ZonMw
The Netherlands Organisation for Health Research and Development (ZonMw) is a national organisation that promotes quality and innovation in health research and health care, initiating and supporting new developments. ZonMw fosters the further exchange of knowledge (between all relevant stakeholders such as policymakers, researchers, health professionals, patients/consumers, general public) and its application in the health care system, thereby contributing to evidence-based medicine. ZonMw also ensures that emerging health care issues are placed on the research agenda.

Part of ZonMw's work involves the design, execution and evaluation of national programmes, which are either open or restricted.

- Open (responsive mode) programmes mainly provide funds for science-driven research. Scientific quality is key here and the approach is mainly tailored to talented researchers or high-ranking research groups. These programmes are open to applications involving research into all aspects of medical and health research and development.
- Restricted (managed mode) programmes provide funding for research on specific issues or themes, where interaction between researchers, policymakers and practitioners is needed to address health and health care questions in order to improve and innovate health care practice. Quality and relevance are of equal importance in the budget allocation process. The approach is geared towards selecting the best science that best helps to solve the problem.

For the executive management of each programme or cluster of programmes, ZonMw’s board sets up a programme committee comprised of national experts in the fields of research, development and implementation. The tasks mandated to these committees include the finalisation of the programme information documents and calls for proposals, the assessment and ranking of project proposals, the monitoring of funded projects throughout their lifetime (including in terms of knowledge exchange and implementation), and the overall interim and final evaluation of the programme. The programme committee may decide to delegate specific elements of these tasks to working groups. When assessing and ranking project proposals the programme committees follow the procedure outlined below. Members of the programme committees are generally excluded from submitting applications to their own calls.

ZonMw assessment procedure
Grant applications may be submitted to ZonMw only once a programme has been opened for applications. ZonMw will issue a call for applications setting out the goal and the focus areas of the programme, as well as the procedure, terms and conditions and the specific criteria on which the applications will be assessed.

Assessment
Grant applications are assessed separately for their relevance and quality. Both the relevance criteria and the quality criteria will be specified and explained in the call. Criteria for quality are generally applicable to any type of programme, in both the responsive and the managed mode. Criteria for relevance are specifically related to the aims of a thematic managed-mode programme. See annex 1 for further clarification.

Relevance
Programme committees assess the relevance of grant applications internally. In exceptional cases, the committee may call upon the advice of experts, for example if the committee lacks expertise on a particular aspect of relevance, such as the patient perspective, legal issues or policy on insurance. Unlike the assessment of quality, the assessment of an application’s relevance is not presented to the applicant for their response (rebuttal). The committee arrives at its relevance assessment on the basis of its own views, and those of any external advisers called in.

Quality
Applications are sent to reviewers who assess their quality. ZonMw ensures that reviewers do not have any personal interest in the project. At least two external reviewers – and preferably three to four – assess the quality of each grant application. They must supply arguments to justify their assessment, not simply
tick a numerical box. The reviewers’ assessments are anonymised, and the applicant is given an opportunity to submit a written response (rebuttal).

The programme committee may decide not to follow a reviewer’s assessment, for instance in response to the applicant’s rebuttal. It may decide to accord a different weight to the reviewer’s arguments or, where two reviewers differ, may decide to accord the judgment of one more weight than that of the other. The reviewer generally sees no more than a few applications, whereas the committee must give a balanced judgement on all the applications submitted in a particular round. If the committee decides to depart significantly from the reviewers’ assessment, it will inform the applicant of its reasons for doing so.

Occasionally, a committee may base its assessment on the quality of an application on arguments not mentioned by the reviewers. In such cases, the applicant will be given another opportunity to respond to these new arguments, before the assessment is finalised.

**Scores**

Applications are scored on a scale. For quality, the following scores may be included in the scale: ‘excellent’, ‘very good’, ‘good’, ‘satisfactory’, ‘poor’ and ‘unsatisfactory’. The scale will consist of at least three, and at most five possible scores. Relevance may be expressed in terms of ‘highly relevant’, ‘relevant’, ‘low relevance’, ‘insufficient relevance’. For relevance, the scale will consist of at least two, and at most four possible scores.

**Ranking and the awarding of grants**

Since the number of applications eligible for a grant almost always exceeds the budget available, or in cases where too many eligible applications fall within a single focus area, applications will have to be prioritised. The programme committee decides which applications should be given priority on the basis of its final assessment of their quality and relevance, but when allocating the programme budget it will consider how it can best distribute successful applications among the priorities identified for the programme, or among the themes or focus areas defined for that particular round.

Applications are ‘eligible’ if their relevance and quality are at least satisfactory; if they are not, the application will never be eligible for a grant. The relevance and quality of individual applications are compared using a ranking matrix that varies from one programme to another, and sometimes from one round to another.

Two examples of ranking matrices are shown below; other versions based on them may be used. One might, for example, decide to divide the applications into clusters, and to rank them within the clusters.

<table>
<thead>
<tr>
<th>relevance</th>
<th>quality</th>
<th>highly relevant</th>
<th>relevant</th>
<th>low relevance</th>
<th>Not relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>good</td>
<td>1</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>satisfactory</td>
<td>2</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>3*</td>
<td>6*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>unsatisfactory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In this example relevance carries the most weight, and differences in quality carry less weight, albeit that the quality of an application must always be at least satisfactory for a grant to be awarded. Applications are ‘eligible’ in an order of priority from 1 to 6. Applications with priorities 3 and 6 will however be awarded a grant only if their quality is addressed. In practice, insufficient funding is often available, and the question of whether it is worth amending a proposal will have to be considered. Applications in unnumbered cells are not eligible.
Here, high quality carries the most weight and differences in relevance carry less, albeit that the relevance of an application must always be at least satisfactory for a grant to be awarded. Applications are ‘eligible’ in an order of priority from 1 to 8. Applications in unnumbered cells are not eligible.

If, after the ranking matrix has been applied, the number of ‘eligible’ projects still exceeds the budget, the committee may apply other grounds for assessing applications, on condition that these grounds have been communicated in the call. The applicant will be informed of any such additional grounds in the letter announcing the committee’s decision.

Whether an eligible application is ultimately awarded a grant therefore depends on its position in the ranking and the budget available for the round in question. A relatively low position in the ranking is sufficient grounds for rejecting an application, with specific reference to the application's relative weaknesses in terms of quality and/or relevance.

**Holding over applications**

In exceptional cases, for instance in thematic programmes with the aim of stimulating a previously underdeveloped science base in a specific field, an application may be ‘held over’ if it is highly relevant but poor in terms of quality. The applicant will then be given specific instructions as to how the quality of the application should be improved. Once it has been amended the application will be reassessed and, depending on the outcome, an award will be granted or the application will be rejected. Where a programme has more than one round, the applicant will generally be invited to submit the revised application in a subsequent round. The applicant may also decide to do so of his own accord. In a programme with just a single round, part of the budget may be reserved pending the second assessment of grant applications that are eligible for improvement. The same reviewers may assess the revised proposal.

If two or more grant applications on virtually the same subject or in the same field achieve equal scores, one of the applications will generally be chosen. The other applications will be rejected, even if they score higher than other projects. A programme committee or working group may however contact the applicants to explore the possibility of the subject being addressed in a collaborative project.
ANNEX 1 Assessment criteria

Quality
The general criteria for quality relate to the following aspects:
- The objectives, problem definition, context
- Approach and deliverables
- Project group or individual investigator
- Feasibility
- Budget justification

Relevance
The criteria for relevance vary according to their specific relationship with the theme of the managed mode programme, but roughly relate to the following aspects:
- The project’s contribution to the aims of the programme
- The innovative potential
- The potential to close societal and scientific gaps
- Cost-benefit analysis
- Acknowledgement of diversity (gender, ethnicity, age, patient perspective)
- Active contribution to knowledge transfer and implementation