Quality-based resource allocation
Further developed proposal for a new model
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Foreword

The Government has assigned Formas, Forte, the Swedish Research Council and Vinnova together to further develop the model for quality-based allocation of increased direct governmental funding to higher education institutions that the public agencies reported on in June 2021 on behalf of the Government. The assignment entails further developing those parts of the model that relate to how applications and assessments of profile areas shall be designed and implemented.

This proposal has been produced jointly by the research funding bodies, with the Swedish Research Council as the coordinating agency. Dialogue with higher education institutions have been held at a joint dialogue meeting, and regularly with the presidium of the Association of Swedish Higher Education Institutions (SUHF) on eight occasions.

The proposed model for quality-based allocation of increased direct governmental research funding is based on expert assessment of the quality of the profile areas that the higher education institutions describe. We propose that the assessment shall focus in particular on how the profile areas can be developed. The model also strives to limit the administrative burden on the higher education institutions in conjunction with applying, but still provide a sufficient basis for making a transparent and credible assessment of the quality.

We see it as very urgent that reasonable preconditions are provided for implementation. If the Government decides to proceed with the model, sufficient time should be given to the higher education institutions to describe their profile areas, and sufficient time should be given for the experts’ assessment. It is also important that the long-term financial preconditions are clearer in terms of both budget and continuity. Against this background, our standing point is that resource allocation to higher education institutions based on results from the implementation of the model should be introduced no earlier than 2025.

Stockholm, 30 May 2022

Jonas Björck  Ingrid Petersson  
Director General  Director General  
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Summary

As tasked by the Government, the research funding bodies Formas (Swedish Research Council for Sustainable Development), Forte (Swedish Research Council for Health, Working Life and Welfare), the Swedish Research Council and Vinnova - Sweden’s Innovation Agency have together developed this proposed model for quality-based resource allocation of increased governmental funding for higher education institutions (HEIs) for research and education at third-cycle higher education level. A dialogue with representatives of the HEIs has been maintained during the process. The report is a further development of the proposal reported by the research funding bodies on behalf of the Government in June 2021, and is in particular a further development of how the application and the assessment of the profile areas shall be designed and implemented.

The background to the assignment is the Government’s long-term research policy goal, that “Sweden shall be one of the world’s foremost research and innovation countries and a prominent knowledge nation, where high-quality research, higher education and innovation lead to societal development and welfare, a competitive business sector, and address the societal challenges we are facing, both in Sweden and globally.”

In the Government Bill called “Forskning, frihet, framtid – kunskap och innovation för Sverige” (Govt Bill 2020/21:60), the Government states that the model shall be a tool for allocating increased direct governmental funding to HEIs. The intention is for the model to replace the current allocation based on quality indicators used for increased direct governmental funding. The quality-based allocation shall be carried out by allocating funding to ‘profile areas’, which shall be strategic research initiative of high quality, defined and applied for by the HEIs themselves. The profile areas shall aim to strengthen the HEIs’ research profiles and contribute to increased quality in the research. Governmental research funding bodies should be responsible for making expert assessments of the applications, and the research funding bodies’ assessments should form the basis for the Government’s funding decisions. According to the Government assignment, the fundamental principle for quality-based allocation shall be high quality. When determining what high-quality research is, internationally accepted criteria that take quality in all scientific fields into account shall be used. This includes quality in collaboration with the surrounding society as an important component of the assessments. The Government also states that the goal of a new model is, as before, to reward high quality of research, but also increasingly to reward strategic profiling and to prioritise research where the preconditions are assessed as being best for research of the highest international quality at HEIs throughout the country.
The Government assignment also states that the model should be designed in such a way that the work input required for the implementation should be limited. The assignment does not include making any proposal for allocation of resources or conditions for the funding, nor does it include making any proposals for follow-up or evaluation of the respective HEIs’ profile areas.

The proposal in brief

In brief, the research funding bodies’ proposal means that to take part in the quality-based allocation of increased direct governmental research funding, the management of the HEIs included in the model have the opportunity to submit one application each, where they describe one or several profile areas, for which they themselves have defined the focus and scope. In their applications, the HEIs can describe and substantiate the quality and planned development of the profile areas. Based on this documentation, the quality of the profile areas will be assessed by experts according to three components – scientific quality, preconditions for quality, and quality in collaboration with the surrounding society.

An international, broadly composed panel consisting of around 10 persons will be responsible for the assessment of the applications from all the HEIs. To achieve a credible assessment of the scientific quality component, the panel may obtain support from a further two to three subject experts within the particular research field. The result of the panel’s assessment will be presented in a joint statement per HEI, based on a three-degree grading scale and accompanying justification text for each of the three components and for each profile area (if several). These statements are proposed to form the basis for the Government’s decision to allocate increased direct funding for research and education at third-cycle higher education level. The panel is not tasked to draw up a ranking list of the HEIs’ applications or the individual profile areas. We assume that the fundamental principle for quality-based resource allocation shall be high scientific quality, as stated in the Government assignment.

For each of the three components – scientific quality, preconditions for quality, and quality in collaboration with the surrounding society – we have developed a proposal for grounds for assessment that the experts shall use, and proposals regarding the documentation the HEIs shall provide to describe their profile areas. Our starting point is that transparency and predictability in the assessment are important for a quality-assured process, and makes it easier for both those who carry out the assessment and the HEIs being assessed. At the same time, the grounds for assessment must be sufficiently open, so that the entire flora of potential profile areas the HEIs choose to highlight can be included. Given this, we propose that the following main questions form the basis for the assessment:

- Is the research in the profile area of high scientific quality? Does it have the potential to achieve the highest scientific quality? The profile area’s research questions, goals and implementation shall be taken into account.
- Does the profile area have preconditions for research of the highest quality?
• Are strategies and processes for the profile area satisfactory for maintaining and developing the quality in collaboration with the surrounding society?

For each of these main questions, the report provides examples of more concrete guiding questions.

Our proposal includes a time plan for the implementation of the model. In brief, this entails the research funding body responsible producing instructions and information to HEIs and experts during autumn 2022, that the HEIs start preparing their applications, and that recruitment of experts begins. During spring 2023, the HEIs shall submit their applications, and the research funding body responsible shall recruit experts. Before this, the HEIs shall submit brief descriptions of the focus of their profile areas, and have the opportunity to propose experts. During summer and autumn 2023, the experts shall assess the quality of the profile areas, and in January 2024 the result of the quality assessment will be submitted to the Government Offices, ahead of a decision on quality-based allocation of increased direct governmental funding, with payment as from 2025.
1 Background

In March 2021, the research funding bodies Formas (Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning), Forte (Swedish Research Council for Health, Working Life and Welfare), the Swedish Research Council and Vinnova (Sweden’s Innovation Agency) received an assignment from the Government to develop, jointly and in dialogue with higher education institutions (HEIs), a new model for quality-based resource allocation of the HEIs’ direct governmental funding for research and education at third-cycle level, often known as the ‘direct grant’. The mandate included the instruction that the proposal should be designed according to the description in the Government Bill “Forskning, frihet, framtid – kunskap och innovation för Sverige” (Govt Bill 2020/21:60). The intention was to introduce a new model as from 2023, based on expert assessment, to replace the current allocation based on quality indicators (bibliometrics and external funding) when allocating increased direct governmental research funding to HEIs.

The assignment was accounted for in the report “Kvalitetsbaserad resursfördelning. Förslag till ny modell” to the Government on 1 June 2021. The proposed new model was developed within a very limited time frame, and with the starting point that the model was to be introduced already in 2023. An underpinning idea in the proposal was that the model should begin with a start-up phase, to give the HEIs time to identify their profile areas, and because more time was needed to work out the model in detail and to develop grounds for assessment and grading criteria in dialogue between the research funding bodies and the HEIs. The Government's budget bill for 2022 (Govt. Bill 2021/22:1 Area 16 Section 6.5.6) stated that the Government shares the funding bodies’ opinion that more time was needed to develop the model, and that the Government intended to issue a continued assignment to the research funding bodies to continue working, in collaboration with the HEIs, on developing the model, to enable it to be introduced as from 2024.

One starting point for the assignment is the Government’s overarching goal for research policy. In the 2016 Government bill on research policy, “Kunskap i samverkan för samhällets utmaningar och stärkt konkurrenskraft”, (Govt. Bill 2016/17:50) the Government stated a new long-term research policy goal. The goal is that Sweden shall be one of the world’s foremost research and innovation countries and a leading knowledge nation, where high-quality research, higher education and innovation lead to societal development and welfare, a

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1 The Government Bill "Forskning, frihet, framtid – kunskap och innovation för Sverige" (Swedish), can be downloaded from the Government’s website regeringen.se.
2 Report "Kvalitetsbaserad resursfördelning. Förslag till ny modell", Vetenskapsrådet (Swedish), can be downloaded from the Swedish Research Council’s website, vr.se.
3 The Government Bill "Kunskap i samverkan – för samhällets utmaningar och stärkt konkurrenskraft" (Swedish), PDF
competitive business sector, and address the societal challenges we are facing, both in Sweden and globally. The new goal was a sharpening compared to the previous goal, due to the emphasis placed on Sweden becoming one of the very foremost knowledge nations. The goal remains in the most recent research and innovation bill (Govt. Bill 2020/21:60). To ensure Sweden becomes a leading knowledge nation, the Government has set the goal of strengthening the quality of research.
2 The Government assignment and its implementation

2.1 The Government assignment

In January 2022, the Government issued an assignment (U2022/00168) to Formas, Forte, the Swedish Research Council and Vinnova to together further develop the model for quality-based allocation of direct governmental funding for research and education at third-cycle level to HEIs that the public agencies reported on in June 2021. The Swedish Research Council was tasked to coordinate the work on the assignment and its reporting. As to the implementation, the assignment stated that a dialogue should be held with HEIs, and that the Swedish Research Council should continuously inform the Government Offices (Ministry of Education and Research) of how the work on the assignment was progressing. The research funding bodies were to submit a joint, written final report to the Government Offices (Ministry of Education) no later than 1 June 2022. The main points of the Government assignment are summarised below. The quotes are taken from the assignment description from the Government (U2022/00168).

“In the Government Bill called “Forskning, frihet, framtid – kunskap och innovation för Sverige” (Govt. Bill 2020/21:60), the Government states that the model shall be a tool for allocating increased direct governmental research funding to HEIs. The intention is for the model to replace the current allocation based on quality indicators.”

“The work shall focus on enabling introduction as from 2024. The assignment aims to further develop those parts of the model that relate to how applications and assessments of profile areas shall be designed and implemented. The reporting of this assignment will form the basis for the Government’s decision on whether to introduce the model.”

“The next Government bill on research policy is expected to be decided on in autumn 2024, and the Government bill on the budget for 2025 is expected to present proposals and calculations on the financial preconditions for the next four-year period (2025–2028). How much funding that will be allocated using the model in the long term, and with what periodicity, is therefore dependent on the future decisions taken by the Riksdag in relation to funding and the model. To become sustainable in the long term, the model must therefore be flexible. It is incumbent upon the Government and the Riksdag to distribute funds within future economic frameworks. The assignment therefore does not include making any proposal for allocation of resources or conditions for the funding.”

“The fundamental principle for quality-based allocation shall be high scientific quality. When determining what research is of high quality, internationally accepted criteria that take into account quality in all scientific fields shall be
used. This includes quality in collaboration with the surrounding society as an important component of the assessments.”

“National government’s allocation of direct research funding shall have a long-term aim and create drivers for high quality in all research. The Government bill on research policy for 2020 states that a starting point is that all HEIs shall be able to be allocated at least one profile area, so that research can be strengthened and developed in a strategic direction throughout the country. The HEIs that should be included in the model are those that were allocated funding based on the quality indicators in the supplementary budget in spring 2021.”

“The HEIs’ applications should be able to relate to both new and established research fields.”

The assignment does not include making any proposal for follow-up or evaluation of the respective HEI’s profile areas. The Government does, however, intend to revisit this issue with an assignment to evaluate the profile area initiative after six to seven years, to see whether the model has led to profile areas being developed, and whether it has increased quality.

“The model should be designed in such a way that the work input required for the implementation should be limited. This applies to the work input by both the research funding bodies and the HEIs, both for their core activities and for administration.”

“To capture a broader quality concept that enables a fairer assessment of different research fields, the Government states in the bill that the quality indicators should be replaced by expert review.”

The Government bill also states that the quality-based allocation shall be carried out by allocating funding to ‘profile areas’. The profile areas shall be strategic research initiatives of high quality, defined by the HEIs themselves. The profile areas shall aim to strengthen the HEIs’ research profiles and contribute to increased quality in the research. It is the HEIs, not individual researchers, that should apply for funding for the profile areas and governmental research councils should be responsible for making expert assessments of the applications. The research councils’ assessments should form the basis for future funding decisions.”

“The Government also states that the goal of a new model for quality-based resource allocation is, as before, to reward high quality of research, but also increasingly to reward strategic profiling and to prioritise research where the preconditions are assessed as being best for research of the highest international quality at HEIs throughout the country.”

“The funding intended to be allocated to profile areas is part of the direct governmental research funding, and are therefore long-term, for the purpose of giving the HEIs increased opportunities to sustainably develop the strategic work on profiling their research. The Government’s research policy bill for 2020

4 Entails 27 HEIs in total.
states that the funding should initially be specified in the HEIs’ research funding.”

2.2 Implementation of the Government assignment

In accordance with the Government’s assignment, the further developed proposal was produced jointly by Formas, Forte, the Swedish Research Council and Vinnova, and coordinated by the Swedish Research Council. Regular meetings have been held by the Directors General, Ingrid Petersson at Formas, Jonas Björck at Forte, Sven Stafström at the Swedish Research Council and Darja Isaksson at Vinnova. The work was coordinated by a team composed of the research funding bodies’ heads of analysis or corresponding: Erik Eriksson, Formas; Cecilia Beskow, Forte; Johan Lindell (convenor), Swedish Research Council; and Göran Marklund, Vinnova. The work team producing documentation and drafts consisted of Carolina Hertzman Johansson, Magnus Lagerholm, Maud Quist (team leader) and Lisbeth Söderqvist, all from the Swedish Research Council, and Susanne Karlsson from Formas.

Dialogue with HEIs has been carried out continuously, via the Association of Swedish Higher Education Institutions (SUHF), with a total of eight meetings. The managements of all the HEIs were invited to a dialogue meeting on 8 April 2022 to discuss a further developed proposal for a new model. The meeting was arranged jointly by SUHF and the research funding bodies. The views of the various actors have implied that the design of the proposal has been adjusted during the course of the work, to take into account different perspectives. For example, we have tried to find a balance between work input and level of detail on the one hand, and a transparent and quality-assured assessment process on the other hand. The research funding bodies have on two occasions informed officers at the Ministry of Education and Research about the implementation and preliminary proposals of the assignment.

The Government assignment states that internationally accepted criteria for what research of high quality is shall be used. The Government’s current profile area initiative is a new one, but we have nevertheless used experiences from other organisations and countries as applicable. We have also continued building on the research funding bodies’ joint knowledge and experiences of assessments and evaluations of different types, to develop the proposed model. For example, we have used previous contemporary environment analysis relating to quality assessment of research in other countries, such as Finland (Profi), United Kingdom (REF) and Netherlands (SEP), and also ongoing work within the European Commission to reform the system for assessing research. We have noted, however, that there is no method or system that in all parts are directly applicable to this new initiative with profile areas in the Swedish research system.
2.3 Time plan for implementation

According to the Government assignment, the proposed model shall enable introduction as from 2024. In autumn 2024, the next Government bill on research policy is expected to be decided on, and the Government bill on the budget for 2025 is expected to present proposals and calculations on the financial preconditions for the next four-year period (2025–2028). We have understood this to mean that actual allocation of funding based on the model will be paid out to the HEIs no earlier than 2025. This is also a precondition for enabling both the procedures at the HEIs and the assessment procedure to be implemented in a reasonable and quality-assured way. This means that the Government must have the documentation for basing a decision on, namely the assessment results, available during spring 2024.

Given these preconditions, we assume the following tentative time line for the process:

- Autumn 2022: The research funding body responsible produce information and instructions for the HEIs and for the experts. The HEIs prepare their applications, namely their descriptions of the profile areas. Recruitment of panel members begins.
- January 2023: The HEIs submit a brief preliminary description of the focuses of the profile areas they intend to include in their applications, and have the opportunity to submit proposals for subject experts.
- February–May 2023: The HEIs submit their applications.
- February–May 2023: Continued recruitment of panel members and any subject experts.
- June 2023: The HEIs’ applications are issued to the panel, and as appropriate to the subject experts.
- June–October 2023: The panel and the subject experts make their assessments.
- August 2023: Deadline for the subject experts to submit their written statements to the panel.
- Beginning of November 2023: Panel meeting.
- November–December 2023: The panel’s statements are compiled.
- January 2024: The result from the quality assessment is sent to the Government Offices ahead of a decision on resource allocation.
3 What is a profile area?

3.1 The HEIs define their profile areas
The quality-based allocation shall be done by allocating funding to profile areas. The fundamental principle for quality-based allocation shall be high scientific quality. According to the Government assignment, the profile areas shall be strategic research initiatives of high quality, in other words, the profiling shall be in research, not any other type of HEI profiling. The managements of the HEIs are responsible for what and how many profile areas they wish to include in the application for quality assessment. The HEIs themselves define the subject or thematic focus on the research in their profile areas. This means that there will probably be a large variation in the profile areas that the HEIs wish to highlight. The proposed long-term goal for the profile areas of the highest quality (see Section 3.2) and the examples of guiding questions for assessment in Chapters 5–7 provide a framework for what we propose should characterise profile areas of the highest quality. There should not be any administrative obstacles to several HEIs applying for similar profile areas, collaborate in profile areas, or apply for multi-disciplinary profile areas.

The profile areas may include both new and more established research fields. Given the character of the profile area, as described in the application, the renewal and quality development of the research, as well as the potential to achieve the goal of profile areas of the highest quality that we propose below shall be included in the assessment of both new and established profile areas.

3.2 Goal for profile areas of the highest quality
Our proposal for a goal to strive for in the longer term, that is, what characterises a profile area of the highest quality, is divided up into three components in line with what is indicated in the Government assignment: Scientific quality, preconditions for quality, and quality in collaboration with the surrounding society. We have assumed that high scientific quality, renewal and potential for quality development are fundamental for the profile area to come into question for this increase in the direct governmental funding.

The proposed goal in the long term is that:

- The research in the profile area is of the highest international scientific quality, or has the potential to reach the highest international quality, and moves the research frontier forwards.
- The HEI works strategically with renewal and quality development within the profile area.
- The preconditions for the profile area are sustainable and fit-for-purpose, in terms of short-term and long-term competence supply, funding and access to research infrastructure.
• The profile area’s collaboration with the surrounding society is fit-for-purpose and contributes to the highest quality and relevance of the research in the profile area, and to that the research creates better understanding for or solutions to various societal challenges.
4 Assessment process

4.1 One application per HEI

Each HEI, irrespective of size, may submit one application describing one or several profile areas. The application, covering around 30 pages, shall be written in English, to enable assessment by international experts. Chapters 5–7 state what the application should include. To gain an idea of the number and approximate focus of the profile areas, and to enable the recruitment of experts to begin in time, we suggest that the HEIs notify the focus of their proposed profile areas in January 2023, as per the proposed time plan, by stating the preliminary title and a brief description (around half a page) for each area, plus a number of key words and SCB/Statistics Sweden codes that together provide an overview. The HEIs also have the opportunity to propose international, non-biased subject experts.

4.2 The profile areas are assessed based on main questions and guiding questions

Our proposal is based on the HEIs describing and documenting the quality and planned development of the profile areas in their applications. When assessing the profile areas, the three components of quality (scientific quality, preconditions for quality, and quality in collaboration with the surrounding society) shall be taken into account. Given this, we have formulated the following main questions, to form the basis for the assessment:

• Is the research in the profile area of high scientific quality? Does it have the potential to achieve the highest scientific quality? The profile area’s research questions, goals and implementation shall be taken into account.
• Does the profile area have preconditions for research of the highest quality?
• Are strategies and processes for the profile area satisfactory for maintaining or alternatively achieve high quality in collaboration with the surrounding society?

Chapters 5–7 provide proposals for concretising these main questions, in the form of examples of guiding questions that are intended to use as support for the HEIs in the design of the application, and also to create a transparent assessment process and provide support to the experts in the assessment.

4.3 The panel and the subject experts

A starting point for the assignment is that the model shall be implemented with the help of expert assessment. This chimes well with our view that expert assessment provides better preconditions for assessing quality in a broader perspective than is possible by using the quality indicators currently used by the Government, that is, quantitative data on publications, citations and external funding. Expert assessment also provides better preconditions for assessing quality in all research fields with differing publication traditions and differing
opportunities for external sources of funding, and with differing preconditions overall. Expert assessment also enables a forward-looking perspective, which is important for the model, as opposed to the existing indicators, which are entirely backward-looking.

We suggest that all applications are assessed by an international panel consisting of around ten persons in leading positions and with backgrounds in different fields. The panel members shall together represent a broad range of competences with solid experience of research in different scientific fields, research strategy work, quality development work, organisational and leadership issues, evaluation of scientific quality in various scientific fields, and collaboration between research in academia and the surrounding society. The gender distribution shall be equal, and the members shall represent a wide range of geographical locations.

One chair and one deputy chair of the panel shall be appointed. The panel has joint responsibility for the final assessment of the quality of each profile area, based on each of the three components, consisting of scientific quality, preconditions for quality, and quality in collaboration with the surrounding society (see Figure 1). The panel shall hold one or more joint meetings, and shall summarise its assessment of each profile area with a grade each per component on a three-degree scale. The grades shall be accompanied by a written justification per component, reflecting the guiding questions for assessment. The panel shall not carry out any ranking of the HEIs or the individual profile areas against each other.

**Figure 1. Schematic illustration of the panel’s task of assessing the quality of a profile area based on three components. For the scientific quality component, the panel may obtain statements from subject experts.**

The panel shall base its assessment of the quality of the profile areas on the HEIs’ descriptions. To assess the scientific quality component, the panel may obtain support in the form of written statements from preferably a further two to three subject experts per profile area. The subject experts shall have the ability to relate the level of the research in the profile area described to the research frontier. Because they have experience and competence within the scientific
field in question, they can base their assessment on the character of the specific field. The subject experts shall only assess scientific quality, not the other two components. The written statements from the subject experts shall be based on the guiding questions for assessment, described in Chapters 5–7, and include a grade on a three-degree scale.

4.4 Background information for the panel

As an international panel cannot be expected to have full insight into the Swedish higher education landscape, they will receive a brief introduction as background for their assessment. We suggest that the research funding body responsible summarises information at an overview level about volumes of funding and personnel. The statistical data that will be presented at HEI level are only intended to increase the panel’s understanding, not to be used for evaluation. To limit the work load, data will be taken from publicly available statistics, and from existing reports, such as the Swedish Research Council’s Swedish Research Barometer, and the Swedish Higher Education Authority’s annual report. We also suggest that descriptive texts with summary information about factors such as research funding and employment, gender equality and open access are produced. The subject experts will also have access to this information.

4.5 The panel’s statements are summarised and submitted to the Government

The result of the panel’s quality assessment will be presented in a joint statement per HEI, based on the grades and accompanying justification text for each of the three components and for each profile area (if several). These form the basis for the Government’s decision to allocate increased direct governmental funding for research and education at third-cycle higher education level. We assume that the profile areas described in the application must be of high quality in order to be included in this reinforcement to the direct governmental funding, that is, the fundamental principle for quality-based resource allocation shall be high scientific quality, as stated in the Government assignment.
5 Assessment of scientific quality

5.1 Grounds for assessment

Main question
Is the research in the profile area of high scientific quality? Does it have the potential to achieve the highest scientific quality? Take into account the profile area’s research questions, goals and implementation.

Guiding questions
Is there potential within the profile area for research breakthroughs and pioneering research, that is, moving the research frontier forward?

• Are the scientific questions and goals important in relation to existing knowledge and ongoing research around the world?
• To what extent does the profile area show potential for research breakthroughs and pioneering research?
• To what extent are new research fields generated or explored, or are new methods used to approach the scientific questions?
• Are sex and gender perspectives applied when relevant to the research?

Is the planned research scientifically feasible, and is there sufficient competence within the profile area?

• Is the research plan feasible in terms of design and time plan?
• To what extent has the HEI’s previous research contributed new knowledge within the research field?
• Is there sufficient scientific expertise and experience in the profile area to successfully complete the research?
• Are any international and national research collaborations within the profile area in existence or planned?
• Are the ethical considerations for the profile area well described and taken care of?

5.2 Grading criteria
The panel shall make an overall assessment of each profile area’s scientific quality on a three-degree scale. The grade shall be justified based on the main question, and the panel’s assessment shall reflect the guiding questions.

Grade 3: The research in the profile area is of the highest, or has the potential to reach the highest scientific quality.

Grade 2: The research in the profile area is of high, or has the potential to reach high scientific quality.
Grade 1: The research in the profile area is in part of high scientific quality.

5.3 Documentation from the HEIs
Each HEI may submit one application. The application may include one or several profile areas. For each profile area, the following shall be stated:

Name of the HEI

Title of the profile area

Key terms (free choice)

SCB/Statistics Sweden codes (five-digit level)

Abstract
Describe briefly the purpose and goal of the profile area, the main research questions that you intend to investigate within the profile area, and how the planned research within the profile area could move the research frontier forward. The text should be readable and comprehensible to a panel of generalists.

Research plan
• Purpose and aims. State the overall purpose and specific aims of the research in the profile area.
• Current research frontier. Summarise briefly the current research frontier within the field covered by the profile area. Explain in what way the proposed research has the potential to move forward or renew the current research frontier.
• Preliminary and earlier results. Describe briefly the HEI’s previous research within the research field that make it probable that the planned research will be feasible.
• Research description Describe the main theories, methods and time plan of the planned research. If sex and gender perspectives are relevant to the research, then please describe.
• International and national collaboration. Describe collaborations within the profile area with foreign and Swedish researchers/research teams/HEIs.
• Ethical considerations. Describe the ethical issues that are relevant, and how any ethical dilemmas will be managed. If no ethical issues are raised, please justify this.

Relevant publications from the HEI
List a total maximum of 30 of the most important publications within the profile area, together with a justification why these are relevant to the planned research within the profile area.
6 Assessment of preconditions for quality

6.1 Grounds for assessment

Main question
Does the profile area have preconditions for research of the highest quality?

Guiding questions

Is the HEI’s engagement in and organisation of the profile area convincing?

- Is the HEI’s overall engagement in the profile area convincing?
- Is the organisation of the profile area fit-for-purpose?
- Are the financial preconditions on a par with the profile area’s aims?

Is the competence supply satisfactory in the short and long term?

- Is the plan for competence supply within the profile area realistic and credible in the short and long term? Are there, for example, both senior and junior researchers, as well as doctoral students? Does the organisation of the profile area support the career development of junior researchers? Are there any plans for strategic recruitment?
- Is there a balance between women and men in the various employment categories, given the gender distribution of the field in general? How does the HEI reason in relation to any imbalance in the profile area?
- Are there any plans for how to safeguard the supply of technical and administrative support personnel for the research?
- Does the HEI work with issues relating to working conditions to create an attractive work environment that contributes to retaining and recruiting employees with the right competence in the profile area?

Is there access to adequate equipment and research infrastructure?

- Are there any plans for how to safeguard access to adequate equipment and research infrastructure for the profile area?

6.2 Grading criteria

The panel shall make an overall assessment of each profile area’s preconditions on a three-degree scale. The grade shall be justified based on the main question, and the panel’s assessment shall reflect the guiding questions.

Grade 3: Very good preconditions exist for the HEI to develop a profile area of the highest quality.
Grade 2: Good preconditions exist for the HEI to develop a profile area of the highest quality.

Grade 1: Preconditions partly exist for the HEI to develop a profile area of the highest quality.

6.3 Documentation from the HEIs
Each HEI may submit one application. The application may include one or several profile areas. For each profile area, the following information shall be stated:

Describe the HEI’s engagement in and organisation of the profile area in the short and long term.

• Describe the HEI’s overall engagement in and strategic work with renewal and quality development in the profile area, and how this contributes to the profile area achieving the highest quality.
• Describe the profile area’s financial preconditions and future needs.
• Approximately how many researchers will be active within the profile area on a (corresponding to) full-time basis?
• Describe how the HEI’s organisation contributes to good preconditions for the quality and quality development of the profile area.

Competence supply in the short and long term.

• Describe the plan for competence supply within the profile area in the short and long term, describe the balance between senior and junior researchers, and how the career development of junior researchers is supported. Describe also any plans for strategic recruitment.
• Describe and discuss the balance between women and men in the various employment categories.
• Describe the supply of technical and administrative support personnel for the profile area.
• Describe how the HEI works on creating an attractive work environment that contributes to retaining and recruiting employees with the right competence in the profile area.

Equipment and research infrastructure in the short and long term.

• Describe in brief the plans for how to safeguard access to adequate equipment and research infrastructure for the profile area.
7 Assessment of quality in collaboration with the surrounding society

7.1 Grounds for assessment

Main question
Are the strategies and processes for the profile area satisfactory for maintaining and developing the quality in collaboration with the surrounding society?

Guiding questions
Does the profile area’s collaboration with the surrounding society contribute to strengthening the scientific quality and relevance of the research?

• Are relevant actors from different sectors of society involved in the profile area, for example for gathering knowledge, or identifying knowledge gaps or research needs?
• Are the collaboration forms for joint knowledge production with the participating actors fit-for-purpose?

Is it clear that the planned collaboration activities contribute to results, value-creation or solutions for the surrounding society?

• Is there capacity, processes and supportive structures that enable joint knowledge production that benefits the surrounding society?
• Is the research made accessible to decision-makers and the broader general public in an adequate way, for example through education, communication, publication with open access and open research data?

7.2 Grading criteria

The panel shall make an overall assessment of each profile area’s collaboration on a three-degree scale. The grade shall be justified based on the main question, and the panel’s assessment shall reflect the guiding questions.

Grade 3: Very high quality or potential to achieve very high quality in collaboration with the surrounding society.

Grade 2: High quality or potential to achieve very high quality in collaboration with the surrounding society.

Grade 1: Partly developed quality in collaboration with the surrounding society.
7.3 Documentation from the HEIs

Each HEI may submit one application. The application may include one or several profile areas. For each profile area, the following information shall be stated:

**The profile area’s strategies for collaboration with the surrounding society.**

- Describe the HEI’s strategies and how they are implemented for maintaining and developing the quality in collaboration with the surrounding society in the profile area.
- Describe the collaboration activities that are in progress or planned.

**The importance of collaboration for the scientific quality and relevance of the research within the profile area.**

- Describe how collaboration with the surrounding society within the profile area contributes or may contribute to the quality and relevance of the research, for example through joint knowledge production.
- Describe in what way the profile area includes knowledge and needs from actors from different sectors of society, and how this impact or may impact on the scientific quality and relevance of the research for society.

**The importance of collaboration for joint knowledge production and use of the profile area’s research in the surrounding society.**

- Describe the engagement of different actors in the profile area, or how the profile area plans to engage them.
- Describe how you plan to utilise the research in the profile area in education.
- Describe how the knowledge generated in the profile area is used or may be used in the surrounding society through the initiatives of the profile area. Examples are through joint knowledge production, communication, publication with open access and open research data, and making the research accessible to decision-makers, the broader general public, and the private and public sectors.
8 Opportunities and risks

8.1 Opportunities and risks
This proposed model for quality-based resource allocation based on expert assessment of profile areas provides opportunities to develop Swedish research according to the goals for research policy. It entails a fairer assessment of different research fields, and a broader, more inclusive quality concept compared to a model based on indicators. It can, for example, open up opportunities for research fields that are today of high quality, but perhaps under-funded, to be strategically highlighted by the HEIs, which may bring with it positive effects, such as renewal, increased gender equality and further developed quality. The model includes the HEIs themselves strategically identifying and working out profile areas; a process that in itself is expected to have a quality-driving effect. The complementary role that the profile area funding is expected to have in the Swedish research funding system should provide incentives for strong research profiles, and in the longer term for successful research.

It cannot be heavily enough underlined that clarity and a long-term approach to how the model is implemented will be crucial for its effect. Clear frameworks in the implementation will be crucial for the quality of the applications, and for the model’s quality-driving effect. The HEIs’ internal processes for developing profile areas are, in many cases, probably not an easy task. Already when they develop their profile areas, the HEIs would probably need to know more about the preconditions, for example the scope of the budget and the continuity of the initiative. It is also important that the process can be developed during the course of the work, so that lessons can be learnt. It may be suitable to establish, at an early stage, a transparent system for evaluating the initiative, which can also function as support for the HEIs in the design and development of their profile areas.

The reporting of the previous assignment highlighted a number of risks, among which were worry about too great a work input at both the HEIs and the funding bodies. The purpose of the proposed model is to have a clear assessment process, which can include all types of profile areas, while at the same time keeping the work input at a reasonable level for all parties.

It is not possible in advance to fully determine how much profiling, further quality enhancement and development of Swedish research the model will contribute to. A possible scenario is that only already strong areas will be highlighted and strengthened. But an equally possible scenario is that areas that already have strong funding will not need the profile area funding to the same extent, and therefore are not highlighted by the HEIs in their applications. These two scenarios do not in themselves be a problem, as long as the profiling leads to development and quality reinforcement. The HEIs’ own interest in strategically developing their research in order to stay at the leading edge and move the research frontier forwards forms the clearest driver of renewal in the model. On
the other hand, there is no guarantee in the model that entirely new profile areas will emerge.

Sweden has previously experienced that funding that sets requirements for the highest scientific quality favours men as a group. According to a study from 2010, in overall terms, women constituted only 13 per cent of those awarded centres of excellence or strategic initiatives, while 87 per cent of the initiatives were awarded to men. One reason may be that the majority of professors are men. A study from the Swedish Research Council indicates that the reason for this pattern being difficult to break may be that scientific fields that are dominated by women have few professors, while scientific fields that are dominated by men have many professors. Given this fact, there may be a risk that the Government’s allocation of the increased direct governmental research funding repeats previous experiences.

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5 Report "Hans Excellens: om miljardsatsningarna på starka forskningsmiljöer", (Swedish, PDF) by Delegationen för jämställdhet i högskolan, Stockholm on website forskningspolitik.se.

6 Report “How gender-equal is higher education? Women’s and men’s preconditions for conducting research” - Vetenskapsrådet, Stockholm 2021, can be downloaded from the Swedish Research Council’s website vr.se.