment of the RU Membership of the research community, but will also provide background information for the assessment of the Overall research performance.

Q4B.1: Most important collaborations with institutions in other countries

This question asks for details on *important* international collaborators or partners of the researchers in the Research Unit, i.e. an institution or research team with whom the cooperation has either generated or is expected to generate a research output or outcome. These institutions may be public or private research organisations or other private (commercial) entities with which researchers in the Research Unit have set up R&D collaborations.

Please list only the most important international collaboration partners – and however no more than 10.

Please give the name of the partner organisation (in full and in English), the country of location and the name and details (telephone number) of a contact person in that organisation.

Indicate the core type of collaboration, for example joint research projects, researcher mobility, shared use of resources or infrastructure, etc., and describe the most important outcomes of these collaborations, for example key joint publications, researcher and/or PhD training, adoption and use of new technologies or new approaches.

Word limit for the description is 50 words.

Q4B.2: Most important study visits coming from abroad

Please state whether any researchers from abroad came on study-visits during the evaluation period. Eligible visits are only those of at least one month's duration with a visitor of at least PhD level.

Please list only the most important international collaboration partners – and however no more than 10.

Indicate the name of the visitor, his/her institution of affiliation and country of location, and the category of the researcher, i.e. PhD student, Postdoctoral fellow, ('mature') researcher.

Indicate the total number of months of the visit and describe the focus of the research conducted (max 50 words).

Q4B.3: Most important study visits to institutions abroad

Please state whether any researchers that are part of the Research Unit conducted study-visits to institutions outside the Czech Republic during the evaluation period. These institutions may be public or private research organisations or other private (commercial) entities with which researchers in the Research Unit have set up R&D collaborations. Eligible visits are only those of at least one month's duration with a visitor of at least PhD level.

Please list only the most important cases – and however no more than 10.

Indicate the name of the visitor, the name and country of the institution visited, and the category of the researcher, i.e. PhD student, Postdoctoral fellow, ('mature') researcher.

Indicate the total number of months of the visit and describe the focus of the research conducted (max 50 words).

Q4B.4: Most important membership in international editorial boards

Please list international journals in which researchers in the Research Unit were or are members of the editorial boards. This **excludes** international journals published in-house. The journals should target the scientific research community, i.e. not the users of research outputs or the broader society.

Please list only the most important international journals – and however no more than 10.

Give the title of the journal (in full and in English) and describe its scientific focus (maximum 50 words). Indicate the name and function(s) of the researcher(s) member(s) of the editorial board and indicate the period of the membership and type of membership, i.e. the specific role of the researcher(s) in the editorial board.

Q4B.5: Most important international conferences

Please list key international conferences where researchers in the Research Unit were among the **main** organisers during the evaluation period. These conferences may have taken place in the Czech Republic or abroad. They should target the scientific research community, i.e. not the users of research outputs or the broader society.

Please select the most important conferences – and however no more than 10.

Indicate the title of the conference (in full and in English), dates, location, and the number of participants.

Give a short description of the scientific focus of the conference (word limit is 50 words) and indicate the role of the researchers in the RU for its organisation (max 50 words).

5.7 Overall Research Performance (Form 5)

5.7.1 Research Output (Q5A)

The evaluation panels will assess the Research Unit's research output both in terms of productivity and overall quality.

The relevant information is collected in the form of data on the number and types of research outputs, informing the bibliometric data analysis, and through a self-assessment by the researchers in the RU.

The Evaluation Management Team extracts information on the number and types of research outputs directly from the RD&I Information System, applying the rules on eligibility and volume counting as defined in the Evaluation Protocol. This includes research outputs by PhD students in case these have been assigned to the RU. It is the responsibility of the Evaluated Unit to ensure that these data are complete and correct. This information is then provided to the evaluation panels in the Bibliometric Data

Report. The Bibliometric Data Report will provide the evaluation panels with all information needed for the assessment of the **overall quality** of the research output.

The research output **productivity** is calculated as the relation of research output volume versus size of the Research Unit in terms of researchers in Full Time equivalents (FTE). The FTE researcher data provided by the Research Unit in these submission forms will apply.

The **self-assessment** by the RU researchers of the value and relevance of their research for the R&D community constitutes an important complement to the information in the bibliometric data report, in particular for the Research Units active in applied research and/or providing services to the research community itself.

It provides the researchers in the Research Unit with the possibility to give the evaluation panels a view on their most important achievements in research and on the value and relevance of their activities, for the advancement of research and development (R&D) in their field.

Q5A: Key value and relevance of the RU activities for R&D (self-assessment)

Describe in maximum 500 words how the activities in the Research Unit have constituted or led to advancements in research and development.

This should not regard single research outputs or activities, but focus on longer-term strands of research or however research group activities that enabled these achievements.

Please describe first the research and activities that led to the achievement and then specify the value and relevance for the broader research and development community.

Examples of topics are:

- Research constituting an important contribution to major scientific breakthroughs
- Research leading to the development of new or improved concepts, methods, standards or protocols
- Research leading to advanced state-of-the-art software or innovative artistic outputs
- Research leading to the development of industrial and utility designs, pilot plants, prototypes, new or improved processes, etc.
- Activities enabling an improved access to information or knowledge for research and development (e.g. providing access to historical sources or to large infrastructure, design and prototype facilities, the creation and maintenance of library collections, large datasets or network infrastructure etc)

5.7.2 RU competitiveness in research (Q5B)

Funding mix (Q5B.1-6)

A major indicator for the RU's competitiveness in research is its capability to attract external funding, from both national and international sources.

It also tells the evaluation panels to what extent the research is in alignment with national or international policy priorities (competitive research funding) and/or with the needs of the public sector or industry sector (contract research and income from commercialisation) – thus giving an indication of the societal relevance of the research. Funding from international sources is also an indicator for the RU's level of membership in the international research community.

All funding data need to be reported in thousands of Czech Koruna, non-adjusted for inflation (quantities 'as they are' or 'as they were' in the past). If you need to convert from other currencies please use the annual exchange rate for the year where the

funding was obtained. In projects longer than a year but paid in tranches, you can do the conversion of the full amount at the exchange rate of the first year for simplicity, or calculate a simple or weighted average).

Q5B.1: National competitive funding ('targeted' funding)

The Evaluation Management Team will provide the RU with data on the funding received over the years from national public sources, based on the data stored in the national RD&I IS. These data can be used to fill in the table for this question.

Please specify the funding body from which competitive funding was received, specifying which ministry (in English).

Q5B.2: National funding from Structural Funds

Please indicate for each Operational Programme and sub-programme the total amount of national funding from Structural Funds received by researchers in the Research Unit over the evaluation period. Specify the Operational Programme if it is not yet listed in the table.

Q5B.3: International competitive funding

Please indicate the competitive funding achieved by researchers in the RU from international sources. Make a distinction between European funding and funding from 'other foreign public sources', such as foreign ministries, embassies, and related organisations. Please specify from which EU programme funding was received.

Q5B.4: Contract research

Contract research funding has defined objectives, but is obtained directly, i.e. not in response to an open call for projects, and the conditions of the work to be carried out are set directly between the RU and the client.

V.A.T (DPH) should not be included in the reported incomes from contract research.

Please indicate from which type of organisation contract research funding was received. Specify which Ministry.

Q5B.5: Income from the commercialisation of research outputs

Income from the commercialisation of research outputs includes, for example, sales and licensing income from patents, plant varieties (Zodru) and animal breeds (Zplem), sales of software, prototypes and similar.

Please indicate the name of the research output and its Identification Number in the RD&I Information System.

Q5B.6: Eventual clarifications or notes on trends

Comments and clarifications can be given (word limit: 200 words).

Capability to attract PhD students (Q5B.7-13)

Data on PhD students taught or trained in the Research Units are considered an indirect indication of the esteem the local research community holds for the Research Unit and the quality of its activities. Data collected in this section will inform the evaluation panels also on the quality of the PhD programme in the RU, thus providing input for the assessment of the Research Environment.

This section needs to be filled in only by Research Units that teach and/or train PhDs. It is expected that the former will predominantly be Research Units in the public HEIs and University Hospitals.

For Research Units that teach and award PhDs

Q5B.7: PhD students enrolled

Please indicate the number of doctoral students conducting research in the field of the RU that were enrolled in the Evaluated Unit during the evaluation period. Provide the figures in Headcounts using the following breakdown: male / female / total.

Q5B.8: PhDs awarded

Please indicate the number of PhDs that were awarded in the field of the Research Unit per year.

Q5B.9: New PhD students

Please indicate the number of new PhD students conducting research in the field of the RU.

Q5B.10: Eventual clarifications on trends

Additional comments and clarifications can be given here on the trends in the evaluated period (max 50 words).

For other research organisations that train PhD students

Q5B.11 PhD students trained

Please indicate the number of PhD students who did a substantial part of their thesis work (>50%) at the Research Unit but were enrolled in another Research Organisation.

Q5B.12 New PhD students

Please indicate the number of new PhD students at the Research Unit.

Q5B.13: Eventual clarifications on trends

Additional comments and clarifications can be given here on the trends in the evaluated period (max 50 words).

Competitive positioning of the RU (self-assessment) (Q7B.14-15)

The self-assessment by the researchers in the Research Unit of the competitive positioning of their research in the national and international context constitutes *crucial information* for the evaluation panels. It complements the other data and information provided, allowing for an improved understanding of the context for the RU - in particular the national context.

Q5B.14: Competitive positioning in the national context

Please describe in maximum 500 words how the Research Unit positions itself in the national R&D community in the field.

Cover the following topics:

- Is the RU research focus unique in the country or are there competing actors in this field? Who are they? Please indicate the most important among these actors and their focus of research. Please give the names of the organisations in full and in English
- To what extent are the characteristic features of the RU (focus of research, networks, activities) similar or complementary to those of the competing actors?
- What characteristic features can be strengthened in order to distinguish the RU from its national competitors? Is there a strategy to strengthen the own research profile?

•

Q5B.15: Competitive positioning in the international context

Please describe in maximum 500 words how the Research Unit positions itself in the international research environment in the field.

Cover the following topics:

- How does the RU perceive itself in the international context?
- What is the “niche” of the RU in the global research environment? What characteristic features distinguish the RU from its international competitors?
- Who are the most relevant competitors (university departments or other research organisations) of the RU in the international context? Please give the names of the organisations in full and in English

5.8 Relevance for society (Form 6)

5.8.1 Knowledge and technology transfer activities (Q6A)

This section is focused on collecting evidence on the knowledge and technology transfer activities by researchers in the Research Unit to the benefit of industry or society at large.

The focus in this section is on the main channels through which researchers in the Research Unit interact with the relevant actors in society who are the intermediate or final ‘users’ of their knowledge and research outputs.

In combination with the other data collected in the previous forms, this information will provide input for the panels’ assessment of the relevance and value of the Research Unit’s activities for economic growth and social welfare in the Czech Republic.

Q6A.1: Collaborations with non-academic societal actors

List the most important collaborations with non-academic societal actors – and no more than 10.

‘Non-academic societal actors’ stands for foundations, charities and non-profit organisations, citizen associations (e.g. patients associations) or professional associations (e.g. teachers’ or designers’ associations), schools or youth organisations, etc. It **excludes** private entities with which the RU collaborates for R&D (these are covered in Form 6 – see Section 5.6.1).

Indicate the name of the organisation (in full and in English) and give the name and details (telephone number) of a contact person in that organisation.

Briefly describe the organisation and its mission (max 50 words) and the type and objective of the collaboration (e.g. joint projects, membership of advisory boards, scientific advice, training, etc) (maximum 150 words).

Q6A.2: Use of media channels for knowledge transfer

Describe if and how researchers in the Research Unit make use of media channels to transfer their knowledge to a *non-academic* community (including industry) or society at large.

Media channels include Internet and the social media (e.g. blogs), Television/radio, the general press (newspapers, magazines) or specialised press (journals or magazines targeting professional or citizen communities or industry sectors), books for the general public.

Indicate the channel and target audience, the topic(s) covered and the estimated value of the information provided for the target audience. If relevant, indicate also the names of the researchers involved.

Word limit is maximum 500 words.

Q6A.3: Most important conferences for a non-academic audience

Please list key conferences for a non-academic audience organised by researchers in the Research Unit in the Czech Republic, i.e. targeting the users of research outputs or the broader society. A conference should have at least **100 participants**.

Please select the most important conferences – and however no more than 10.

Indicate the title of the conference (in full and in English), dates, location, and the number of participants.

Give a short description of the purpose of the conference and the profile of the conference participants (word limit is 150 words).

Q6A.4: Participation in incubators and clusters

List the most important cases of participation in incubators or clusters during the evaluation period– and however no more than 10.

Indicate the name of the incubator or cluster (in full and in English) and the name and details (phone number) of a contact person. Name the most important partner organisations (in full and in English) and give a brief description of the participation, i.e. the objective of the incubator/cluster and the role of the RU (max. 150 words).

Q6A.5: Participation in European or National Technology Platforms

List the most important cases of participation in European or National Technology Platforms during the evaluation period– and however no more than 10.

Indicate the name of the Technology Platform (in full and in English) and the name and details (phone number) of a contact person. Name the most important partner organisations (in full and in English) and give a brief description of the participation, i.e. the objective of the Technology Platform and the role of the RU (max. 150 words).

Q6A.6: Spin-off creation

List the spin-off companies launched by researchers in the RU during the evaluation period.

Give the name of the spin-off company, the date of its creation, its specialisation (i.e. its business offer), and the number of employees (at present).

Please estimate the present turnover and profitability (in thousands of CZK).

Q6A.7: Clarifications or additional notes

Additional comments and clarifications can be given here (max 50 words).

5.8.2 Societal relevance of the research (self-assessment) (Q8B.1-2)

The RU self-assessment of the societal value and relevance of its activities is an important complement to the data collected above. It should give the evaluation panels additional information on the researchers' approach and attention to creating impacts on society, the underlying strategy and the effects of the activities implemented in the evaluation period.

There are many ways in which research can lead to impacts on society and this can occur in a medium- or long-term perspective. Examples are:

- Research can inform follow-up research or development that in turn lead directly or indirectly to innovation

- Researchers can engage with the public and create changes in, for example, public awareness, attitudes, understanding or behaviour
- Researchers can impact on others through the provision of professional advice or expert testimony
- Research can lead to economic impact through its deliberate exploitation or through its exploitation by others.

Research output can be presented in various ways. For example, in technical disciplines, one may emphasise patents or collaboration with industry; in medical/biomedical research, clinical applications or protocols; in the humanities, exhibitions; in the social sciences, contributions to educational innovation.

“Impacts on society” are effects on the economy, social welfare, culture, education, public policy or services, health, the environment or quality of life, beyond academia. Beneficiaries are, e.g., industry, SMEs, schools, citizen or professional associations, ministries or governmental agencies.

Q8B.1: General statement

Describe how the RU activities promote or support the activities of other societal actors, e.g industry, SMEs, schools, citizen or professional associations, ministries or governmental agencies.

Please indicate what the RU approach was to creating societal impact during the evaluation period and the RU’s strategy for supporting the achievement of the effects.

Word limit is 500 words.

Q8B.2: Relevance of the RU activities for society

Please provide up to 3 specific examples illustrating the value of the RU activities and the (expected) creation of impact on society. Word limit for each example is 750 words.

The focus of these examples should be the value and (expected) impacts of the Research Units’ (research) activities, not the impact of individuals or individual research outputs.

In each example, please specify

- The nature of the research insights or findings that relate to the (expected) impact and any relevant key contextual information about this area of research
- Details of the beneficiaries, i.e. who or what community, constituency or organisation is expected to draw benefit
- Details of the nature of the expected impact, i.e. how they are expected to benefit

In case claims are made on impacts that have been achieved, please provide evidence on the extent of the impact.

The following is a list of potential topics. This list is not comprehensive and by no means exclusive.

- Economic impacts, i.e. (future) beneficiaries may include businesses, either new or established, or other types of organisation which undertake activity that may create wealth
- Impacts on practitioners and services, i.e. (future) beneficiaries are organisations or individuals involved in the development of and delivery of professional services
- Impacts on public policy and services, i.e. (future) beneficiaries are government, public sector, and charity organisations and societies, either as a whole or groups of individuals in society, through the implementation of policies

- Impacts on society, culture and creativity, i.e. (future) beneficiaries are individuals, groups of individuals, organisations or communities whose knowledge, behaviours or practices have been influenced
- Health and welfare impacts, i.e. (future) beneficiaries are individuals and groups (both human and animals) whose quality of life has been enhanced (or potential harm mitigated)
- Impacts on the environment, i.e. (future) key beneficiaries are the natural environment and/or the built environment, together with societies, individuals or groups of individuals who benefit as a result

5.9 SWOT analysis (Form 7)

One of the main objectives of the evaluation system is the improvement of research and research management. The self-assessment should therefore also entail an analysis of the institute's strengths and weaknesses, and give a perspective for the future. This can be done through a SWOT-analysis.

In the SWOT-analysis, the Research Unit analyses itself in four dimensions, two internal (strengths and weaknesses) and two external (opportunities and threats).

The SWOT analysis constitutes the final step in the self- assessment process. It is a final reflection by the researchers in the Research Unit themselves, based on the information collected (both quantitative and qualitative) in the preceding sections.

Q7: SWOT analysis (self-assessment)

Please provide an evaluation of the Unit's scientific strengths, weaknesses, opportunities and threats.

Analyse the Research Unit's scientific expertise and achievements, its funding, quality and profile of human resources, facilities, organisation and management and its activities and research environment and identify the major internal Strengths and Weaknesses as well as external Threats and Opportunities.

The **process for the SWOT analysis** is as follows:

3. Main starting point for this final analysis is the self-assessment of the RU's competitive positioning in the national and international context, performed in Form 6 (see Section 5.6, above) during which the RU was requested to reflect on its position in relation to its main external partners / competitors
4. Based on the reflections made in that occasion and considering also the other data collected during the evaluation, the RU reflects on its mission and main activities compared to its main external partners/competitors and defines its Strengths and Weaknesses in relation to:
 - Quality of the staff
 - Quality of the research output
 - Esteem in the community
 - Ability to attract quality human resources
 - Ability to attract funding
 - Adequacy of the research infrastructure
 - Adequacy of the research management

Questions are:

- What advantages does the RU have compared to other research groups in the national and/or international environment? What are the strong points? What

relevant resources does the RU have access to (financial, human, research infrastructure)?

- *Weaknesses:* Which aspects of the work are sub-standard? Which aspects of the activities could be improved? What kind of activities should be avoided?
5. The analysis of Opportunities and Threats takes into consideration the developments in the external environment and the capacity of the Research Unit adequately to react on them. Possible opportunities and threats are:
- Developments in research (e.g. the direction of technological progress, new actors emerging)
 - Developments in technology or markets
 - Developments in government or research policy (e.g. the changing demands and/or priorities of funding bodies, or new legislation)
 - Developments in socio-cultural patterns (e.g. health, ethics, lifestyle)
 - The institutional environment (e.g. major institutional changes)

The questions to be asked are:

- *Opportunities:* What are the interesting trends? Where or what are the good opportunities? These can be in changes in technology and markets, changes in government policy or social patterns, population profiles, life style changes, etc.
 - *Threats:* What is the ‘competition’ doing better? Are there significant changes in the requirements for the work in your field? Does the RU have a bad financial situation, and does this regard the institutional funding or other funding sources? Does the RU have problems finding, keeping and replacing qualified personnel?
6. Based on the SWOT analysis, the Research Units should draw its conclusions on the elements of strategy, organisation and/or research activities that are to be adjusted in order better to exploit the external opportunities and counteract threats.

The **outcomes of the SWOT analysis** should be presented as follows to the evaluation panels:

- A table summarising the Strengths and Weaknesses identified (key words only)
- A table summarising the Opportunities and Threats (key words only)
- The conclusions of the SWOT analysis,
 - Summarising the main findings related to a) Strengths, b) Weaknesses, c) Opportunities and d) Threats – making clear references to facts and information provided in the self-assessment report
 - Presenting the RU’s conclusions on future actions to be taken in terms of research strategy, activities, organisation and management

Limit is maximum 1500 words, with emphasis on the conclusions.

Appendix A - Templates for the Subject panel report and its components

[Notes: This section holds the template for the Subject panel report and its components, i.e. the Subject panel report comprising the Calibration Exercise Report and the RU evaluation report, and the Review report(s).

These report templates act also as basis for the reporting on the outcomes of the remote assessments by the individual Subject panel members and the remote reviews by the individual referees.]

A.1. Covers

Front cover:

Title: Subject Panel Report – [title or number]

Subject Panel Chair: [name] [affiliation] [country]

Subject Panel Members: [name] [affiliation] [country]

Subject Panel Secretariat/Coordinator: [name] [function]

Date: [xxx]

Internal cover:

This report has been approved by the Main Panel Chair for the Disciplinary Area [xx], [name] [affiliation] [country]

A.2. Calibration Exercise Report – The approach to the assessment

The standard assessment criteria for this evaluation and the values for the assessment of performance against these criteria are:

[List of all assessment criteria and their description]

During the calibration exercise, the Subject panel defined the field-specific and RO-type interpretation of the keywords and importance of the sub-criteria assessment criteria as reported in the sections below.

Field-specific definition of keywords in the assessment criteria

Scientific Research Excellence

The assessment criterion on Research Excellence requires the panels to assess the quality level of the RU outputs in terms of *originality*, *significance* and *rigour*.

The panel defined these keywords as follows:

Target: 50 words for each key word

Originality:

Significance:

Rigour:

Societal Relevance

The assessment criterion on Societal Relevance requires the panels to assess the impact of the RU activities in terms of *reach* and *significance*.

The panel defined these keywords as follows:

Target: 50 words for each key word

Reach:

Significance:

Importance of the sub-criteria for fields and RO typologies

The Subject panel defined the importance to be attributed to specific sub-criteria in the context of the field and for the RO typologies in the field. The panel did so in the form of %, even though the overall judgment was **not** to be based on arithmetic. The panel could also decide that all sub-criteria are equally important or that no distinction was to be made for the different RO typologies.

In case the Subject panel decided that considerable differences existed among the sub-fields in its field, it mentioned so in the decisions below.

The panel took into consideration only the types of Research Organisations that are active in the field of its competence in the Czech Republic.

Research environment

Importance for the field overall:

Sub-criteria	Weight
The quality of the research management (including HR management)	
The adequacy of the research strategy	

[Short explanation \(target is 100 words\)](#)

Importance for the [type of RO]:

Sub-criteria	Weight
The quality of the research management (including HR management)	
The adequacy of the research strategy	

[Short explanation \(target is 100 words\)](#)

Membership of the national and global research community

Importance for the field overall:

Sub-criteria	Weight
International research presence and collaboration	
National research presence and collaboration	

[Short explanation \(target is 100 words\)](#)

Importance for the [type of RO]:

Sub-criteria	Weight
International research presence and collaboration	
National research presence and collaboration	

Short explanation (target is 100 words)

Overall research performance

Importance for the field overall:

Sub-criteria	Weight
Research output	
Competitiveness in research	

Short explanation (target is 100 words)

Importance for the [type of RO]:

Sub-criteria	Weight
Research output	
Competitiveness in research	

Short explanation (target is 100 words)

A.3. The Research Unit evaluation report

Introduction

Short description of the RU (field focus, positioning in the EvU, competitive positioning nationally and internationally, research strategy) **quarter to half a page**

Results of the panel evaluation

Overview of the starred quality levels reached by the Research Unit:

Criterion number	Quality criteria	Starred quality level reached
A	Research environment	
B	Membership of the national and global research community	
C	Scientific research excellence	
D	Overall research performance	
E	Societal relevance	

Criterion A: Research environment

Please highlight in grey the final score as shown below

Starred quality level	Definition	Description
5	Outstanding	The RU is a Global Leader In terms of the quality of the research strategy and management, the Unit's research environment is fully comparable to that of global leaders in the field. It can attract the highest quality international researchers
4	Very good	The RU is a Strong International Player The Unit is able to provide an internationally comparable excellent research environment to high-level international researchers in the given field
3	Good level	The RU is a Strong National Player The Unit is able to provide a research environment that is comparable with internationally recognised research organisations in the field
2	Adequate	The RU is a Satisfactory National Player The Unit's research environment is still evolving to achieve a level that is expected in the international research community of a respected research organisation in the field
1	Poor	The RU is a Poor National Player The Unit is still only in the process of creating an internationally comparable research environment
Unclassified		N/A

In this criterion, 'global', 'international' and 'national' refer to quality standards. They do not refer to the geographical scope of the strategy or management activities

Explanatory text for the starred quality level – **quarter to half a page**

Criterion B: Membership of the national and global research community

Starred quality level	Definition	Description
5	Outstanding	The RU is a Global Leader The Unit participates and is recognised in excellent international networks involving global leaders in the field.
4	Very good	The RU is a Strong International Player The Unit participates and is recognised in international networks in the field.
3	Good level	The RU is a Strong National Player The Unit participates and is recognised in excellent national networks involving national leaders in the field.
2	Adequate	The RU is a Satisfactory National Player The Unit participates and is recognised in national networks in the field.
1	Poor	The RU is a Poor National Player The Unit has little to no substantive collaboration.

Unclassified		N/A

Explanatory text for the starred quality level – **quarter to half a page**

Criterion C: Scientific research excellence

Starred quality level	Definition	Description
5	Outstanding	The RU is a Global Leader In terms of <u>originality</u>, <u>significance</u> and <u>rigour</u>, the Unit's research output is comparable with outstanding work internationally in the field. The research possesses the requisite quality to meet the highest international standards of excellence. Work at this level can be a key international reference point in the field. The RU output profile is comparable to the one of the best international research organisations in the field.
4	Very good	The RU is a Strong International Player In terms of originality, significance and rigour, the Unit's research output is comparable with excellent work internationally. The research nonetheless does not yet meet the highest standards of excellence. Work at this level can arouse serious interest in the international academic community. The RU output profile is comparable to the one of very good international research organisations in the field.
3	Good level	The RU is a Good International Player In terms of originality, significance and rigour, the Unit's research output is comparable with the best work internationally. The research possesses the requisite quality to meet high international standards. Internationally recognized publishers or journals could publish work of this level. The RU output profile is comparable to the one of good international research organisations in the field.
2	Adequate	The RU is a Good National Player with Some International Recognition In terms of originality, significance and rigour, the Unit's research output is comparable with good work internationally. The research possesses the requisite quality to meet international standards only to a certain extent. The RU output profile is comparable to the one of modest international research organisations in the field.
1	Poor	The RU is a Poor National Player In terms of originality, significance and rigour, the Unit's research output falls below the international quality standards. The RU output profile is not comparable to the one of modest international research organisations in the field.
Unclassified		N/A

In this criterion, 'Global', 'International' and 'National' refer to quality standards. They do not refer to the geographical scope of the research outputs and/or publication channels.

Explanatory text for the starred quality level – **quarter to half a page**

Criterion D: Overall research performance

Starred quality level	Definition	Description
5	Outstanding	The RU is a Global Leader In terms of research output and competitiveness, the Unit's overall research performance is internationally excellent, i.e. at the level of the best international research organisations in the field.
4	Very good	The RU is a Strong International Player In terms of research output and competitiveness, the Unit's overall research performance is optimal, i.e. at the level of very good international research organisations in the field.
3	Good level	The RU is a Strong National Player In terms of research output and competitiveness, the Unit's overall research performance is at a good standard.
2	Adequate	The RU is a Satisfactory National Player In terms of research output and competitiveness, the Unit's overall research performance is at an acceptable standard.
1	Poor	The RU is a Poor National Player In terms of research output and competitiveness, the Unit's overall research performance is poor.
Unclassified		N/A

In this criterion, 'global', 'international' and 'national' refer to quality standards. They do not refer to the geographical scope of the research activities.

[Explanatory text for the starred quality level – quarter to half a page](#)

Criterion E: Societal relevance

Starred quality level	Definition	Description
5	Outstanding	Work in the RU has a Very High Potential for Societal Impacts In terms of <u>reach and significance</u> , the RU is an important driver of societal development. The RU's collaborations and/or interactions with non-academics (i.e. business, policy-makers, the public) stand out in terms of their extensive and dynamic nature.
4	Very good	Work in the RU has a High Potential for Societal Impacts In terms of reach and significance, the RU strongly contributes to societal development. The RU's collaborations and/or interactions with non-academics (i.e. business, policy-makers, the public) are at a very high level.
3	Good level	Work in the RU has a Good Potential for Societal Impacts In terms of reach and significance, the RU contributes well to societal development. The RU's collaborations and/or interactions with non-academics (i.e. business, policy-makers, the public) are at a good level.
2	Adequate	Work in the RU has a Low Potential for Societal Impacts In terms of reach and significance, the RU contributes to societal development. The RU has some collaborations and/or interactions with non-academics (i.e. business, policy-makers, the public).
1	Poor	Work in the RU has Little to No Potential for Societal Impacts In terms of reach and significance, the RU makes little to no contributions to societal development. The RU does not collaborate and/or interact with

		non-academics (i.e. business, policy-makers, the public).
Unclassified		N/A

‘Societal’ impacts refer to impacts on the economy and social welfare, the latter including health, environment, culture, social inclusion, education and gender.

Explanatory text for the starred quality level – **quarter to half a page**

Conclusions and recommendations

Target: half a page

A.4. The Remote Review report

[Notes: The Review reports will constitute an appendix to the RU evaluation reports.

The **referees remain anonymous** so for the Panel reports, the names of the Referees must be omitted. They are nevertheless included in this template as the indication of the name of the Referee is important during the internal evaluation process.

In the RU evaluation report, the Review reports are ranked per Research Unit, name of the research outputs, and First reader first.]

A.4.1. Review report cover

PANEL	[OECD Field]
Name of Evaluated Unit	[Research Organisation] – [EvU]
Research Unit	[OECD Field]
Type of research organisation	XXX
Field(s) of the publication	[OECD Sub-field(s)]
Title of publication	XXX
Type of publication	Example: Journal article
Author(s)	XXX

A.4.2. Assessment criteria

(Scientific) research excellence

Starred quality level	Definition	Description
5	Outstanding	The RU is a Global Leader In terms of originality, significance and rigour, the Unit's research output is comparable with outstanding work internationally in the field. The research possesses the requisite quality to meet the highest international standards of excellence. Work at this level can be a key international reference point in the field. The RU output profile is comparable to the one of the best international research organisations in the field.
4	Very good	The RU is a Strong International Player In terms of originality, significance and rigour, the Unit's research output is comparable with excellent work internationally. The research nonetheless does not yet meet the highest standards of excellence. Work at this level can arouse serious interest in the international academic community. The RU output profile is comparable to the one of very good international research organisations in the field.
3	Good level	The RU is a Good International Player In terms of originality, significance and rigour, the Unit's research output is comparable with the best work internationally. The research possesses the requisite quality to meet high international standards. Internationally recognized publishers or journals could publish work of this level. The RU output profile is comparable to the one of good international research organisations in the field.
2	Adequate	The RU is a Good National Player with Some International Recognition In terms of originality, significance and rigour, the Unit's research output is comparable with good work internationally. The research possesses the requisite quality to meet international standards only to a certain extent. The RU output profile is comparable to the one of modest international research organisations in the field.
1	Poor	The RU is a Poor National Player In terms of originality, significance and rigour, the Unit's research output falls below the international quality standards. The RU output profile is not comparable to the one of modest international research organisations in the field.
Unclassified		Not research

A.4.3. Assessments

Joint Assessment: Suggested starred quality level = XXX

Assessment by the First Reader

Name of the reviewer	XXX
Date of reading	XXX

Starred quality level	Please provide an explanation for the score (minimum 100 / about 200 words)

Assessment by the Second Reader

Name of the reviewer	XXX
Date of reading	XXX

Starred quality level	Please provide an explanation for the score (minimum 100 / about 200 words)

Appendix B - Templates for the conclusive analytical reports

B.1. The report at Evaluated Unit level

[Note: Reports at Evaluated Unit level will be written only for Evaluated Units that register more than one Research Unit for evaluation.

The process for the drafting of this report is described in Section 3.4.7.]

B.1.1. Covers

Front cover:

Title: Conclusive Analytical Report for the Evaluated Unit: [name]

Authors:

[Name] [Function]

Date: [xxx]

Internal cover:

This report has been approved by the Subject Panel Chair for the field [xx]: [name]
[affiliation] [country]

B.1.2. Report

Background to the report

This section sets out the profile of the Evaluated Unit. It gives an overview of its historical background, current positioning in the RD&I system, organogram, and lists the Research Units that the Evaluated Unit registered for evaluation.

Target: half a page

Main elements of strength in the performance of the Evaluated Unit

Target: one page

Main elements of weakness in the performance of the Evaluated Unit

Target: one page

Main opportunities for future development and performance

Target: one page

Main threats for the future development and performance

Target: one page

Conclusions

Target: half a page

Recommendations

Target: half a page

B.1.3. Appendixes

All RU evaluation reports

B.2. The report at Field level

[Note: The process for the drafting of this report is described in Section 3.4.6]

B.2.1. Covers

Front cover:

Title: Conclusive Analytical Report for the Field: [name]

Author: [name] [affiliation] [country], Chair of the subject panel

With the support of

[Name] [Affiliation] [Country], member of the subject panel

[Name] [Function], Subject Panel Secretariat/Coordinator

Date: [xxx]

Internal cover:

This report has been approved by the Main Panel Chair for the Disciplinary Area [xx], [name] [affiliation] [country]

B.2.2. Report

Background to the report

This section sets out the profile of the field in the Czech Republic. It gives an overview of the main areas of focus for R&D, the positioning of research in the field in the disciplinary area, and lists the most important actors in the field

Target: half a page

Main elements of strength in the performance

Target: one page

Main elements of weakness in the performance

Target: one page

Main opportunities for future development and performance

Target: one page

Main threats for the future development and performance

Target: one page

Conclusions

Target: half a page

Recommendations

Target: half a page

B.2.3. Appendixes:

List of the Research Units that were registered for evaluation in the field [in alphabetical order]

All RU evaluation reports, including IRU

B.3. The report at Disciplinary Area level

[Note: The process for the drafting of this report is described in Section 3.4.8]

B.3.1. Covers

Title: Conclusive Analytical Report for the Disciplinary Area: [name]

Author: [name] [affiliation] [country], Chair of the Main panel

With the support of

[Name] [Affiliation] [Country], member of the Main panel

[Name] [Affiliation] [Country], chair of the Subject panel [XX]

[Name] [Function], member of the Evaluation Management Team

Date: [xxx]

B.3.2. Report

Background to the report

This section sets out the profile of the disciplinary area in the Czech Republic. It gives an overview of the main fields and areas of focus for R&D, the positioning of research in the fields in the disciplinary area, and lists the most important actors.

Target: half a page

Main elements of strength in the performance

Target: one page

Main elements of weakness in the performance

Target: one page

Form 1 - Registration Form**Form 2 - The Research Environment in the EvU****Form 3 - The Research Environment of the RU****Form 4 - Membership of the (global & national) research community****Form 5 - Overall research performance****Form 6 - Societal relevance of the research****Form 7 - SWOT analysis****Form 1 - Registration Form****Q1.1 - Contact persons**

Please provide the name and contact details of a person for the Evaluated Unit overall and for each Research Unit

	Evaluated Unit	Research Unit 1	Research Unit 2	...
Name & Surname				
Position				
Telephone number				
E-mail address				

Q1.2 - Type of the Research Organisation**Q1.3 - Registration of the Research Unit(s)**

	Research Unit Field
Research Unit 1	
Research Unit 2	
Research Unit 3	
xxx	

Q1.4 - Suggestions / oppositions to panel members / referees for the evaluation**Suggestions**

Title	
Name & Surname	
Function / Job Title	
Institution of affiliation	
Country	
Email	
Field	
Sub-field (for referees only)	
Reason(s) why	

Oppositions

Title	
Name & Surname	
Function / Job Title	
Institution of affiliation	
Country	
Email	
Field	
Sub-field (for referees only)	
Reason(s) why	

Q1.5 - Recommendation for cross-referral

Q1.5.a - Description of the inter-disciplinary lines of research in the RU

Word limit: 50 words

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Q1.5.b - Reasons for the recommendation

Word limit: 50 words

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Q1.5.c - Host and additional fields

Host field	
Additional field 1	
Additional field 2	

Q1.6 – Application for registration of an Interdisciplinary Research Unit

Q1.6.a - General statement

Word limit: 50 words

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Q1.6.b - Data on research outputs/bibliometrics

Disciplinary area	Field	Count of eligible outputs	Share of total
TOTAL		XX	100%

Q1.6.c - Scientific background of lead researchers

Word limit: 200 words

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Q1.6.d - Co-publications of researchers

Author(s) affiliated with the EvU/IRU	Output title	Field of publication	Output type	Output identifier in the RD&I IS	Output details in the RD&I IS (link)	DOI (link)

Q1.6.e - Statement of research strategy

Word limit: 200 words

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Q1.6.f - Host and additional fields

Host field	
Additional field 1	
Additional field 2	

Q1.6.g - List of researchers in the IRU

ID number	Name	Surname	Function or job title	Main field of expertise	Additional field(s) of expertise

Q1.7 - Declaration of the accuracy of the information

I hereby declare that the information in this submission is true to the best of my knowledge and belief,. Proof of any of this information may be asked during the evaluation process and I am aware that failure to provide satisfactory proof will result in penalty of the assessment results.

Signature

Q1.8 – Listing of the researchers forming the Researcher Units

ID number	Name	Surname	Gender	Function or job title	Research Unit / field

Form 2 – The Research Environment in the EvU

2A. Background information on the Evaluated Unit

Q2A.1 - Description of the Evaluated Unit

Word limit: 500 words

Q2A.2 - Organogram of the Evaluated Unit

Organogram, i.e. organisational chart, of the Evaluated Unit (in English), indicating also the foci of research in the different organisational units

Q2A.3 - Historical background of the Evaluated Unit

The historical (i.e. past 10 years) development of the Evaluated Unit and the development and trends in importance of the organisational units.

Word limit: 500 words

2B. Research and support staff in the Evaluated Unit

Staff overview

Q2B.1 - Headcounts

(please see submission guidelines for definitions)

	2009	2010	2011	2012	2013	2014
Researchers						
Technicians and equivalent staff (referred to as "technicians")						
Other supporting staff (referred to as "other personnel")						
Total	0	0	0	0	0	0

Q2B.2 - Full Time Equivalent (FTE)

(please see submission guidelines for definitions)

	2009	2010	2011	2012	2013	2014
Researchers						
Technicians and equivalent staff (referred to as "technicians")						
Other supporting staff (referred to as "other personnel")						
Total	0.0	0.0	0.0	0.0	0.0	0.0

Q2B.2 - Eventual clarifications or notes on trends in the evaluated period

Word limit: 50 words

Profile of the researchers

For Higher Education Institutions (HEIs), including university hospitals

Q2B.4 - Headcounts

(please see submission guidelines for definitions)

	2009	2010	2011	2012	2013	2014
Professor						
Associate professor						
Assistant professor						
Instructors						
Total	0.0	0.0	0.0	0.0	0.0	0.0

Q2B.5 - Full Time Equivalent (FTE)

(please see submission guidelines for definitions)

	2009	2010	2011	2012	2013	2014
Professor						
Associate professor						
Assistant professor						
Instructors						
Total	0.0	0.0	0.0	0.0	0.0	0.0

Q2B.6 – PhD students considered to be researchers

How many of the researchers listed above are PhD students with an employment contract? Please indicate in Headcounts and FTE

	2009	2010	2011	2012	2013	2014
Headcounts						
FTE						

For research institutes in the Czech Academy of Sciences (ASCR)**Q2B.4 - Headcounts**

(please see submission guidelines for definitions)

	2009	2010	2011	2012	2013	2014
5. Senior scientist/scholar						
4.Scientist/scholar						
3b. Associate scientist/scholar						
3a. Postdoctoral fellow						
2. Graduate student						
Total	0.0	0.0	0.0	0.0	0.0	0.0

Q2B.5 - Full Time Equivalent (FTE)

(please see submission guidelines for definitions)

	2009	2010	2011	2012	2013	2014
5. Senior scientist/scholar						
4.Scientist/scholar						
3b. Associate scientist/scholar						
3a. Postdoctoral fellow						
2. Graduate student						
Total	0.0	0.0	0.0	0.0	0.0	0.0

For other research organisations**Q2B.4 - Headcounts**

(please see submission guidelines for definitions)

	2009	2010	2011	2012	2013	2014
Senior Researchers (>10 years of employment)						
Researchers (<10 years of employment)						
PhD Students with a contract						
Total	0.0	0.0	0.0	0.0	0.0	0.0

Q2B.5 - Full Time Equivalent (FTE)

(please see submission guidelines for definitions)

	2009	2010	2011	2012	2013	2014
Senior Researchers (>10 years of employment)						
Researchers (<10 years of employment)						
PhD Students with a contract						
Total	0.0	0.0	0.0	0.0	0.0	0.0

For all research organisations**Q2B.7 - Eventual clarifications or notes on trends in the evaluated period**

Word limit: 50 words

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2C. Human Resource (HR) Management

Career development

Please answer the following questions. The word limit for each question is 300 words.

Q2C.1 - Please describe the appraisal and monitoring system in place

Q2C.2 - Please describe the process and frequency of the performance reviews

Q2C.3 - Please describe the promotion procedures

Q2C.4 - Please describe the process used to support the researchers and their work

Only for Higher Education Institutions (HEIs), including university hospitals

Career development of PhDs and post-docs

The word limit for each question is 300 words.

Q2C.5 - Please describe the PhD programme

Q2C.6 - Please describe the support delivered for their work placement

Q2C.7 - Please describe the supervision process

Q2C.8 - Please describe the educational components for the training of PhDs

2D. Total Institutional Funding

Q2D.1 - Total institutional funding

In thousands of CzK

	2009	2010	2011	2012	2013	2014
Funding for research						
Funding for other activities:						
Funding for other activities:						
Total institutional funding						

Q2D.2 - Eventual clarifications or notes on trends in the evaluated period

Word limit: 50 words

Form 3 – Research Environment for the Research Unit

3A. Historical background

Q3A.1 – Historical background of the RU

Word limit is 200 words

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Q3A.2 – Fields and foci of research of the RU

Word limit is 200 words

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Q3A.3 – Organisational structure for the researchers in the Research Unit

Organisational unit	Focus of research in the field	Number of RU researchers

Q3A.4 – Peer-reviewed journals published by the RU

Name of Journal	Language	Year of establishment	Scientific Focus	Listed in ...	Type of peer-review

3B. Research and support staff in the Research Unit

Overview

Q3B.1 - Headcounts

(please see submission guidelines for definitions)

	2009	2010	2011	2012	2013	2014
Researchers						
Technicians and equivalent staff (referred to as "technicians")						
Other supporting staff (referred to as "other personnel")						
Total	0	0	0	0	0	0

Q3B.2 - Full Time Equivalent (FTE)

(please see submission guidelines for definitions)

	2009	2010	2011	2012	2013	2014
Researchers						
Technicians and equivalent staff (referred to as "technicians")						
Other supporting staff (referred to as "other personnel")						
Total	0.0	0.0	0.0	0.0	0.0	0.0

Q3B.3 - Eventual clarifications or notes on trends in the evaluated period

Word limit: 50 words

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Functions of the researchers in the RU

For Higher Education Institutions (HEIs), including university hospitals

Q3B.4 - Headcounts

(please see submission guidelines for definitions)

	2009	2010	2011	2012	2013	2014
Professor						
Associate professor						
Assistant professor						
Instructors						
Total	0.0	0.0	0.0	0.0	0.0	0.0

Q3B.5 - Full Time Equivalent (FTE)

(please see submission guidelines for definitions)

	2009	2010	2011	2012	2013	2014
Professor						
Associate professor						
Assistant professor						
Instructors						
Total	0.0	0.0	0.0	0.0	0.0	0.0

Q3B.6 – PhD students considered to be researchers

How many of the researchers listed above are PhD students with an employment contract? Please indicate in Headcounts and FTE

	2009	2010	2011	2012	2013	2014
Headcounts						
FTE						

For research institutes in the Czech Academy of Sciences (ASCR)

Q3B.4 - Headcounts

(please see submission guidelines for definitions)

	2009	2010	2011	2012	2013	2014
5. Senior scientist/scholar						
4. Scientist/scholar						
3b. Associate scientist/scholar						
3a. Postdoctoral fellow						
2. Graduate student						
Total	0.0	0.0	0.0	0.0	0.0	0.0

Q3B.5 - Full Time Equivalent (FTE)

(please see submission guidelines for definitions)

	2009	2010	2011	2012	2013	2014
5. Senior scientist/scholar						
4. Scientist/scholar						
3b. Associate scientist/scholar						
3a. Postdoctoral fellow						
2. Graduate student						
Total	0.0	0.0	0.0	0.0	0.0	0.0

For other research organisations

Q3B.4 - Headcounts

(please see submission guidelines for definitions)

	2009	2010	2011	2012	2013	2014
Senior Researchers (>10 years of employment)						
Researchers (<10 years of employment)						
PhD Students with a contract						
Total	0.0	0.0	0.0	0.0	0.0	0.0

Q3B.5 - Full Time Equivalent (FTE)

(please see submission guidelines for definitions)

	2009	2010	2011	2012	2013	2014
Senior Researchers (>10 years of employment)						
Researchers (<10 years of employment)						
PhD Students with a contract						
Total	0.0	0.0	0.0	0.0	0.0	0.0

For all research organisations**Q3B.7 - Eventual clarifications or notes on trends in the evaluated period**

Word limit: 50 words

Profile of the researchers**Q3B.8 – Age of the researchers***In Headcounts*

Age	2009	2010	2011	2012	2013	2014
Less than 29						
30-39						
40-49						
50-59						
60-69						
70 and more						
Total						

Q3B.9 – Gender balance*In Headcounts*

	2009	2010	2011	2012	2013	2014
Male						
Female						
Total						

Q3B.10 – Inbreeding*In Headcounts*

	2009	2010	2011	2012	2013	2014
Nr researchers in the RU that received their PhD training in the Evaluated Unit						
Total number of researchers in the RU						

Q3B.4 - Eventual clarifications or notes on trends in the evaluated period

Word limit: 50 words

3C. HR management in the RU**Q3C – RU-specific HR arrangements**

Please specify any additional or different personnel policies and/or HR management processes that regard the researchers included in the Research Unit compared to those described in Form 2 for the Evaluated Unit overall.

Word limit: 200 words

3D. Total institutional funding for the Research Unit

Q3D.1 - Total institutional funding

In thousands of CZK

	2009	2010	2011	2012	2013	2014
Funding for research						
Funding for other activities:						
Funding for other activities:						
Total institutional funding						

Q3D.2 - Eventual clarifications or notes on trends in the evaluated period

Word limit: 50 words

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3E. Research infrastructure for the Research Unit

Q3E.1 - Relevant research infrastructure in the EvU

Maximum 10 key pieces of research infrastructure

Name of the equipment	
Is the equipment or resource older than 10 years?	Yes/No
Description of equipment or resource (Limit: 50 words)	
Shared or collaborative use with	

Q3E.2 - Use of other national research infrastructure (non-competitive access)

Maximum 10 cases

Name of the research infrastructure	
Owner	
Description of equipment or resource (Limit: 50 words)	
Purpose of the use for research in the RU (Limit: 50 words)	

Q3E.3 - Use of major research infrastructures (competitive access)

Maximum 10 cases

Name of the research infrastructure	
Owner	
Total value of time awarded	
Purpose of the use for your research (Limit: 50 words)	

Q3E.4 - Adequacy of the research infrastructure (self-assessment)

Overall comment on the adequacy of the research infrastructure in the EvU for research in the Research Unit, relating it to the research needs of the Research Unit.

Word limit: 500 words

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Q3E.5 - Eventual clarifications or notes

Word limit: 50 words

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3F. Research strategy for the RU

Q3F.1 - Process for research strategy and plan development

Word limit: 200 words

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Q3F.2 - Research strategy and plan description

Word limit: 500 words

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Q3F.3 - The research strategy in the context

Word limit: 200 words

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Q3F.4 - Eventual clarifications or notes

Word limit: 50 words

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Form 4 - Research Unit Membership of the global & national research community

4A. National research presence and collaboration

Q4A.1 - Participation in Research Centres, Centres of Excellence or Competence, and/or Research Infrastructures

Maximum 10 cases

Name of the Centre or Research Infrastructure	
Focus of the research (<i>max 50 words</i>)	
Main project partners	
Total funding for the Centre (in thousands CZK)	
Share for the RU (in thousands CZK)	
Role of the RU researchers in the Centre or Research Infrastructure (<i>max 50 words</i>)	

Q4A.2 - Most important national collaborations and partnerships

Maximum 10 cases

Name of organisation	
Contact person	
Type of collaboration	
Most important outcomes (<i>max 50 words</i>)	

Q4A.3 - Most important scientific prizes, honours and scientific positions of trust

Maximum 10 cases

Name of the prize or position	
Organisation awarding the prize	
Name and function/job title of the researcher	

Q4A.4 - Most important memberships of scientific advisory boards

Maximum 10 cases

Name of the organisation	
Description of the organisation (<i>max 50 words</i>)	
Name and function/job title of the researcher(s)	
Type of membership	

4B. International research presence and collaboration

Q4B.1 - Most important collaborations with institutions in other countries

Maximum 10 cases

Name of organisation	
Country	
Contact person	
Type of collaboration	
Most important outcomes (<i>max 50 words</i>)	

Q4B.2 - Most important study visits coming from abroad

Maximum 10 cases

Name of Visitor	
Institution of affiliation	
Country	
Category (PhD student, postdoc, 'mature' researcher)	
Total months of visits	
Focus of the research (<i>max 50 words</i>)	

Q4B.3 - Most important study visits to institutions abroad*Maximum 10 cases*

Name of Visitor	
Institution visited	
Country	
Category (PhD student, postdoc, 'mature' researcher)	
Total months of visits	
Focus of the research (<i>max 50 words</i>)	

Q4B.4 - Most important membership in international editorial boards*Maximum 10 cases*

Title of the journal	
Scientific focus of the journal (<i>max 50 words</i>)	
Name and function/job title of the researcher	
Period of the membership	
Type of membership	

Q4B.5 - Most important international scientific conferences*Maximum 10 cases*

Title of the conference	
Dates	
Location	
Number of participants	
Short description of the conference (<i>max. 50 words</i>)	
Role of the researchers in the RU (<i>max 50 words</i>)	

Form 5 – Overall Research Performance**5A. Research output****Q5A - Key value and relevance of the RU activities for R&D (self-assessment)**

Describe in maximum 500 words how the activities in the Research Unit have constituted or led to advancements in research and development.

5B. The RU competitiveness in research**Funding mix****Q5B.1 - National competitive funding ('targeted' funding)**

In thousands of CzK

Funding bodies	2009	2010	2011	2012	2013	2014
Science Foundation (GACR)						
Technology Agency (TACR)						
Ministry						
Ministry						
Ministry						
Total						

Q5B.2 - National funding from Structural Funds

In thousands of CzK

Operational Programme	2009	2010	2011	2012	2013	2014
OP RDI - European Centres of Excel						
OP RDI - Regional R&D centres						
OP Prague Competitiveness (OPPC)						
Other – OP 1						
Total						

Q5B.3 - Competitive international funding

In thousands of CzK

Funding source	2009	2010	2011	2012	2013	2014
European Funding - EC Framework Programme						
European Funding -						
Funding from other foreign public sources						
Total						

Q5B.4 - Funding from contract research

In thousands of CzK

Funding source	2009	2010	2011	2012	2013	2014
Contract research from industry						
Contract research from the Ministry						
Contract research from the Ministry						
Contract research from other public sector institutions (in the Czech Republic)						
Contract research from international public bodies						
Other contract research:						
Total						

Q57B.5 - Income from the commercialisation of research outputs*In thousands of CzK*

ID in the IS	Name of output	2009	2010	2011	2012	2013	2014
Total							

Q5B.6 - Eventual clarifications or notes on trends*Word limit: 50 words*

Capability to attract PhD students**For Research Units that teach and award PhDs****Q5B.7 - PhD students enrolled***In Headcounts*

	2009	2010	2011	2012	2013	2014
Male						
Female						
Total						

Q5B.8 - PhDs awarded per year*In Headcounts*

	2009	2010	2011	2012	2013	2014
Male						
Female						
Total						

Q5B.9 - New PhD students per year*In Headcounts*

	2009	2010	2011	2012	2013	2014
Male						
Female						
Total						

Q5B.10 - Eventual clarifications or notes on trends*Word limit: 50 words*

For Research Units that train PhD students**Q5B.11 - PhDs trained at the research unit**

The number of PhD students who did a substantial part of their thesis work (>50%) at the Research Unit but were enrolled in another Research Organisation.

In Headcounts

	2009	2010	2011	2012	2013	2014
Male						
Female						
Total						

Q5B.12 - New PhD students per year*In Headcounts*

	2009	2010	2011	2012	2013	2014
Male						
Female						
Total						

Q5B.13 - Eventual clarifications or notes on trends in the evaluated period*Word limit: 50 words*

Competitive positioning of the RU (self-assessment)

Q5B.14 - Competitive positioning in the national context

Describe in **maximum 500 words** how the Research Unit positions itself in the national R&D community in the field.

Q5B.15 - Competitive positioning in the international context

Describe in **maximum 500 words** how the Research Unit positions itself in the international research environment in the field.

Form 6 – Societal relevance of the research

6A. Knowledge and technology transfer activities

Q6A.1 – Collaborations with non-academic societal actors

Maximum 10 cases

Name of the organisation	
Contact in the organisation	
Description of the organisation (max 50 words)	
Description of collaboration (max. 150 words)	

Q6A.2 – Use of media channels for knowledge transfer

Describe in maximum 300 words if and how researchers in the Research Unit make use of media channels to transfer their knowledge to a non-academic community or society at large.

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Q6A.3 - Most important conferences for a non-academic audience

Maximum 10 cases

Title of the conference	
Dates	
Number of participants	
Short description of the conference (max. 150 words)	

Q6A.4 - Participation in incubators and clusters

Maximum 10 cases

Name of incubator or cluster	
Contact person	
Partner organisations	
Description of participation (150 words)	

Q6A.5 - Participation in European or National Technology Platforms

Maximum 10 cases

Name of the Technology Platform	
Contact person	
Partner organisations	
Description of participation (150 words)	

Q6A.6 - Spin-off creation

Name of spin-off company	
Date	
Specialisation	
Number of employees	
Present Turnover (estimate - in thousands of CZK)	
Present profitability (estimate - in thousands of CZK)	

Q6A.7 - Clarifications or additional notes

Word limit: 50 words

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6B. Self-assessment on societal relevance

Q6B.1 – General statement

Describe in no more than 500 words how the RU activities promote or support the activities of other societal actors, e.g. industry, SMEs, schools, citizen or professional associations, ministries or governmental agencies.

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Q6B.2 – Societal value of the RU activities

Please provide up to 3 specific examples of the economic, social, cultural, policy or other value of the Research Unit's activities for the Czech society. Word limit for each example is 750 words.

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Form 7 – SWOT analysis

Maximum 1500 words

SWOT

Strengths	Weaknesses

Opportunities	Threats

Conclusions

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technopolis|group|

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