

Guidelines for Referees for the assessment of NCCR outline proposals

1 Introduction

Most of the instructions for evaluators are provided directly in the header area of the evaluation form on *mySNF*. These guidelines provide additional information about your role as referees. They give an overview of the NCCR funding scheme, the SNSF evaluation procedures, the handling of conflicts of interest, and DORA (Declaration on Research Assessment). Please read through this information before beginning your assessment.

2 The NCCR funding scheme

National Centres of Competence in Research (NCCRs) are research consortia conducting innovative and outstanding research with a long-term perspective. The NCCR funding scheme aims to sustainably strengthen Swiss research in strategically important fields. NCCRs may run for 8 to 12 years, and their duration is divided into four-year phases, which includes a potential third phase of flexible duration. The NCCR programme has the following aims:

- The maintenance and sustainable strengthening of Switzerland's position in research fields of strategic importance through the promotion of research of the highest quality.
- The sustainable renewal and optimisation of research structures through the creation of additional research and teaching capacities, promoting the cooperation among the Swiss research institutions and international networking.
- The implementation of a coherent strategy for research and for the five structure-related areas knowledge & technology transfer, education & training, equal opportunities, communication & outreach and open science¹.

Every NCCR proposal requires the explicit support of two or more recognised Swiss higher education research institutions, which host the NCCR as home institutions. In line with the aims stipulated above, home institutions support structural developments and supplement the funding provided by the Swiss National Science Foundation (SNSF) with their own contributions.

Since 2001, 48 NCCRs have been established. A list of the ongoing and concluded NCCRs is available on the [SNSF website](#). The present call is restricted to proposals that are situated within the social sciences and humanities (SSH).

3 Evaluation procedure and role of referees

The NCCR selection process comprises an outline proposal (present stage) and a full proposal stage.

In the outline proposal, applicants present the visions and potential of the envisaged NCCR. Every proposal is first reviewed by at least 3 international reviewers, which are expected to deliver a detailed and well-founded analysis of the proposals. Taking these external reviews into account, each proposal is independently assessed by two panel members that act as referees. During the evaluation panel

¹ The five structure-related areas are not yet evaluated at this stage of the evaluation procedure.

meeting, both referees present their appreciation of the proposal. Based on these recommendations and the following discussion in the panel, every panel member will independently rate the proposal. Strong proposals are subsequently invited by the SNSF to elaborate a detailed research programme and submit a full proposal (60 pages), which is, again, externally peer-reviewed and discussed in SSH evaluation panels.

Detailed information regarding the evaluation process can be found in the [call document for the 6+ \(SSH\) NCCR call](#).

3.1 Role and tasks of external reviewers

External reviewers assess every proposal in relation to the criteria defined by the SNSF. They apply each criterion to the proposal and deliver a criteria-based assessment. Proposals are not compared with each other at this stage.

The SNSF chooses external reviewers who are based outside Switzerland based on their expertise and knowledge of the latest international developments in the relevant research field. Reviewers are expected to deliver a detailed and well-founded analysis of the proposals.

3.2 Role and tasks of referees

Members of the evaluation panel assume the role of referees and are in charge of evaluating the proposals. They are elected based on their general experience and knowledge as researchers, as well as their expertise in their field; they do not represent their institutions. The Administrative Offices assign individual proposals to the members of the evaluation panel based on the disciplines, keywords, summary and research plan. As far as possible, the Administrative Offices take individual workloads into account when assigning proposals.

Each proposal is assigned to two referees. For the proposals assigned to them, the referees check the reviews for their usefulness and weight them accordingly. The most important criteria for usefulness are the comprehensibility as well as the clarity and concreteness of the reviews. Moreover, the referees provide some bullet points that summarise the main points of the review. Note that external reviewers see only one proposal and that the written comments are often more useful than the grades. Subsequently, the referees assess each proposal for which they are responsible. The referees confirm, supplement, or critically comment on the reviews by adding their own criteria-based assessment. In doing so, they rate the proposals based on the evaluation criteria and using the numeric rating scale. More detail on the criteria-based assessment is available below.

At the outline proposal panel meeting, the referee and co-referee will present their recommendations to the full panel. This will provide the basis for an informed decision in the evaluation panels.

The referees' written recommendations are key documents of the evaluation procedure, and they will be made available to the applicants in anonymised form. The SNSF Administrative Offices will inform applicants about the final rating of their proposal via an official letter, containing a substantive justification of the rating as well as the anonymised external peer reviews and referee recommendations.

3.3 Role and tasks of the balancers

To facilitate the discussion during the panel meeting, the SNSF will assign a third panel member to each outline proposal that will act as balancer. The balancer reads the referee's and co-referee's recommendations as well as the external reviews before the evaluation meeting. During the evaluation

meeting, the main function of the balancer is to assure that critical points emanating from the reviews or the (co-)referees' recommendation are adequately addressed. This is a constructive role meant to steer the discussion towards these points in case they have been overlooked or not sufficiently appreciated, or if the assessments are very divergent. The balancer can challenge the referee/co-referee's recommendation or request further clarification and justification on their assessments. Balancers are not required to read the outline proposals, they look at the referee recommendations and the external reviews and are thematically more distant from the topics of the proposals than the referees. Moreover, the balancer is not a third referee, does not present a separate assessment and does not suggest a rating for the proposals.

4 Criteria-based assessment

As referee or co-referee, you are asked to provide a written recommendation according to the criteria specified by the NCCR funding instrument and the evaluation form in *mySNF*. By integrating the external reviews and your personal appreciation of the proposal, your comments should set out the main strengths and weaknesses of the proposal.

Besides the external reviews, the most important document for your assessment is the outline proposal which can be retrieved in the available documents in *mySNF* under the "Scientific part". The CVs of all applicants, an overview of the consortium, as well as information on management experience of all members of the team of directors can be found under "CV/list of publications/ career plan". Information on the structural commitments by the home institutions can be retrieved in the available documents under "official confirmation / approval". The requested budget is included in the "Administrative part".

4.1 The rating scale

Throughout the evaluation process, the following numeric rating scale is used. It provides clear guidance on how to grade the proposals and enables the use of statistical analyses. A rating of 5 should be considered as the entry point to the scale, from which arguments to grade a proposal lower or higher should be developed.

Rating Scale

Consider 5 (Strong in several relevant aspects. Some clearly identified weaknesses.) as an entry point and develop arguments to grade the application.

- | | |
|----------------------------|--|
| ☐ 9 | Strong in all relevant aspects. No or negligible weaknesses. |
| ☐ 8 | |
| ☐ 7 | Strong in most relevant aspects. Few clearly identified weaknesses. |
| ☐ 6 | |
| ☐ 5 | Strong in several relevant aspects. Some clearly identified weaknesses. |
| ☐ 4 | |
| ☐ 3 | Some strengths in relevant aspects. Several clearly identified weaknesses. |
| ☐ 2 | |
| ☐ 1 | Few or no strengths in relevant aspects. Many serious weaknesses. |

5 Voting and evaluation outcome

After the discussion of a given outline proposal, every panel member electronically casts a vote. The panel members are free to choose a grade from the entire scale. During the casting, the individual votes are hidden. The results of the individual votes, including who voted for which grade, are displayed only after all the panel members have submitted their votes. This ensures a clear, independent vote based on the recommendations made by the referees as well as on the information displayed and discussed during the evaluation.

It lies in the nature of the individual voting process that no consensus is needed before voting and that not all panel members vote for the same grade. A voting result that reflects the diversity of opinions is also one of the main advantages of the new voting system applied by the SNSF and a condition for applying the Bayesian ranking method. However, if individual votes deviate significantly from what has been proposed by the referees and no justification is given, it remains unclear whether the deviating grades are based on valid arguments.

Therefore, the following procedure is applied:

- All relevant arguments are presented before the vote. This also includes a substantially different weighting of the arguments made (e.g. the impact of lower originality in the case of an otherwise sound project).
- No restrictions apply to voting, and the whole scale is available to all panel members.
- If votes deviate two or more points from the recommendations made by the two referees (whichever is closest) and the arguments on which these votes are based are not evident, the panel chair may request that the relevant panel members justify their votes once the voting results have been fully disclosed.

5.1 Bayesian ranking

The individual votes of the evaluation panel members provide the basis for the final ranking of the outline proposals. Ranking proposals based on their average voting grade can be problematic as this ranking does not take into account random fluctuations and other uncertain factors in the evaluation and voting process. Some panel members may not vote on all proposals due to conflicts of interest, not every proposal receives the same number of votes, and some panel members are reluctant to give high grades while others are less strict in their judgements. To account for the different constellations in which votes are casted, Bayesian ranking ([Heyard, Ott, Salanti & Egger, 2022](#)) is applied. Bayesian ranking is based on a statistical model flexible enough to account for different constellations. It compares each proposal with every other proposal, correcting for random effects to produce a comparative ranking.

5.2 Evaluation outcome and decision-making

Based on the ranking list for each panel, the Research Council decides which outline proposals should receive the recommendation to submit a full proposal. The evaluation outcome is subsequently conveyed to the applicants and their respective home institutions in an official letter that includes:

- A general note on the evaluation and its outcome (number of outline proposals, distribution of ratings, etc.);
- An overall appraisal of the proposal's main strengths and weaknesses based on the evaluation criteria;
- The classification of the outline proposal (quintile);
- A recommendation on whether to submit a full proposal or not;
- The anonymised external reviews;
- The anonymised referee recommendations.

Importantly, no formal decision is made at this stage of the evaluation. Every applicant of an outline proposal has the right to submit a full proposal, provided that the home institutions continue to support it and the further requirements for the submission of a full proposal are fulfilled. The applicants are expected to address the weaknesses identified during the outline proposal evaluation.

6 AI use by referees

Referees bear full responsibility for their assessments. The SNSF's evaluation procedure relies entirely on the general experience and knowledge referees as researchers and as experts in their respective fields. All assessments must be based on their own expertise and on a careful reading of the complete proposal.

After referees have formed their own opinion, artificial intelligence (AI) tools may be used to refine their assessment, in a supportive capacity, e.g. assisting in literature research, transforming bullet points into a draft or improving language. The substantive assessment of scientific quality must fully remain in the referees' control and responsibility. AI tools must not be used in a substantial manner in the review process, e.g. to generate all or part of the review, including the criteria-based evaluation, or to generate a list of strengths and weaknesses. When submitting their reviews to the SNSF, referees must disclose their use of AI tools in preparing the assessment.

For further information, please consult the Swiss code of conduct for scientific integrity, chapter 5.2.9: [Swiss Code of Scientific for Scientific Integrity](#).

7 Confidentiality and data protection

According to SNSF regulations and the confidentiality declaration they signed, referees must keep all data confidential and must not forward to unauthorised third parties any documents, discussions or other information obtained in the course of their work, including data accessed via mySNF/the SNSF Portal that they have not personally submitted: [SNSF General implementation regulations for the Funding Regulations](#), Annex 1).

Referees should be aware that uploading or sharing content or original concepts from an SNSF grant proposal or an assessment to AI tools can violate the SNSF's peer-review confidentiality and integrity regulations as well as data protection laws. AI tools such as natural language processors, large language models or other generative AI technologies must fulfil the following requirements at all times. The AI tool must be deployed under specific contractual agreements or in a technical environment ensuring full confidentiality, data security and data protection, including no storage by the provider, no

use for training purposes and no access by unauthorised persons or systems (i.e. any third party besides the reviewer or referee). These conditions must be strictly respected if reviewers and referees run an AI tool on their own device as well as if they use an AI tool hosted by their institution or a cloud-based commercial or non-commercial AI tool.

8 Conflicts of interest

Referees are obliged to declare all potential conflicts of interest. Conflicts of interest are already deemed to exist should an outside observer have reasonable cause to suspect partiality in the evaluation. Such a conflict clearly exists in situations where someone involved in the evaluation procedure has an interest in the outcome of a decision, in particular where the approval or rejection of a proposal may result in an advantage or disadvantage for the referee. As referee you are obliged to disclose all possible links to NCCR directors and PIs, for instance if you:

- are applicant of the project to be evaluated or are referred to as partner in a cooperation of the NCCR;
- currently work or will in the future work in the same institution as the applicants;
- have a close family or personal relationship with the applicants (blood relation, related through marriage, partnership, close friendship);
- professionally depend on or compete with the applicant, or have done so until recently or will do so in the foreseeable future;
- have published jointly with members of the team of directors in the past ten years or with any other PI of the NCCR within the past five years;
- fulfil other criteria that cast doubt on your impartiality.

Based on your self-assessment, the SNSF will evaluate whether the disclosed links qualify as conflict of interest. A limited number of joint publications with individual PIs on the NCCR proposal may not be considered a conflict of interest, if it does not reflect a collaboration of significant intensity.

In accordance with good scientific practice, referees must refrain from any interactions with the applicants throughout the entire evaluation process.

9 DORA (Declaration on Research Assessment)

The SNSF has implemented measures to ensure a fair and transparent evaluation process. These measures include the adherence to the Declaration on Research Assessment (DORA), which recommends that funders explicitly set out the criteria used to evaluate the scientific productivity of applicants. DORA promotes the view that scientific quality across a researcher's entire output is much more important than publication metrics or publishing in a prestigious journal. The SNSF signed DORA in 2014. The DORA recommendations for funding agencies include:

- Be explicit about the evaluation criteria applied.
- Scientific quality of research output counts.
- Do not rely on journal-based metrics or the reputation of the journal (impact factor or H-index).
- Consider the value and impact of all research outputs (such as datasets, software, patents).

10 Checklist to assess proposals involving animal experiments

The SNSF is committed to supporting excellent, original and innovative research that complies with Swiss legislation^{2,3}. However, the SNSF does not intervene in the animal experimentation licence application or assessment procedures, which fall under the sole responsibility of the cantonal authorities.

To ensure the fair and transparent evaluation of research proposals involving animal experiments, the SNSF expects reviewers and members of evaluation panels to thoroughly assess – following the guidance set out in the [Principles and Practices of the Swiss National Science Foundation concerning Research Using Animals](#) – whether the proposed use of animals is scientifically justified and respects the dignity and welfare of the animals involved.

Specifically, reviewers and panel members are asked to consider the following in their evaluation:

- The scientific necessity and methodological suitability of the proposed research involving animals should be evaluated in relation to its overall objectives.
- The proposed animal species, models, and numbers must be scientifically justified, not unnecessarily duplicative, and supported by valid statistical analyses and appropriate methodological approaches.
- Whether the 3Rs principles (Replacement, Reduction, Refinement) have been applied in a meaningful and methodologically sound manner.
- Avoid particularistic ethical judgements or assessing compliance with animal welfare legislation, which lies outside the SNSF's remit.
- Provide constructive, expertise-based feedback to encourage responsible and high-quality study design.

² Animal Welfare Act (AniWA): <https://www.fedlex.admin.ch/eli/cc/2008/414/en>

³ Animal Protection Ordinance (AniPO): [SR 455.1 - Tierschutzverordnung vom 23. April 2008 \(TSchV\) | Fedlex](#) / [RS 455.1 - Ordonnance du 23 avril 2008 sur la pr... | Fedlex](#)