

Standard Evaluation Protocol 2015 – 2021

Protocol for Research Assessments in the Netherlands

Amended version, 2016



KONINKLIJKE NEDERLANDSE
AKADEMIE VAN WETENSCHAPPEN



Netherlands Organisation for Scientific Research

Errata, July 2015

On the following pages, the text has changed relative to the previous version of March 2014: page 24, page 26 and page 28. The adjustments have been incorporated into the main text.

Amendments, September 2016

In July 2016 'diversity' was added as a third aspect that the assessment committee considers in its qualitative assessments, in addition to PhD programmes and research integrity. The text on the following pages has therefore changed relative to the previous versions: page 6, page 7, page 9, page 12, page 13, page 17, page 21, page 24 and page 31. These amendments have been incorporated into the main text.

In addition, one sentence on page 14 has been modified slightly to clarify the intention of the narrative.

This Standard Evaluation Protocol (SEP) was published under the authority of the Association of Universities in the Netherlands (VSNU), the Netherlands Organisation for Scientific Research (NWO), and the Royal Netherlands Academy of Arts and Sciences (KNAW). This SEP was presented to the Dutch Minister of Education, Culture and Science dr. Jet Bussemaker on 21 March 2014.

Lay-out: Tigges aanstekelijke communicatie,
Voorburg, The Netherlands.
Published: 21 March 2014, all rights reserved.

Contents

Introduction	4
1. SEP 2015-2021	5
1.1 Aims and target groups	5
1.2 SEP: Basic principles	5
1.3 The SEP in a nutshell	5
2. Assessment criteria and categories	7
2.1 Focus	7
2.2 Assessment criteria	7
2.3 Categories	7
2.4 PhD programmes, research integrity, and diversity	7
3. The research units	10
3.1 Aggregate level of assessment within an institution	10
3.2 National assessments of research fields	10
4. Scheduling and managing an assessment	11
4.1 Scheduling the assessments	11
4.2 Terms of Reference, ToR	11
4.3 Composition of the assessment committee	11
5. Self-assessment and additional documentation	13
5.1 Documents furnished by the research unit	13
5.2 Contents of the self-assessment	13
6. Site visit	15
6.1 Prior to the site visit	15
6.2 During the site visit	15
7. Assessment report	16
7.1 Procedure	16
7.2 Timeframe	16
7.3 Contents of the assessment report	17
8. Public accountability and follow-up	18
8.1 Public accountability	18
8.2 Follow-up	18
Appendix A Overview of tasks and responsibilities	19
Appendix B Terms of Reference format	21
Appendix C Statement of impartiality and confidentiality	22
Appendix D Format self-assessment report	23
Appendix E Format assessment committee report	31

Introduction

The Standard Evaluation Protocol (SEP) describes the methods used to assess research conducted at Dutch universities and NWO and Academy institutes every six years, as well as the aims of such assessments. As in the case of the previous SEPs, the present Standard Evaluation Protocol was drawn up and adopted by the Association of Universities in the Netherlands (VSNU), the Netherlands Organisation for Scientific Research (NWO), and the Royal Netherlands Academy of Arts and Sciences (KNAW). These organisations have undertaken to assess all research conducted within their organisations between 2015 and 2021 in accordance with this SEP.

This document is intended for all who work with the Standard Evaluation Protocol, whether they be researchers, the heads of research groups, policy officers, members of boards, or members of assessment committees. After describing the aims of the protocol and the assessment criteria in the first two chapters, the document goes on to provide all the information needed to organise and carry out proper research assessments. The text follows the chronological sequence of steps that make up an assessment: identify the research unit to be assessed; specify the Terms of Reference (ToR) and the composition of the assessment committee; draft a self-assessment; conduct the site visit; draw up the assessment report; and finally, have the institution's board offer public accountability and follow up on the assessment. The appendices provide formats and checklists for the documents to be produced during the assessment process.

Although the authors of the SEP have made every effort to choose their words carefully and to draw up a protocol that does justice to the multifaceted nature of research, the SEP cannot cover every situation or answer every question that may arise. The SEP may be deviated from if the relevant board so decides and has good reason for its decision. After all, the point is not to stick slavishly to the rules of the SEP but to use these rules to arrive at a transparent and fair assessment of the quality and relevance of publicly funded research.

1. SEP 2015-2021

This section summarises the key features of the SEP 2015-2021.

1.1 Aims and target groups

Research assessments based on the SEP serve different aims and target groups. The primary aim of SEP assessments is to reveal and confirm the quality and the relevance of the research to society and to improve these where necessary.

In addition, SEP assessments also serve specific aims, depending on the target group involved:

- The first target group consists of researchers and those who head research groups. They need to know how the quality of research, societal relevance and their unit's strategy will be assessed, and how these aspects can be improved.
- The second target group consists of the boards of the institutions, who wish to track the impact of their research policy.
- Government also wants to know the outcomes of such assessments in connection with the institutions' accountability for expenditure and its own efforts to support an outstanding research system.
- Finally, society and the private sector are interested in the assessments because they seek to solve a variety of problems using the advanced knowledge that research delivers.

The following parties are involved in individual assessments:

- a. the institution's board;
- b. the research unit that is being assessed;
- c. the assessment committee.

In addition, the assessment outcomes are shared with other stakeholders (government, the private sector, civil society organisations, and so on).

Appendix A lists the task and responsibilities of the three parties involved in the assessment process.

1.2 SEP: Basic principles

The basic principles of the SEP are as follows.

1. The quality assurance system serves to guarantee, reveal and confirm the quality and relevance of academic research. The assessment concerns the scientific, societal and strategic aspects of the research.
2. The boards of the universities, NWO and the Academy take full responsibility for the assessments and following up on them within their own institutions. They are also responsible for seeing that every unit within their institution is assessed once every six years, for the overall scheduling of assessments at their institution, and for giving notice of pending and concluded assessments.
The boards must also take a number of specific procedural decisions, for example concerning the aggregate level at which assessments are to be carried out, whether or not mid-term assessments are needed, and regarding the requirements for the output indicators to be delivered.
3. The research unit's own strategy and targets are guiding principles when designing the assessment process. That includes the composition of the assessment committee and specifying the Terms of Reference and the substance of the self-assessment.

1.3 The SEP in a nutshell

All research conducted at Dutch universities, university medical centres and NWO and Academy institutes is assessed regularly in accordance with the SEP. External assessment committees conduct these assessments for each unit or institute once every six years (not all at once, but on a rolling schedule). The institution decides how the unit will follow up on the external assessment committee's recommendations.

The external assessment concerns a) research that the research unit has conducted in the previous six years and b) the research strategy that the unit intends to pursue going forward.

The boards of the universities, NWO and the Academy are responsible, within their own realm, for seeing that the assessments are carried out. They decide when an assessment is to take place and which research units will be assessed. The boards draw up a schedule of assessments and inform the research units well in advance. They may also decide jointly to undertake national assessments of research fields.

The board of the institution must specify the Terms of Reference for each assessment. It determines the aggregate level of assessment and selects an appropriate benchmark, in consultation with the research unit. The board appoints an assessment committee. The committee should be impartial and international. The committee must be capable, as a body, to pass a judgement regarding all assessment criteria.

The research unit subject to assessment provides information on the research that it has conducted and its strategy going forward. It does this by carrying out a self-assessment and by providing additional documents.

The assessment committee reaches a judgement regarding the research based on the self-assessment, the additional documents, and interviews with representatives of the research unit. These interviews take place during a site visit.

The committee takes into account international trends and developments in science and society as it forms its judgement. In judging the quality and relevance of the research, the committee bears in mind the targets that the unit has set for itself.

The assessment committee bases its judgement on three assessment criteria: research quality, relevance to society, and “viability” (the extent to which the unit is equipped for the future). In its report, the assessment committee offers that opinion both in text (qualitative) and in

categories (quantitative). The four possible categories are “excellent”, “very good”, “good” and “unsatisfactory”. The committee also makes recommendations for the future.

The assessment committee considers three further aspects: PhD programmes (including those at the national research schools), research integrity and diversity. Here, the committee limits itself to a qualitative assessment.

Finally, the assessment committee passes a judgement on the research unit as a whole in qualitative terms.

The board of the institution receives the assessment report and acquaints itself with the research unit’s comments. It then determines its own position on the assessment outcomes. In its position document, it states what consequences it attaches to the assessment. The assessment report and the board’s position document are then published.

2. Assessment criteria and categories

This chapter describes the assessment criteria and categories of the SEP 2015–2021 and the aspects the assessment committees consider.

2.1 Focus

The primary aim of the SEP is to reveal and confirm the quality and relevance of the research to society and to improve these where necessary. SEP assessments thus focus on the strategic choices and future prospects of research groups, and it is important for the assessment committees to tailor their recommendations accordingly. In the view of the research units, institutions and assessment committees, assessments of the quality and relevance of research fulfil a duty of accountability towards government and society.

2.2 Assessment criteria

The assessment committee assesses the research unit on the three assessment criteria. It ensures that the qualitative assessment (text) and the quantitative assessment (assigned category 1-4) are matched. It is important for the committee to relate these criteria to the research unit's strategic targets. The three criteria are applied with a view to international standards.

1 Research quality

The committee assesses the quality of the unit's research and the contribution that research makes to the body of scientific knowledge. The committee also assesses the scale of the unit's research results (scientific publications, instruments and infrastructure developed by the unit, and other contributions to science).

2 Relevance to society

The committee assesses the quality, scale and relevance of contributions targeting specific economic, social or cultural target groups, of advisory reports for policy, of contributions to public debates, and so on. The point is to assess contributions in areas that the research unit has itself designated as target areas.

3 Viability

The committee assesses the strategy that the research unit intends to pursue in the years ahead and the extent to which it is capable of meeting its targets in research and society during this period. It also considers the governance and leadership skills of the research unit's management.

2.3 Categories

The judgements based on the three criteria described above constitute the core of the assessments. These qualitative assessments are supplemented by assigning the research unit to a discreet category (1-4) for each of the criteria. There are no intermediate categories.

2.4 PhD programmes, research integrity, and diversity

In addition to the criteria set out in Section 2.2 above, every assessment also considers at least three further aspects: 1) PhD programmes, 2) research integrity, and 3) diversity.

PhD programmes

The assessment committee considers the supervision and instruction of PhD candidates. The relevant subjects include the institutional context of the PhD programmes, the selection and admission procedures, the programme content and structure, supervision and the effectiveness of the programme plans and supervision plans, quality assurance, guidance of PhD candidates to the job market, duration, success rate, exit numbers, and career prospects.

At the universities, it is the graduate schools that provide PhD supervision and instruction. If the PhD programmes are also run in a nationally accredited research school and the research unit's PhD candidates participate in those schools, then the assessment also covers the quality of the national research school. The national research school is assessed within the context of the research units' SEP assessments. As a rule, this is the research unit that acts as the lead unit for the research

Table 1, meaning of categories in SEP 2015 - 2021

Category	Meaning	Research quality	Relevance to society	Viability
1	World leading/ excellent	The research unit has been shown to be one of the few most influential research groups in the world in its particular field.	The research unit makes an outstanding contribution to society.	The research unit is excellently equipped for the future.
2	Very good	The research unit conducts very good, internationally recognised research.	The research unit makes a very good contribution to society.	The research unit is very well equipped for the future.
3	Good	The research unit conducts good research.	The research unit makes a good contribution to society.	The research unit makes responsible strategic decisions and is therefore well equipped for the future.
4	Unsatisfactory	The research unit does not achieve satisfactory results in its field.	The research unit does not make a satisfactory contribution to society.	The research unit is not adequately equipped for the future.

The categories in this SEP and the descriptions differ from the scores in prior SEPs and are therefore not comparable.

school. A similar arrangement is made when the PhD candidates of multiple research units are enrolled in a single graduate school.

The research unit undergoing assessment responds to a number of questions in the self-assessment, described in the format provided in Appendix D. The unit should use these questions to reflect on its own PhD programmes and on how it supervises PhD candidates within its research unit. The assessment committee discusses this

during the site visit, comments on this in its report, and makes recommendations for improvement. Where research units cooperate within the context of a graduate school or accredited research school, they will preferably present their PhD programmes collectively and in the same way. Where necessary, a separate external committee can be called in to assess a national/inter-university research school.

Research integrity

The assessment committee considers the research unit's policy on research integrity and the way in which violations of such integrity are prevented. It is interested in how the unit deals with research data, data management and integrity, and in the extent to which an independent and critical pursuit of science is made possible within the unit.

The assessment committee bases its assessment on how the research unit itself describes its internal research culture. The research unit undergoing assessment responds to a number of questions in the self-assessment, described in the format provided in Appendix D. The unit should use these questions to reflect on its own data management practices, the level of internal research integrity, and the transparency of its research culture. The assessment committee discusses these points during the site visit, comments on this in its report, and makes recommendations for improvement.

Diversity

The assessment committee considers the diversity of the research unit. It is precisely the presence of mutual differences that can act as a powerful incentive for creativity and talent development in a diverse research unit. Diversity is not an end in itself in that regard, but a tool for bringing together different perspectives and opinions.

The assessment committee bases its assessment on how the research unit itself describes its internal diversity. This refers to such topics as gender, age, and ethnic background. The research unit undergoing assessment responds to a number of questions in the self-assessment, described in the format provided in Appendix D. The intention is for the research unit to use the answers to reflect on its own diversity. The assessment committee discusses these points during the site visit, comments on this in its report and, where appropriate, makes recommendations for improvement.

3. The research units

This section discusses the aggregate level of the research units that are assessed.

3.1 Aggregate level of assessment within an institution

The board decides which research units will be assessed as a group by a single assessment committee. For example, a board may decide that the assessment will concern a research group, a research institute, a research cluster or the research carried out within a faculty. The following conditions apply:

1. The research unit must have its own clearly defined strategy and be sufficiently large in size, i.e. at least ten research FTEs among its permanent academic staff, including staff with tenure-track positions and not including PhD candidates and post-docs. This merely indicates the minimum number, however; larger units are preferable.
2. The research unit subject to assessment should have been established at least three years previously. If groups of a more recent date are to be assessed, their self-assessment should indicate their stage of development so that the assessment committee can take this into account when considering the “viability” criterion.
3. The research unit should be known as such both within and outside the institution and should be capable of proposing a suitable benchmark in its self-assessment. The benchmark would preferably be an international one.

The board determines whether the research unit has met the above conditions.

3.2 National assessments of research fields

As indicated above, the boards of the institutions are free to decide which internal unit or units will be assessed. That means that national, discipline-specific assessments are also possible. The desirability of a discipline-specific assessment must be established in national-level consultations within the relevant research field.

The SEP guidelines apply equally for national assessments. In that case, the participating universities appoint one of their number as coordinator. The SEP guidelines will need to be amended on a number of points concerning the organisation (who will assemble the assessment committee, how will the site visit take place, and so on). These organisational rules can be drawn up in a supplementary protocol (discipline-specific protocol) by the coordinating university, in consultation with the other participating universities.

4. Scheduling and managing an assessment

4.1 Scheduling the assessments

The board is responsible for overall scheduling and for the transparency of the assessment within its institution and decides when each research unit will be assessed. The board sets up a schedule for this purpose and publishes it on the institution's website. The board informs the research units of the individual assessments well in advance..

The board is also responsible for scheduling individual assessments and for dealing with the related practical aspects (for example booking the assessment committee's flights, hotel rooms and dinners). The board lets all those involved know what is expected of them during the assessment process and when. The board also monitors the schedule.

When preparing an assessment, the board defines the Terms of Reference (ToR) and appoints the assessment committee. These two subjects are discussed in the sections below.

4.2 Terms of Reference, ToR

The board specifies the Terms of Reference (ToR) for the assessment committee for each separate assessment. The format for the Terms of Reference can be found in Appendix B.

The Terms of Reference contain specific information about the research unit to be assessed and/or about elements that the assessment committee must consider. This information may be related to a) strategic questions or b) a research unit's specific tasks.

If the assessment covers a discipline, the assessment committee may be asked to make strategic recommendations for the entire discipline at national level.

4.3 Composition of the assessment committee

The procedure and conditions below apply when composing an assessment committee.

Procedure for assembling an assessment committee

The board is responsible for setting up the procedure to assemble the assessment committee. The board and the research unit ensure that the assessment committee's overall profile matches the research unit's research and societal domains. See also the conditions for the composition of the assessment committee below.

The research unit is asked to nominate a candidate chairperson and candidate members. Before appointing the committee members, the board once again submits the final composition of the committee to the research unit. The unit indicates whether it agrees with the board that the committee will be capable of adequately assessing the quality of the unit's work in that particular composition.

Conditions for the composition of an assessment committee

Ultimately, the assessment committee must assess the results of the research unit's various activities according to the three criteria and two additional aspects of the SEP. This means that a number of conditions must be met in the composition of this committee, listed below in points a. to h. The point is to ensure that the committee as a whole satisfies all the conditions, so that it can arrive at a satisfactory assessment of the various aspects. It is therefore not necessary (and also not possible) for each individual committee member to satisfy all conditions.

An international assessment committee:

- a. should be familiar with recent trends and developments in the relevant research fields and be capable of assessing the research in its current international context;
- b. should be capable of assessing the applicability of the research unit's research and its relevance to society;

- c. should have a strategic understanding of the relevant research field;
- d. should be capable of assessing the research unit's management;
- e. should have a good knowledge of and experience working with the Dutch research system, including the funding mechanisms;
- f. should be capable of commenting on the PhD programmes, the research integrity policy and diversity;
- g. should be impartial and maintain confidentiality;
- h. should have the assistance of an independent secretary who is not associated with the research unit's wider institution and who is experienced in assessment processes within the context of scientific research in the Netherlands.

Statement of impartiality and induction

Prior to the site visit, the members of the assessment committee sign a statement of impartiality (see Appendix C). They are then officially installed by a representative of the institution.

5. Self-assessment and additional documentation

This section describes which documents the research unit draws up for the assessment committee.

5.1 Documents furnished by the research unit

The research unit draws up the required documents for the assessment committee. The documents, listed in Appendix D, include at least the following:

- the conclusions and recommendations of the previous assessment;
- the research unit's self-assessment;
- the required appendices to the self-assessment (see the format provided in Appendix D).

The assessment committee bases its assessment largely on the information contained in these documents and the interviews it conducts during the site visit.

The assessment committee also receives the following documents:

- the SEP;
- the Terms of Reference;
- any additional documents that are used internally by the institution (for example manuals or explanatory notes to the SEP).

The board is responsible for making these documents available to the assessment committee well in advance, for example by placing them on a separate website that can only be accessed by the committee members. Depending on the size of the research unit that is assessed, they should be available no later than a month or two before the site visit.

5.2 Contents of the self-assessment

The research unit writes a self-assessment. In that self-assessment, it describes as accurately as possible its efforts and results over the past six years and its plans for the coming six years. It discusses its strategy and specific targets, its research results and societal relevance of the past

period, and its strategy (or changes it has made to its strategy) going forward. The unit conducts a SWOT analysis in this context (see Appendix D4) and indicates a benchmark (preferably an international one). It also considers its PhD programmes, its research integrity and diversity. Further details on these subjects can once again be found in the self-assessment format provided in Appendix D.

The research unit attaches a number of appendices to the self-assessment. A list of these can also be found in the format provided in Appendix D.

Appendix with output indicators

One of the appendices to the self-assessment is the table of output indicators (Appendix D1), which the research unit fills in as follows.

The research unit selects one or more indicators per cell that correspond with its profile and strategic decisions and that are compatible with the existing agreements (see below).

The indicators given in the table in Appendix D1 are only examples; the research unit may choose other indicators. However, in selecting the indicators, the definitions and the measurement and registration methods, the research unit must adhere to the internal agreements made within its institution and/or within the research fields. This means the following:

- University units adhere to the internal agreements at their university (and within their research field).
- Academy and NWO institutes adhere to the internal agreements at the Royal Academy and NWO respectively (and within their research field).

Research units must complete all cells unless certain cells are not relevant. In that case, the unit must explain why.

For each indicator, the unit must provide evidence pertaining to the past six years. The evidence may be qualitative in nature (in the form of a narrative, see below) and/or, where possible and useful, quantitative (in the form of figures, in a table).

Narrative/case study: the research unit provides the evidence in the form of at least one narrative (a case study) for the indicators in cells 4, 5 and/or 6. Instructions for composing a narrative can be found in Appendix D2.

Research units draft a general text to accompany the completed table and evidence provided. The text should reflect on the results of the past six years that the unit has indicated in the completed table.

6. Site visit

The assessment committee pays a site visit to the research unit. If the assessment involves multiple units, the site visit may take place at a single central location.

6.1 Prior to the site visit

The assessment committee receives the self-assessment and other relevant documentation one or two months prior to the site visit. If the committee requires additional information, it may ask the research unit to supply it.

The assessment committee, the research unit and the board finalise the programme for the site visit.

6.2 During the site visit

Below is a description of what happens during the site visit.

Private kick-off meeting

The site visit commences with a private kick-off meeting of the assessment committee. This meeting should not be attended by board members or other individuals working at the institution. The meeting has two purposes:

1. to allow the committee members to discuss the assessment procedure, the Terms of Reference and the procedure of writing the assessment report;
2. to allow the committee members to discuss their findings based on the material that they received prior to the site visit (self-assessment, other documents).

Interviews

During the site visit, the assessment committee conducts interviews with delegates from the research unit involved. The purpose of these interviews is to verify and supplement the information provided in the self-assessment so that the committee can make an informed qualitative and quantitative assessment. The assessment committee interviews the following persons/bodies:

- the director/management of the research unit;
- the head/heads of the research groups in the unit;
- a number of staff members (tenured and non-tenured); a number of PhD students;
- the boards responsible for the relevant graduate schools/research schools;
- delegates from the scientific advisory council (if the research unit has a scientific advisory council);
- if necessary, delegates from the board of the institution.

Time is reserved in the site visit programme for a private interim meeting of the assessment committee.

Private final meeting

After interviewing the delegates from the research unit, the assessment committee meets once again in private. At this final meeting, it discusses its findings and the related arguments and arrives at a provisional judgement on the research unit with respect to the three criteria.

If the committee is assessing multiple research units, or if multiple institutions are participating in the assessment, the committee convenes a private kick-off and a private final meeting for each relevant research unit. These meetings are listed in the programme; it is important for the committee to have enough time to discuss its assessment internally and to reach agreement concerning the qualitative and quantitative assessments.

Presentation of provisional findings

At the end of the site visit, the chairperson of the assessment committee presents a brief, general summary of the committee's findings to the research unit. The presentation is a first impression, and the findings are not finalised. The research unit or institution should therefore not publicise the provisional findings.

7. Assessment report

This section describes the procedure and timeframe for the assessment report and that report's contents.

7.1 Procedure

After the site visit, the assessment committee writes the draft assessment report. This draft version is sent to the directors/managers of the research unit. The research unit checks the draft report for factual inaccuracies. If such inaccuracies are detected, the assessment committee sees that they are corrected.

The assessment committee then sends the

assessment report to the board. The board comments on the contents of the report. After the board has determined its position, the assessment report and the board's position document are published on the institution's website. In its annual report, the board indicates which research units have been assessed, what the most important conclusions and recommendations were, and what follow-up action has been taken on the recommendations.

7.2 Timeframe

The table below indicates the timeframe for the assessment of a single research unit.

Draft assessment report made available to the research unit	8 weeks after site visit
Comments by research unit concerning factual inaccuracies made available to assessment committee	10 weeks after site visit
Final version of assessment report made available to board	12 weeks after site visit
Board determines its position	16-20 weeks after site visit
Publication of final assessment report + board's position document on website	no more than six months after site visit
Report on assessments, conclusions, recommendations and follow-up in annual report	annually

7.3 Contents of the assessment report

For the contents and structure of the assessment report, see the format provided in Appendix E. The assessment committee adheres to this format as much as possible.

In the assessment report, the assessment committee gives its assessment of the research unit based on the criteria and the two aspects described in Section 2 and provides clearly-worded arguments supporting its assessment for each criterion and each aspect. The assessment committee takes into account the research unit's strategy as described by the unit itself (in its self-assessment and/or other documents). The committee makes specific recommendations for improvement on these subjects.

The criteria "research quality", "relevance to society" and "viability" are assessed both in qualitative terms (with arguments) and quantitative terms (in one of the four categories). The two must be in agreement. The other aspects (the PhD programmes, research integrity and diversity) are only assessed in qualitative terms.

Finally, the assessment committee passes a judgement on the research unit as a whole in qualitative terms.

It must be possible to read the assessment report as a separate document and without prior knowledge. That is why it includes a short description of the research unit.

8. Public accountability and follow-up

This section explains the board's responsibilities in terms of public accountability and following up on assessments.

8.1 Public accountability

The assessment reports are published in order to account for the way in which funding is spent. The boards are responsible for taking action in this regard in the following ways:

1. The board ensures that the assessment report and its position document are published on the website within six months of the site visit.
2. In its annual report, the board indicates which of the institution's research units have been assessed according to the SEP, what the most important conclusions and recommendations were, and what follow-up action (broadly speaking) has been taken on the recommendations. The board also reports which research units will be assessed in the year ahead.

8.2 Follow-up

The boards of the universities, the Academy and NWO monitor follow-up actions on assessment committee recommendations at regular intervals. The institutions decide for themselves how to proceed in this regard. For example, they can discuss this subject during annual meetings between the board and the research units and in this way incorporate it into their regular academic planning and control cycle. They can also require their research units to conduct a (limited) mid-term assessment after three years. This protocol does not prescribe how the follow-up is to proceed; the only instructions that the protocol gives is for the follow-up to be compatible with the institution's internal procedures.

Appendix A

Overview of tasks and responsibilities

The table below describes the tasks and responsibilities of (I) the board of the institution, (II) the research unit subject to assessment and (III) the assessment committee.

I) Board

Action	Section
Draw up schedule for assessments in the 2015-2021 period and publish schedule on website	4
Announce assessment well in advance	4
Formulate Terms of Reference	4
Compose evaluation committee	4
Schedule site visit in consultation with research unit and assessment committee	4
Organise logistical and other practical matters	4
Make self-assessment and other documentation available digitally to the assessment committee	5
Drafting the programme of the site visit together with research unit and assessment committee	6
Define board's position	7
Publish assessment report and board position document	7, 8
In annual reports, indicate which research units were assessed in year under review, along with conclusions, recommendations and follow-up, and which units will be assessed in year ahead	8
Monitor follow-up actions on recommendations	8

II Assessment committee

Action	Section
Consider self-assessment and other documents	5
Conduct site visit	6
Write assessment report	7
Send assessment report to management of research unit to check for factual inaccuracies	7
Correct any factual inaccuracies	7
Send assessment report to board	7

III Research unit

Action	Section
Suggest candidates for assessment committee	4
Draw up self-assessment and documentation	5
Send self-assessment and other documentation to board	5
Draft programme for site visit	6
Organise logistical and other practical matters for site visit	6
Comment on assessment report regarding factual inaccuracies	7

Appendix B

Terms of Reference format

Terms of reference

The board of [institution] hereby issues the following Terms of Reference to the assessment committee of [research unit], chaired by [name of chairperson].

Assessment

You are being asked to assess the quality and relevance to society of the research conducted by [research unit] as well as its strategic targets and the extent to which it is equipped to achieve them. You should do so by judging the unit's performance on the three SEP assessment criteria (a. to c.) below. Be sure to take into account current international trends and developments in science and society in your analysis.

- a. research quality;
- b. relevance to society;
- c. viability

For a description of these criteria, see Section 2 of the SEP.

Please provide a written assessment on each of the three criteria and assign the research unit to a particular category (1, 2, 3 or 4) in each case, in accordance with the SEP guidelines. Please also provide recommendations for improvement.

In this protocol, indicators of research quality explicitly include such output as instruments and infrastructure developed by the research unit.

We ask you to pay special attention to the two aspects below in your assessment:

- 1....
- 2....

[To be completed by the board: specific aspects that the assessment committee should focus on – these may be related to a) strategic issues or b) a research unit's specific tasks.]

In addition, we would like your report to provide a qualitative assessment of [research unit] as a whole in relation to its strategic targets and

to the governance and leadership skills of its management. Please also make recommendations concerning these two subjects.

In accordance with the SEP, please also reflect on the following three aspects in your report:

- a. PhD programmes;
- b. research integrity;
- c. diversity.

Documentation

The necessary documentation will be available on the secure website www.....

no less than [xx] weeks prior to the site visit. The documents will include at least the following:

- self-assessment with appendices
- *[to be completed by board]*

Site visit

The site visit at [research unit] will take place on [date]. The provisional programme for the site visit is enclosed with this letter. We will contact you about [to be completed by board – for example logistical matters] approximately [xx] months prior to the site visit.

Statement of impartiality

Before embarking on your assessment work, you will be asked to sign a statement of impartiality. In this statement, you declare that you have no direct relationship or connection with *[research unit]*.

Assessment report

We ask you to report your findings in an assessment report drawn up in accordance with the SEP guidelines and format. You must send the draft report to [research unit] no more than [8 weeks] after the site visit. [Research unit] will check the report for factual inaccuracies; if such inaccuracies are detected, you will see that they are corrected. You will then send (the corrected version of) the assessment report to the board.

[If the assessment concerns an entire discipline: please make strategic recommendations for discipline X as a whole.]

Appendix C

Statement of impartiality and confidentiality

The Standard Evaluation Protocol aims to ensure a transparent and independent assessment process. The members of the assessment committees should be experts who are well acquainted with the unit's research field. There is a strong possibility that an expert will have a working relationship with the unit to be assessed; that relationship should not, however, lead to bias in the assessment process.

We have confidence in the integrity of the assessment committee members. Committee members are kindly asked to reflect on affiliations or relationships that could lead to a biased assessment. What is essential is for committee members to feel that they will be able to conduct an independent and impartial review. Committee members will be asked to sign a statement with regard to impartiality and confidentiality, as included below.

Forms of involvement with the members of staff, management or board of the unit that committee members must report include the following (this list is not exhaustive):

- Having a personal relationship, such as:
 - a family relationship (up to and including the 3rd degree of consanguinity);
 - friendship;
 - a personal conflict.
- Having a professional relationship, such as:
 - supervising or having supervised (doctoral) work;
 - collaborating on research projects and/or publications and/or applications, or having done so in the past three years, or planning to do so in the near future;
 - being colleagues in the same section/ department or similar organisational unit, or planning to be so in the near future;
- Having a hierarchical relationship with any member of staff, management or board, or planning to have such a relationship in the future;
- Having a professional conflict.

- Having an economic interest, such as
 - being in a position to derive any material advantage from the unit to be assessed.

Statement of impartiality and confidentiality

Undersigned (first name, last name):

.....

Organisation:

.....

Participating in the assessment of (name of research unit to be assessed):

- I have read and understand the principles with regard to impartiality and confidentiality as explained above;
- I declare that I will not use any information furnished to me during the assessment process for the benefit of myself or others;
- I declare that I fully understand the confidential nature of the assessment process and that I will not disclose or discuss the materials associated with the assessment, my own review, or the assessment meeting with any other individual, either during the evaluation process or thereafter;
- I declare that to the best of my knowledge I have no affiliation or relationship to the entity to be assessed that could lead to a biased assessment;
- I declare that I have no conflict of interest regarding the research unit to be assessed. (If a conflict of interest arises during my term I will have to declare this and inform my contact person on the board of the institution responsible for the assessment).

Date:

Place:

Signature:

.....

Appendix D

Format self-assessment report

The self-assessment report should be no longer than 15 pages, excluding appendices and tables. It should consist of the following:

- a description of the research unit’s organisation, composition and financing (see also: Tables D3a, b, c and d);
- a description of the research unit’s strategy;
- a description of the specific targets of the past six years (research, societal relevance and strategic) and the targets identified for the next five to ten years;
- an explanation of which selected performance indicators are most important to the research unit, based on the table in Appendix D1;
- the results achieved in the domains of research and society in the past six years, based on the table in Appendix D1. For “relevance to society”, you must write a narrative (see Appendix D2). If necessary, explain why your unit has not achieved its targets or not achieved them in full. Consider also the value and importance of the research results and contributions to society that you have presented in the table.
Note: You must fill in all six categories (cells in the table), unless certain categories are not applicable to your research unit. In that case, you must explain why.
- Link the results to the three SEP criteria and your own assessment of your unit’s:
 - a. research quality
 - b. relevance to society
 - c. viability, using a SWOT analysis – see Appendix D4.
- the relevant environmental factors/developments over the past six years and a forecast of trends and developments in the coming years;
- the SWOT analysis and benchmark/positioning of your own research (compared to a relevant group or groups, preferably in an international context);
- PhD programmes:

A general reflection covering the following aspects:

 - a. context, supervision and quality assurance of PhD programmes and PhD research in the unit;
 - b. participation in a graduate school or schools and/or a research school or schools; where relevant, include an appendix providing the results of an assessment of national/inter-university/interdisciplinary research school/schools;
 - c. the selection and admission procedures (where applicable);
 - d. supervision of PhD candidates internally and guidance of PhDs to labour market;
 - e. exit numbers in the following sectors: research, industry, government and non-profit (where possible).

Information on the duration and the success rate of the PhD programmes should be given in Table D3d.
- Research integrity:

A general reflection covering the following aspects:

 - a. the degree of attention given to integrity, ethics, and self-reflection on actions (including in the supervision of PhD candidates);
 - b. the prevailing research culture and manner of interaction;
 - c. how the unit deals with and stores raw and processed data;
 - d. the unit’s policy on research results that deviate flagrantly from the prevailing scientific context;
 - e. any dilemmas (for example of an ethical nature) that have arisen and how the unit has dealt with them.

– Diversity

A general reflection covering the following aspects:

- a. the extent to which diversity is a concern (including gender, age and ethnic background) and reflection on the unit's own actions in this regard;
- b. a brief description of where the research unit stands at present with respect to its own diversity and the diversity of the organisational culture (promoting an inclusive research environment¹);
- c. the research unit's diversity targets;
- d. how the research unit intends to achieve these targets;
- e. how the research unit guarantees diversity in its selection and appraisal committees.

– Include the following appendices:

- a. Table describing the composition of the research unit – see Table D3a
- b. Table indicating the research unit's financing structure (see below) – see Table D3c
- c. Table with output indicators: selected indicators with evidence and text (see below) – see Table D1
- d. Table indicating length of PhD candidacies and success rate of PhD programmes – see Table D3d
- e. List of the unit's five most important scientific publications and/or other scientific outputs in the past six years
- f. List of the unit's five most important societal publications and/or other societal outputs in the past six years
- g. Other relevant documents, for example the conclusions and recommendations of the previous external assessment and (where applicable) the most recent mid-term assessment.

¹ A research environment in which researchers feel at home, regardless of their gender, age or ethnic background.

Table D1 Table with output indicators

		Quality Domains	
		Research quality	Relevance to society
Assessment Dimensions	Demonstrable products	<p>1. Research products for peers</p> <p>Examples of indicators:</p> <ul style="list-style-type: none"> - Research articles (refereed vs. non-refereed) - Scientific/scholarly books - Other research outputs (instruments, infrastructure, datasets, software tools or designs that the unit has developed) - Dissertations - ... - ... 	<p>4. Research products for societal target groups</p> <p>Examples of indicators:</p> <ul style="list-style-type: none"> - Reports (for example for policymaking) - Articles in professional journals for non-academic readers - Other outputs (instruments, infrastructure, datasets, software tools or designs that the unit has developed) for societal target groups - Outreach activities, for example lectures for general audiences and exhibitions - ... - ...
	Demonstrable use of products	<p>2. Use of research products by peers</p> <p>Examples of indicators:</p> <ul style="list-style-type: none"> - Citations - Use of datasets, software tools, etc. by peers - Use of research facilities by peers - Reviews in scientific/scholarly journals - ... - ... 	<p>5. Use of research products by societal groups</p> <p>Examples of indicators:</p> <ul style="list-style-type: none"> - Patents/licences - Use of research facilities by societal parties - Projects in cooperation with societal parties - Contract research - ... - ...
	Demonstrable marks of recognition	<p>3. Marks of recognition from peers</p> <p>Examples of indicators:</p> <ul style="list-style-type: none"> - Science awards/scholarly prizes - Research grants awarded to individuals - Invited lectures - Membership of scientific committees, editorial boards, etc. - ... - ... 	<p>6. Marks of recognition by societal groups</p> <p>Examples of indicators:</p> <ul style="list-style-type: none"> - Public prizes - Valorisation funding - Number of appointments/positions paid for by societal parties - Membership of civil society advisory bodies - ... - ...

Explanation to table and definitions

1. The indicators given in the table are only examples. The research unit may select these or other indicators compatible with its own profile and mission, within clearly defined boundaries; see under 2.

For further examples of indicators, see *Definitie-afspraken Wetenschappelijk Onderzoek* (VSNU, www.vsnu.nl), *Raamwerk Valorisatie-indicatoren* (www.vsnu.nl) and the accompanying list, the three Academy reports on indicators for the humanities, social sciences and technical sciences (all available in English), or the indicators of *NWO Instituten Platform Kennisbenutting*.

2. Please note: in selecting the indicators, the definitions and the measurement and registration methods, the research unit must adhere to the internal agreements made at its institution, within the relevant field and/or nationally. This means the following:
 - University units adhere to the internal agreements at their university (and within their research field), specifically with respect to the VSNU Definitieafspraken referred to above.
 - Academy and NWO units adhere to the internal agreements at the Royal Academy and NWO respectively (and within their research field).
3. Outputs: this includes non-countable results (“output”).
4. Societal groups: these include all target groups outside the domain of research, science and scholarship: policymakers and administrators, business people, civil society organisations, the general public, and so on.
5. Some outputs may fall into multiple categories. For example:

Reviews: written by the research unit (“output”) or by others about the research unit’s work (“use”); published in scientific or scholarly journals (“scientific”) or in general publications (“non-specialist”). A particular review may only be placed in one cell.

Research units complete the table, citing the relevant evidence, and explain the choices they have made.

The research unit may also make use of Table D3b when filling in Table D1. Table D3b is based on the information agreements on research data between the universities/Academy/NWO and the Dutch government. The SEP does not prescribe the use of Table D3b because the indicators selected for Table D1 are determined by the research unit’s strategic choices.

D2 Narrative

The research unit adds a “narrative” to the output table of the self-assessment. The purpose of the narrative is to explain the relevance of the research unit’s work to society. This text is supported by indicators, i.e. the indicators for “relevance to society” from the table of output indicators (see Appendix D1).

Explanation

A narrative is three to five pages long. It indicates what relevance to, impact on or added value for society the research unit’s work has (had) or is being (has been) demonstrated at regional, national or international level during the assessment period and, where applicable, continuing into the near future.

The narrative describes:

- the precise work or research projects involved;
- the individuals involved and their roles;
- the nature of the research unit’s relevance to or impact on society and the scope of that relevance or impact;
- how the unit achieved this;
- whether revenue has been generated.

This description may also include research activities dating from before the assessment period. A particular research activity’s relevance to society may only become clear many years after the activity itself has ended. If relevant, research conducted elsewhere in the world may also be included in the narrative.

The narrative need not cover the unit’s entire sphere of activity. The point of the narrative is to describe the most convincing examples of relevance, impact or added value to society achieved by means of the scientific work of the research unit.

D3 Tables to be included in the self-assessment

The following tables are to be included in the self-assessment. Other quantitative information may be provided on a secure website.

Table D3a Research staff

	Year 5	Year 4	Year 3	Year 2	Year 1	Current year
Research unit						
Scientific staff(1)	# / FTE	# / FTE	# / FTE	# / FTE	# / FTE	# / FTE
Post-docs (2)	# / FTE	# / FTE	# / FTE	# / FTE	# / FTE	# / FTE
PhD students (3)	#	#	#	#	#	#
Total research staff	# / FTE	# / FTE	# / FTE	# / FTE	# / FTE	# / FTE
Support staff	# / FTE	# / FTE	# / FTE	# / FTE	# / FTE	# / FTE
Visiting fellows	# / FTE	# / FTE	# / FTE	# / FTE	# / FTE	# / FTE
Total staff	# / FTE	# / FTE	# / FTE	# / FTE	# / FTE	# / FTE

Note 1: Comparable with WOPI categories HGL, UHD and UD; tenured and non-tenured staff

Note 2: Comparable with WOPI category Onderzoeker

Note 3: Standard PhD (employed) and Contract PhDs (externally or internally funded but not employed)

Please note: it is *not mandatory* for research units to include Table D3b separately in their self-assessments. This table reflects existing information agreements between universities. For reasons of continuity, it was decided to keep this table in the SEP. So now it is possible that there is an overlap between the data used in Table D1 and those in Table D3b. In accordance with arrangements made within the institution and/or the field, research units may decide to use (some or all of) the indicators in Table D3b to fill Table D1. Research units may also choose other indicators to fill Table D1.

For any indicator that is chosen to fill Table D1, it is expected that the definition of this indicator is in accordance with the agreements made within the institution the research unit belongs to. For research units within universities this means the following: if these units choose indicators from the prevailing information agreements between universities, they should adhere to the current definitions (see for more information http://www.vsnu.nl/f_c_research-en.html).

Table D3b Main categories of research output

Research unit						
Refereed articles	#	#	#	#	#	#
Non-refereed articles (1)	#	#	#	#	#	#
Books	#	#	#	#	#	#
Book chapters	#	#	#	#	#	#
PhD theses	#	#	#	#	#	#
Conference papers	#	#	#	#	#	#
Professional publications (2)	#	#	#	#	#	#
Publications aimed at the general public (3)	#	#	#	#	#	#
Other research output <specify> (4)	#	#	#	#	#	#
Total publications	#	#	#	#	#	#

Note 1: Articles in journals that are non-refereed, yet deemed important for the field

Note 2: Publications aimed at professionals in the public and private sector (professionele publicaties), including patents and annotations (e.g. law)

Note 3: Also known as “populariserende artikelen”

Note 4: Other types of research output (if applicable), such as abstracts, patents, editorships, inaugural lectures, designs and prototypes (e.g. engineering) and media appearances

Table D3c Funding

	Year 5	Year 4	Year 3	Year 2	Year 1	Current year
Research unit						
<i>Funding:</i>						
Direct funding (1)	FTE / %	FTE / %	FTE / %	FTE / %	FTE / %	FTE / %
Research grants (2)	FTE / %	FTE / %	FTE / %	FTE / %	FTE / %	FTE / %
Contract research (3)	FTE / %	FTE / %	FTE / %	FTE / %	FTE / %	FTE / %
Other (4)	FTE / %	FTE / %	FTE / %	FTE / %	FTE / %	FTE / %
Total funding	FTE / %	FTE / %	FTE / %	FTE / %	FTE / %	FTE / %
<i>Expenditure:</i>						
Personnel costs	€ / %	€ / %	€ / %	€ / %	€ / %	€ / %
Other costs	€ / %	€ / %	€ / %	€ / %	€ / %	€ / %
Total expenditure	€ / %	€ / %	€ / %	€ / %	€ / %	€ / %

Note 1: Direct funding (basisfinanciering / lump-sum budget)

Note 2: Research grants obtained in national scientific competition (e.g. grants from NWO and the Royal Academy)

Note 3: Research contracts for specific research projects obtained from external organisations, such as industry, government ministries, European organisations and charitable organisations

Note 4: Funds that do not fit into the other categories

Table D3d PhD Candidates (1)

Enrolment			Success rates						
Starting year	Enrolment (male / female)		Total (M+F)	Graduated in year 4 or earlier	Graduated in year 5 or earlier	Graduated in year 6 or earlier	Graduated in year 7 or earlier	Not yet finished	Discontinued
T-8	#M	#F	#	# / %	# / %	# / %	# / %	# / %	# / %
T-7	#M	#F	#	# / %	# / %	# / %	# / %	# / %	# / %
T-6	#M	#F	#	# / %	# / %	# / %	# / %	# / %	# / %
T-5	#M	#F	#	# / %	# / %	# / %	-	# / %	# / %
T-4	#M	#F	#	# / %	# / %	-	-	# / %	# / %
Total	#M	#F	#	# / %	-	-	-	# / %	# / %

Note 1: All PhD candidates conducting research with the primary aim/obligation of graduating, based on a 0.8-1.0 FTE contract. This includes PhD candidates with employee status (AiO/promovendi) and contract PhD candidates without employee status, receiving external funding or a university scholarship, who are conducting research under the authority of the research unit with the primary aim of graduating (beurspromovendus).

D4 SWOT analysis and benchmark

The self-assessment includes a SWOT analysis. Generally speaking, a SWOT analysis consists of two parts. One part focuses on the research unit's own strengths and weaknesses, and the other on the external opportunities and threats. The institution decides on the aggregate level of the SWOT, but the preference is for the analysis to concern the entire research unit being assessed.

Positioning and Benchmarking

The SWOT analysis is intended primarily as a tool for reflecting on the research unit's position in research and society and opportunities for development in these domains in the near future. For an academic institution this means two things: a form of benchmarking by looking at the performance of comparable units elsewhere, and an analysis of its own mission in relation to developments in the Dutch and European policy

context. The unit indicates the reference points for comparison in the relevant context (international or national).

There are all sorts of different SWOT analyses. At one end of the spectrum, there are analyses based on huge quantities of data; on the other, there are analyses that make use of interviews, focus groups or other more qualitative methods. Where possible and useful, a SWOT analysis may include quantitative data. Where that is not possible or useful, qualitative data will suffice. It is naturally possible to combine the two. The SWOT analysis should be supported by specific evidence.

Example of a SWOT analysis

A SWOT analysis involves four dimensions: two internal (strengths and weaknesses) and two external (opportunities and threats). The table below gives examples in each of the four dimensions.

Example of a SWOT analysis

Internal organisation	Strengths	Weaknesses
	Specific strengths: <ul style="list-style-type: none"> – good staff quality – innovative results – major awards and funding – own infrastructure, resources – contributions to shared infrastructure – financially sound – appeals to external parties (stakeholders, staff, students) 	Specific weaknesses: <ul style="list-style-type: none"> – sub-optimal staff quality – sub-optimal management – financial deficits – difficulty recruiting qualified staff – basic infrastructure inadequate
External context	Opportunities	Threats
	Important changes to which you must respond: <ul style="list-style-type: none"> – in research – in technology or the economy – in government or other policy – in socio-cultural patterns, e.g. demographics, health, lifestyle, ethics 	Uncertainties related to: <ul style="list-style-type: none"> – the direction of technological progress – major institutional changes – new legislation (including EU) – the changing demands of funding bodies – strong “competitors”

Appendix E

Format assessment committee report

The assessment report should consist of the following sections/subsections:

- I. General section on the procedures followed, the members of the assessment committee and the research unit or units assessed.
- II. Assessment of the research unit (maximum of 5 pages):
 - a. Brief description of the research unit's strategy and targets
 - b. Qualitative and quantitative assessment on the three criteria (first text, then categorisation):
 1. research quality;
 2. relevance to society;
 3. viability.

For research quality, consideration should also be given to such matters as the scientific instruments/infrastructure that the research unit has produced.

For the third criterion, the governance and leadership skills of the unit's management are included.

- c. Consider the quality and organisation (just text) of:
 1. PhD programmes;
 2. research integrity policy;
 3. diversity.

III. Recommendations

Make specific recommendations for the near future, bearing in mind the governance and leadership skills of the research unit.

- a. Assess the quality of the research unit as a whole, in relation to the unit's strategy, with general conclusions and strategic recommendations going forward.
- b. Consider the unit's PhD programmes (with arguments and recommendations), including their participation, role and position in national research schools.
- c. Consider the unit's research integrity (with arguments and recommendations).
- d. Consider the unit's diversity (with arguments and recommendations).

IV. Compulsory appendices:

1. Short CVs of the members of the assessment committee.
2. Site visit programme.
3. Quantitative data on the research unit's composition and financing.
4. Explanation of the categories utilised (table 1).

Note: If the assessment concerns multiple research units within a specific research field, belonging to different institutions, then a supplementary section (General Remarks) may be included in which you assess the international position of the research field in the Netherlands.

**Royal Netherlands Academy
of Arts and Sciences (KNAW)**

PO Box 19121
NL-1000 GC Amsterdam

T + 31 (0) 20 551 07 00
E: knaw@knaw.nl

www.knaw.nl

**Association of Universities
in the Netherlands (VSNU)**

PO Box 13739
NL-2501 ES Den Haag

T + 31 (0) 70 302 14 00
E: post@vsnu.nl

www.vsnu.nl

**Netherlands Organisation
for Scientific Research (NWO)**

PO Box 93138
NL-2509 AC Den Haag

T +31 (0) 70 344 06 40
E: nwo@nwo.nl

www.nwo.nl