National Centres of Competence in Research – Evaluation Report NIFU on the Selection Process 5th series NCCR

Position statement of the Swiss National Science Foundation



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1. Position statement

In this document the Swiss National Science Foundation (SNSF) provides comments on the independent evaluation report that assessed the selection procedure followed for the 5th NCCR call. The Nordic Institute for Studies in Innovation, Research and Education (NIFU) was mandated to conduct the evaluation and to provide the report. The NIFU also evaluated the selection procedures for the calls of the 3rd and 4th series of NCCRs.

The following sections present the SNSF's position regarding the recommendations formulated by the NIFU evaluators and other reflection axis highlighted by the responsible National Research Council (NRC) that will be considered in future NCCR selection procedures. It is however important to note that those are possible measures that may be considered to improve one or the other aspect of the NCCR evaluation process. The considerations are highly interconnected and sometimes incompatible. Those relevant for the next NCCR selection process will strongly depend on potential adaptations of the NCCR scheme profile and on the upcoming call's detailed framework. Adjustments of the selection process must be well conceived and remain aligned to the profile and mission of the NCCR funding scheme.

1.1 Recommendations from the evaluation report of the NIFU

A) Assign multiple proposals to each member of the panels assessing the full proposals, and also ensure a broad set of experts on each proposal.

The Research Council endorses the idea of choosing panel members who are more **interdisciplinary**, even though this was already an objective in previous panel recruitments. That is, the SNSF should identify panel members who are less experts in any one field but are experienced in judging complex (sometimes interdisciplinary) and large projects – in-depth and field-specific expertise is ensured by the external reviewers that should remain a part of the full proposal review process. Potential panel members should have a demonstrable track-record that suggests they have a broader expertise than the specific area they have to judge.

The SNSF could consider **increasing the number of referees**, who present a proposal. For instance, three or four people in the panel could look at a proposal and the reviews in details. It would be worthwhile to assign more than one NCCR proposal to each panel expert in order to avoid that panel members championing the proposal they are assigned to. However, the whole panel should not look at all applications: these applications are very long and take a lot of time to read. It is not feasible for panel members to read all applications in full.

Another option is to have two lead panel members who have to write and to agree on a single summative report. Thus report is then the focus of all panel members as each application is evaluated. Three or four panel referees could as well agree on a common report, broadening the basis of the assessment and weakening counter-arguments related to biased evaluation and COIs. Such an assessment would be longer than the current referee reports and contain more detail on the scientific and structural objectives of the proposed NCCR.

Increasing the number of external reviewers for each full proposal may also contribute to increase the field-specific expertise and should be implemented in the future.

B) Allowing more input from applicants in the selection of reviewers expertise

This proposition has advantages and disadvantages: on the one hand, it could improve the evaluation process by helping the SNSF to identify potentially qualified reviewers (even if the applicant's nominees are not selected); on the other hand it could introduce unnecessary biases in the process. While the applicants for SNSF grants had the possibility to suggest reviewers in the past, the SNSF decided to change its policy and to generally renounce this practice in all funding schemes. Empirical findings confirm that the reviews of "recommended" experts are systematically more positive than assessments of reviewers selected by an independent body. Nonetheless, other measures such as allowing applicants to suggest specific keywords, a description of the research, a specification of the fields of research and of the expertise that is particularly relevant to reviewing the proposal, rather than names, may help with the search of suitable reviewers. Either way, a reflection on how to select appropriate reviewers should be carried out with the preparation of the next NCCR selection process.

C) Reconsidering the need for a ranked shortlist of the full proposal

Providing a ranked shortlist was not a choice of the NRC but it was an explicit demand by the SERI. Rating and ranking have proven to be very challenging and timeconsuming processes. Should this exercise have to be repeated in the future, the Division should consider bringing in other aspects/ criteria in the process at the point where it is hardly possible to differentiate the scientific merit of several proposals. However, such criteria would need to be published in the call document, and not defined ad-hoc.

D) Consider adjustments in NCCR scheme to increase outreach and flexibility

This recommendation is related to the arguably limited outreach of the 5th NCCR call to the Humanities, Social Sciences and emerging research fields. Hence, a potential "adjustment" of the NCCR scheme could aim at increasing the attractiveness of NCCRs for SSH fields1 as well continuing to search for very novel and truly innovative research topics. In addition, the NCCR scheme needs to become more "flexible" as well.

Given that the commented report focussed on the evaluation / selection procedure, the NRC felt that a substantive positioning toward this recommendation is beyond the scope of this document. Adjustments of the NCCR scheme face challenges at several levels and various trade-offs: Would a higher inclusiveness of the NCCR scheme

are: STEM: 40% / 50% (SNSF funding: 35%); Life Sci/Med: 40% / 36% (SNSF funding: 41%).

¹ The average share of shortlisted NCCR proposals from the SSH for the last three calls was 20% (shortlist always contained 10 proposals, whereof 2 mostly in the SSH). The 20% are close to the 24% that mark the average share of funding the SNSF spent for SSH projects over the past 5 years. However, after the selection of the SERI, only one SSH NCCR was funded in the last calls (14%). The respective shares for shortlisted / funded NCCR proposals from the other domains

compromise its prestige since the NCCRs so far are (and are meant to be) highly selective grants made to strategically important research endeavours?

When evaluating NCCR proposals from all possible fields (from established to emerging) or of any size, would the Research Council still be able to compare the quality and potential of such diverse proposals? This report points to many additional aspects to be considered should the SERI would mandate the SNSF to revise the NCCR funding scheme. The NIFU report states itself (cf. p 76) that the requirements for the NCCR proposals - resulting from the legal framework and political objectives for this funding scheme - are likely to hamper a higher degree of flexibility or a considerably enhanced outreach of the NCCR scheme. In fact, revisions of the NCCR instrument need to be closely interrelated with its objectives.

1.2 Other measures to be considered

In considering the NIFU report, the SNSF identified some other measures that could be discussed as part of the review of the NCCR selection process.

Redefining the role of the research councillors: from observers to moderators

The SNSF RC members (observers) from all divisions should play a more active role in overseeing the panel dynamics and intervene if the situation requires to do so (e.g. panel members not engaging with widely shared concerns raised by external reviewers; insisting on objective and balanced arguments (positive and negative evaluation)). This would require a more subtle management of conflict of interests of Programme division (and other division) members such as by requiring a research councillor who is a member of the host institution of a proposed NCCR to be excluded from the part of the panel meeting when that NCCR is discussed. The role of the Research Councillors in the evaluation of the structural aspects may be reconsidered as it is probably them who are best able to understand and to apply structural measures in an evaluation.

Speeding-up of the evaluation and selection process

It was noted above that there was no real evidence that the NCCR assessment process takes too long and the NRC does see only limited potential to reduce the time for an appropriate evaluation of NCCR proposals. However, one delay to the process may be questioned - the necessity of separate SNSF and SERI meetings with host institutions. The SNSF meetings with host institutions could be cancelled; and perhaps there should be a member of the Direction of the lead host institution in the panel meeting itself. The Division's work could be speeded up. Introduction of further discrimination criteria and reconsideration of the need to rank the short list may help.

Improving the conflict of interest self-declaration for research councillors

A more formal survey of CoIs of all potential panel members and research councillors at the start of both the outline and the full proposal evaluation processes should be implemented. This should use a standard self-declaration based upon a selfprompting questionnaire. It should establish the full history of any potential linkages between applicants and any person involved in the evaluation process (also within the SNSF). The identification of a potential conflict of interest should not necessarily be

exclusionary but should be proactively managed before both the outline and full proposal stage.

Establishing a single interdisciplinary panel for the evaluation of the proposals

The splitting up the NCCR proposals to separate evaluation panels "medical and life sciences; social sciences and humanities; natural and technical sciences" potentially undermines wider attempts to be interdisciplinary and may be reconsidered. For instance, and if we continue the comparison, both Norway and Denmark have a single panel to look at all centre of excellent applications. However, such a panel would need to become much larger (to ensure sufficiently broad expertise) and last an entire week.

Conclusion and Outlook 2.

High quality review and selection procedure - some more room for improvement

Overall, the Research Council appreciated the results of NIFU's evaluation and the associated report, since they confirm a high quality of the conducted NCCR selection procedure and considerable satisfaction of the applicants and stakeholders. Many aspects of the review procedure seem to come close to best practice, although there is still room for improvement. The positive assessment of the implemented revisions since the 4th call is particularly encouraging. Mainly for the full proposals submitted under the 5th call, the in applicants' satisfaction with the thoroughness of the review significantly increased. The recommendation by NIFU emphasising the timely information about panel compositions for NCCR applicants, will be considered for a future NCCR selection procedure.

Complexity and trade-offs

The evaluation procedure, assessed by NIFU, is tailored for the current objectives and format of the NCCR instrument. Moreover, NCCR evaluations are inherently complex and interdependent with the format and goals of the funding scheme. The experience shows that there are trade-offs associated with almost every revision the SNSF made in the past. Moreover, adaptations in the selection process do not always return the expected benefits or advances. One of the most prominent novelties in the analysed review procedure, the appointment of external panel chairs from abroad, had no substantial impact on the applicants' satisfaction with impartiality or quality of the review procedure. When adapting the selection procedure in the future, the Research Council should, nonetheless, conduct an "impact assessment" of the intended revisions - reflecting on potential advantages but also downsides, as well as unintended consequences.

Outlook and future adaptation of the NCCR scheme

With the aim to further improve future NCCR selection procedures, the SNSF will refine its analyses to reveal the causes for the limited attractiveness for NCCR proposals from the Humanities and Social Sciences (SSH). Further insights could be derived from a recent study on the participation of Swiss SSH researchers in calls of the European Research Council (ERC). The SNSF also needs to assess the

substantially lower rate of conversion of SSH outline proposals into full proposals, and the reasons for this.

With regard to the clear underrepresentation of female (senior) researchers as leading NCCR applicants, the SNSF will analyse how the participation of female researchers, submitting proposals as designated NCCR directors, could be improved. The role of the involved universities, supporting the proposal as a home institution, seems crucial in this context. It seems worthwhile to combine the different issues (SSH / gender / role, selection within HI) by applying an intersectional perspective, using data available for recent calls.

The NIFU report recommends some adaptations of the NCCR scheme. On the other hand, wider revisions in the format or objectives of the NCCR instrument will need to be reflected in revisions to the selection procedure as well. Therefore, the SNSF suggests assessing revisions of the NCCR instrument in direct relation to the scheme's intentions, objectives, strengths, and of course, the known weaknesses. Such a revision will then need to inform reflections regarding the selection process. Discussions around a revision of the NCCR scheme will need to take into account the relevant portfolio of SNSF funding instruments as well, since every scheme needs to match specific needs in Switzerland's research landscape with a proper and adequate "profile". Thus, the SNSF will have to position future NCCRs in a wider, and dynamically evolving context. The expected debate about adaptions of the NCCR scheme needs to take up the previous reflections² and there is material relevant to these reflections in the NIFU report even if the latter had a more narrow remit and focus on the selection process itself.

² The related recommendations by NIFU will be addressed in the context of the pending debate about the future design of the NCCR scheme with the State Secretariat for Education, Research and Innovation (SERI). In its "Konzeptbericht mit Optionen für eine Neupositionierung der NCCR", the SNSF already provided suggestions to tackle this issue.