INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
CENTRE INTERNATIONAL DE RECHERCHE SUR LE CANCER

Governing Council	**GC/51/13**
Fifty-first Session	03/04/2009

Lyon, 14–15 May 2009
Auditorium

CONSOLIDATED DOCUMENT REGARDING
IARC SCIENTIFIC REVIEW PROCEDURES

1.   At its 50th Session in May 2008, the Governing Council, having considered the IARC Scientific Review Procedures contained in GC/47/13 Rev.1 (dated 13/05/2005), and having further considered the recommendation of the Governing Council Subcommittee on the role and responsibilities of the Scientific Council concerning the amendment of these procedures contained in Document GC/50/9 ("Report of the Governing Council Subcommittee on the role and responsibilities of the Scientific Council"), adopted the revision of the IARC Scientific Review Procedures contained in Annex 2 of GC/50/9 and approved the proposed supplement to these procedures contained in Appendix A of the report of GC/50/7 ("Report of the Scientific Council on its 44th Session").

2.   The Governing Council further requested the Scientific Council at its next meeting to prepare a consolidated document of IARC Scientific Review Procedures, taking into account Documents GC/50/9 and GC/50/7 for consideration by the Governing Council at its next session (cf. Resolution GC/50/R16).

3.   A draft consolidated document, which is presented here in Annex 1, was prepared and discussed by the Scientific Council in January 2009, along with a commentary from the Director entitled "Comments from the IARC Secretariat" which is presented here in Annex 2. The Scientific Council asked for the draft document to be revised after the meeting. This was done with a view to rationalizing and streamlining the consolidated document, and to accommodate the Director's suggestions. The revised version was submitted to the Scientific Council via e-mail in March 2009. The Scientific Council has approved the revised version, which is presented in Annex 3, for consideration by the Governing Council at its 51st Session.

Annex 1: "IARC Scientific Review Procedures"

Importance of independent scientific review to ensure the highest quality of IARC science

1.   The relevance of any research activity must be seen within the overall strategy for the IARC as determined by the Governing Council. The current Medium-Term Strategy (2005–2009) can be found in Documents GC/47/Inf. Doc. No 1 Rev.1 and GC/47/Inf. Doc. No 2 Rev.1.

2.   In order to make the review process at IARC more rigorous, a five-year cycle of reviews for each IARC Cluster, including its component parts of Groups and Teams, was approved by the Governing Council in 2005 (see Resolution GC/47/R10). By examining a complete Cluster, information will be available regarding past performance and the future plans of each Team and there will also be the opportunity to provide advice regarding the overall strategy of the research programme being pursued and developed within each Cluster.

3.   The value of the review is dependent to a large extent on the quality of the Review Group assembled for a particular task. Ideally members of such Review Groups should be scientists who have great experience in the area being reviewed, have outstanding research credentials and have no conflicts with the programmes being reviewed nor with the IARC scientific programme overall. Restricted involvement in IARC work is permissible but should always be declared in advance, in particular when a specific IARC Cluster is being evaluated by the Scientific Council or when a Scientific Council member is invited to take part in other review groups/panels.

4.   Members of the IARC Scientific Council should play a key role in such Review Groups wherever possible. However, the issue of independence is again critical to the overall success of the Review, in terms of the value of the scientific advice given. There is great value in the Review Groups being comprised to the largest extent possible of highly qualified scientists who are independent of the IARC scientific programme.

5.   The key role of the Scientific Council in providing advice on the entire programme of the Agency will thereby be strengthened. Having had the opportunity to spend time discussing a detailed technical review of individual Groups and Teams, the Scientific Council will be able to take the discussion forward and provide its collective input and advice to the Director on future research directions and strategy for the Agency.

6.   A Chairperson for each Cluster Review will be nominated by the IARC Scientific Council at their meeting prior to the Review taking place. The Chairperson may be external to the Scientific Council and should be independent of the IARC scientific programme. In discussion with the Chairperson of the Scientific Council and the IARC Director, the Review Chairperson should finalize the membership of the Review Group which should be comprised of at least two appropriately qualified members of the

Scientific Council as well as non-members expert in the areas being reviewed. The Review Group should be composed of around five to seven members depending on the extent of the work areas covered by the Cluster. The process of identifying and inviting members of the Review Group should occur as soon as possible after the Chairperson has been identified in order to have the most qualified group. The Secretariat should be in close contact with the Chair of the Review Group. The material relevant for the review should be distributed to the members of the Review Group at least two months before the site visit.

IARC Scientific Review process

7.   The objectives of the Review are to conduct a detailed scientific review of the Teams and Groups comprising an IARC Cluster based on past achievements, future plans and an assessment of how well the work of the Group fits with the overall mission and strategy of the IARC. The Review will include an evaluation of the scientific standing and research output of the Principal Investigator and an assessment of the Group Head's ability to manage a research group. In addition, the Review will provide advice to the IARC Director on the strategy of future research in the area covered by this Cluster. These reviews also provide the opportunity for senior scientific staff to reassess their own research aims and directions. Where deemed necessary, reviews of specific Groups of Teams could be conducted between Cluster reviews.

A.   Selection of the Review Group

8.   In order to achieve these objectives IARC will seek independent peer review conducted according to the highest international standards. The review process will involve a site visit by an expert Review Group to assess both the past and proposed future work of the Groups. A full report of the Review will be prepared, which will include a Consensus Statement prepared by the Review Group.

9.   Reviews are an integral part of the funding assessment and focus principally on the performance of the Group Heads and, in some cases, other senior members of the Group.

10.   *The following suggestions are made to help in the selection of the Review Group:*

   ✓   *At 9-12 months before the review, Group Heads and Cluster Coordinator should provide a brief (1–2 pages) summary of their future proposals.*

   ✓   *This summary is the starting point for the selection of reviewers, which is done jointly by the Chair of the Review Group, the Chair of the Scientific Council and the IARC Scientific Coordinator. Several alternate names should be proposed to cover each field of research (including Scientific Council members and external members) and short CVs/publication lists of each should be provided to the Review Group Chair and the Scientific Council Chair*

by the IARC Scientific Coordinator, to be considered in conjunction with the summaries of research proposals.

✓ *A short list of reviewers, with at least two names for each research area, is prepared by the Review Group and Scientific Council Chair and Scientific Coordinator, and discussed with the Director, Cluster Coordinator and Group Heads by the Scientific Coordinator. The Director, Cluster Coordinator and Group Heads are allowed to object to any proposed reviewer, on the grounds of competition or other conflict of interest. The motivated objections are circulated to the Scientific Council and Review Group Chairs by the Scientific Coordinator, followed by one or more conference calls to arrive at a final list.*

✓ *Invitations to reviewers should be sent, and acceptance received, at least six months before the date of the Review. Conference calls should be used to identify alternates if necessary, following the above procedure.*

B.   Review documents

11.   The written submissions from the Group Heads form the framework for the Review. Time for presentations to the Review Group during the site visit will be short, therefore the papers should provide a comprehensive overview of the work performed during the last five years and the future research plans of the Group. Whilst future plans will be requested for a five-year period, it is accepted that the future plans will detail primarily the first one to two years, but should identify short, medium and long-term goals. The papers should be sufficiently detailed so that the Review Group is able to assess the research proposals and the Group's expertise and abilities to achieve the goals.

12.   *Based on their experiences with the 2007 Cluster Review, Dr Ron, Dr Comber and Dr Kiemeney proposed that the review documents be prepared in the format detailed below. In addition to the Working Papers prepared for each Group, another one will be prepared by the Cluster Coordinator giving the general description of the Cluster, its strategic vision, the role of the Cluster within IARC, as well as the operational management of the Cluster.*

13. Format of the Working Papers that should be sent to the reviewers at least two months before the review:

1. Introduction

    1.1 General description of individual Groups

        1.1.1 Strategic vision of Group

        1.1.2 Role of Group within IARC

        1.1.3 Current scientific (indicate level) + non-scientific staff (including Ph.D. students) and visiting fellows

        1.1.4 Vacancies

        1.1.5 Scientific staff (indicate level) that left IARC in previous five years

        1.1.6 Operational management/mandates and responsibilities of Group Head

        1.1.7 Brief CVs of P4 and P5 staff

        1.1.8 Extended CV of Group Head

    1.2 The Group's involvement in training programmes/courses

        1.2.1 Courses held

        1.2.2 Location

        1.2.3 Attendance

        1.2.4 Informal training consisting of meetings with:

    1.3 Recommendations for the Group by previous Review Group

2. Research report

    2.1 Past performance by the Group

        2.1.1 Overall: landmarks/specific circumstances that influenced performance

        2.1.2 List of all significant projects in past five years

2.2 For each finished and longer-term ongoing project: 1 page (maximum) summary in the following format:

Title of project [add as many as necessary]

2.2.1 Principal investigator

2.2.2 Role of the Group: initiator or collaborator, names and affiliations of main collaborators

2.2.3 Funding source + amount

2.2.4 Background/motivation

2.2.5 Brief: design and methods

2.2.6 Results

2.3 Publication list, containing publications from the Group over the past five years categorized in peer-reviewed papers, book chapters/reviews with the five most significant papers starred

2.4 Copies of two key publications; and title pages of other major publications

2.5 A list of meetings at which Group members have been invited speakers

3. Future research proposal

3.1 Strategic vision of the Group for the next five years

3.1.1 Overall

3.1.2 Short, medium, and long-term goals

3.2 A one to two page summary for each shorter-term ongoing and planned project in the following format:

Title of project [add as many as necessary]

3.2.1 Ongoing/planned

3.2.2 Principal investigator

3.2.3 Role of the Group: initiator or collaborator

3.2.4 Funding source + amount/requested budget

3.2.5 Background/motivation

3.2.6 Design and methods (sufficient detail should be provided to allow the reviewers to form an opinion on the feasibility of the proposed work)

3.2.7 Expected results and impact

3.2.8 Expected completion date

3.2.9 Relevance of project to goals of Group and of IARC as a whole

3.3 Priority score of the ongoing and planned projects:

  3.3.1   4 essential

  3.3.2   3 desirable

  3.3.3   2 useful

  3.3.4   1 requested by WHO or other Group (specify)

14.   Standards and Guidelines for contents, outline, length and presentation of reports are reviewed and revised, if necessary, by the Cabinet after each Review. The emphasis on the documents is on clarity and brevity.

C.   The Review

15.   The Review Group will be responsible for the review of the scientific research and an assessment of how the work appears to be consistent with the IARC mission and strategy.

16.   It is the experience of Review Group that insufficient time is available during the Review to write a Consensus Report. It is therefore necessary to draft texts prior to the meeting that can form the basis for the report to be written during the meeting.

17.   In order to achieve this, the Review Group Chair assigns three Review Group members to each Group, two months before the review. Each Review Group member is assigned to two Groups.

18.   The Review Group members draft reports on the two Groups before coming to the meeting. The format for the report is as follows:

1.   The Group's past work:

  1.1 Overview of the Group's work in the last five years

  1.2 Critical appraisal of the Group's work in the last five years

  1.3 Overall score for the Group's past work

2.   The Group's future plans:

  2.1 Overview of the Group's future plans and strategic vision

  2.2 Critical appraisal of the Group's future plans

  2.3 Score for each future plan (add short motivation)

  2.4 Overall score for future plans

3. *The Group's assessment (SWOT):*

3.1   *Assessment of the Group's Strengths*

3.2   *Assessment of the Group's Weaknesses*

3.3   *Assessment of the Group's Opportunities*

3.4   *Assessment of the Group's Threats*

4. *Recommendations for the Group*

5. *Evaluation of the scientific standing of the Principal Investigator*

6. *Evaluation of the managing abilities of the Principal Investigator*

7. *Overall score for Principal Investigator. All scores should include justifications and recommendations for action where needed (e.g. training, support)*

19.   The reports should be circulated to the other reviewers in advance.

20.   The reviewers may query some elements of the report in advance with the Group Head. All these queries go through the Review Group Chair to ensure that all Review Group members are aware of the query and the response.

21.   The Review will focus on the performance of the Group Head who will be responsible for the preparation and submission of the papers. Team Leaders and (exceptionally) other Senior Scientists (PI-equivalent) can be invited by the Review Chairperson to present their work orally if they are entirely responsible for an independent research activity, which is resourced from within the main programme. Any proposal for key collaborators to attend the scientific session must be discussed in advance with the Director and the Review Chairperson.

22.   The IARC Director and the Cluster Coordinator will normally be in attendance as observers, for those parts of the Review where the Group Head is present. The Director, the Cluster Coordinator and each Group Head will have an opportunity to meet privately with the Review Group.

23.   The presentation of the research should be brief and focus on the highlights of the past five years' achievements. The members of the Review Group will already have read the submitted material, and time does not allow for reiteration. Instead, the major part of the presentation should outline the ongoing and future research plans. In general, only the Group Head, and in exceptional cases other senior scientific staff, will attend and present orally at the Review. The Scientific Session will be the opportunity for the

Review Group to probe the details of the proposals and the Group's ability to deliver the programme.

24. Junior members of the Group being reviewed will prepare posters that will be displayed in the area where lunch- and tea-breaks will be taken. This will allow the Review Group to have an opportunity to comment on the quality and depth of the research Group by having direct interactions with students and post-docs about their work. The feedback from the Review Group will also be valuable to IARC in monitoring progress in IARC's training programmes for junior researchers.

25. Following the scientific session, the Review Group will meet privately to discuss its findings and to identify any issues for which further clarification is required. The Group Head will then be invited to respond to any queries and to discuss other pertinent managerial or scientific issues. A Group Head will also have a brief un-minuted meeting with the Review Group from which the Director and his staff are excluded.

26. The Review Group will agree on scientific ratings for the past and future work and an assessment of how well the work fits with the IARC's unique position and its strategy. The scoring system is outlined in Appendix I.

27. *The timetable of the review should be agreed in advance by the Chair of the Review Group and the IARC Scientific Coordinator. The following are appropriate guidelines:*

- ✓ *Because IARC and the review procedures may be new to some of the Review Group members, the Review Group is welcomed by the Scientific Coordinator/Director on the evening before the review and receives a short explanation of IARC and the review procedures.*

- ✓ *The Review Group should have a one hour meeting on the first evening to agree on processes, discuss procedures and terms of reference, assign tasks, review the timetable. This could be done, but not necessarily, over dinner (in the absence of IARC personnel).*

- ✓ *Presentation by the Cluster Coordinator: overview, organizational procedures, staff, vacancies, budget, cross links between Groups and Clusters. One hour (30 minutes presentation + 30 minutes Q&A).*

- ✓ *Presentation of each Group by Group Heads: 15 minutes presentation; one hour discussion; 15 minutes evaluation by Review Group in absence of IARC personnel. The presentation should cover only the Group's strategic plan and how this is to be achieved by the projects already described in the report.*

- ✓ *Roundtable meeting with junior scientists/postdocs. One hour.*

- ✓ *Depending on Group that is being reviewed: tour of facilities. One hour.*

- ✓ *Drafting of report: five hours. During this time period, anyone can request a meeting in private with the Review Group.*

✓ *During the drafting of the report, the following items are added to the report for both the Cluster as a whole and each of the Groups:*

    o *Recommendations*

    o *Evaluation of the scientific standing of the Principal Investigator*

    o *Evaluation of the managing abilities of the Principal Investigator*

    o *Overall score for the Principal Investigator. All scores should include justifications and recommendations for action where needed (e.g. training, support)*

✓ *The draft report is given to the Director/Scientific Coordinator and Group Heads. Opportunity for Cluster Coordinator and individual Group Heads or Team Leaders to review the section of the Review Group's draft report relating to their Group only, and to meet with the Review Group at the time of the visit, to allow correction of factual errors or misunderstandings. One hour.*

✓ *Presentation of the Review Group's summary conclusions and gradings to individual Group Heads in respect of their own proposals, and to the Director and Cluster Coordinator for all Group Heads, but not dissemination to others outside the Scientific and Governing Councils (30 minutes per Group).*

✓ *Finalization of the report. One hour.*

✓ *Total duration in case of four groups (breaks excluded): 18 hours. This means that for the Review of a cluster with more than three Groups, two and a half days instead of two days should be planned.*

D. Presentation and discussion of results

28.   At the end of each Review, the Group Head, in the presence of the IARC Director and the Cluster Coordinator, will be debriefed by the Review Group. This will include a brief summary of the assessment of the Review Group and advise the Group Head on the scores for the components of the programme.

29.   In the final private meeting, the Review Group will draft a Consensus Statement summarizing its findings and conclusions about the science, the impact of the work and on the originality, relevance and feasibility of the future proposals. The outline of the Consensus Statement should be based upon the SWOT principle: Strengths, Weaknesses, Opportunities and Threats for each activity under review.

30.   *The Consensus Statement, edited in IARC format by the IARC Secretariat, will be circulated to all members of the Review Group for approval. Any proposed change in the text will have to be approved by at least two thirds of the members of the Review Group.*

31.   The Group Head will be invited to identify any **factual** inaccuracies, which will be corrected and, if he/she wishes, to comment on and respond to the report and the recommendations of the Review Group. These comments will accompany the report when it is submitted to the IARC Secretariat, and will be available as an official document for discussion by the IARC Scientific Council at its next meeting following the Review.

E.   Submission to Scientific Council

32.   The report incorporating the Consensus Statement of the Review Group shall be a Scientific Council document discussed by the IARC Scientific Council at its next meeting. *It should be available, together with the review documents, to the Scientific Council, at least two weeks in advance of the Scientific Council meeting following the review.*

33.   The Chairperson of the Review Group shall be invited to the Scientific Council meeting to present the report.

34.   At this Scientific Council session, the Group Heads who have been reviewed may be invited to respond to questions or to express responses to the review, but this must not imply any element of re-review.

35.   At this meeting, the Scientific Council shall prepare advice for the Director on the review.

36.   To minimize the time covered by the entire review process, site visits of Review Groups will be arranged for late November/early December prior to the Scientific Council meeting in early February. The outcome shall be transmitted to the Governing Council, generally held in May following the Scientific Council.

F.   Process resulting from Review

37.   In the event that the work of a Group or a Team or another principal-investigator equivalent researcher is determined to be *unsatisfactory* in terms of its science or in its contribution to the IARC strategy, the research may be terminated and the Group disbanded. In such an eventuality, WHO Staff Rules and Regulations will be applied. If the work is judged to be just short of *good*, then the Team in question will have the opportunity to have a second review, by members of the same Review Group designated by the Review Chairperson, within a twelve month period.

38.   Within 10 working days following the meeting of the Scientific Council, the IARC Director will meet individually with each Team reviewed, in the presence of the Cluster Coordinator and the Director of Administration and Finance, to summarize the outcome of the Review.

G.   Follow-up on the recommendations

39. During the second Scientific Council meeting after the Cluster review, approximately one year after the review took place, the Cluster Coordinator presents the actions that were taken on the recommendations.

Appendix I.   The scoring of research at IARC

Four distinct elements of the programme of work will be scored:

- a single score will be awarded for the past work;

- an overall score for the future work. Each section of the future proposals will be scored and then an overall score for the future work agreed;

- a score reflecting how well the work benefits from IARC's unique position and how well it appears to fit with the IARC strategy. This score shall be essentially based on the future plans;

- a score reflecting how well the work impacts on public health.

The following classification will be used:

O (Outstanding)	Outstanding work of the highest international calibre, pioneering and trend-setting. This score will only be applied to exceptional programmes of work, not because a programme was particularly topical or in an under-researched area.
F (Forefront)	Work that is at the forefront internationally and which, it is considered, will have an important and substantial impact.
C (Competitive)	Work that is internationally competitive and will make a significant contribution.
G (Good)	Satisfactory work.
NC (Not competitive)	Work which is not considered competitive.
U (Unsatisfactory)	Unsatisfactory or poor quality work.
P (Preliminary)	Work which is too preliminary to rate.

Mixed scores e.g. **C/F** may be used if considered appropriate.

Annex 2: Comments from the IARC Secretariat on Annex 1

General: The Scientific Council may wish to reconsider the language of the document in that it is specific to current organizational structure and would be out of date subsequent to any re-structuring. It is suggested that reference to Clusters could be replaced by a more generic term (for example, "major scientific groupings") and that reference to specific roles within the IARC secretariat could be replaced simply by the term "IARC Secretariat" or "the Secretariat".

Paragraph 6: The Scientific Council may wish to reconsider the possibility of the Chairperson being external to the Scientific Council. For example, an external Chair may lack familiarity with the IARC Scientific Review process, appointment could potentially result in delays by having to wait for his/her acceptance to Chair the Review Group before contacting other Review Group members and would also need to attend the subsequent Scientific Council meeting to present the report.

Paragraph 6: The Scientific Council may wish to reconsider the flexibility provided in terms of the proposed number of members of the Review Group. Currently this is stated to comprise five to seven members, with each Review Group member assigned to two Groups in the review process. Consequently only a maximum of four Groups in any one Cluster could be reviewed without either increasing the size of the Review Group or the workload of each individual in the Review Group.

Paragraph 13: Given that section 3.3. relates to a priority score, the sub-point 3.3.4 may be taken to imply that projects requested by WHO or another Group are automatically of the lowest priority. The Scientific Council may wish to consider whether the project could be identified as "Requested by WHO or other Group (specify)" separately from the scoring system.

Paragraph 13: The Scientific Council may wish to consider changing the title of Section 1.1.5 Scientific staff (indicate level) that left IARC in previous five years to:

Section 1.1.5 Professional staff (indicate level) that left IARC in previous five years

Paragraph 13: The Scientific Council may wish to consider changing the title of
Section 1.1.7 Brief CVs of P4 and P5 staff
to:

Section 1.1.7 Brief CVs of P4 and P5 staff (excluding that of the Group Head)

Paragraph 18: The Scientific Council may wish to consider changing "Principal
Investigator" to "Group Head" in Section titles 5, 6 and 7.

Paragraph 27, seventh bullet point: The Scientific Council may wish to consider whether
the use of the word "anyone" is ambiguous in this context.

Paragraph 37: The Scientific Council may wish to consider whether this paragraph needs
to be more explicit. For example, four elements of each programme of work will be
scored. Does the "*unsatisfactory*" score, which opens the work to termination, relate to
any one of the four elements, all four elements or a stage in between? Does the
Scientific Council consider it clear enough in the document that the decision to terminate
work or disband a group rests with the Director? Is the sentence referring to "just short
of good" sufficiently clear, given that no such categorization exists in the scoring
(see Appendix I)?

Annex 3: Alternative proposal for IARC Scientific Review Procedures prepared by the Scientific Council in 2009

As a preamble to this document, it should be noted that it uses terminology regarding the scientific structure of IARC that is intended to be as general as possible, so as to accommodate possible future changes in structure and nomenclature.

1. Section: This corresponds approximately to the current "Cluster" and comprises a number of research groups working on overlapping and/or complementary areas, and which would lend itself to review by a single review team.

2. Research Group: This corresponds approximately to the current "Group" and comprises a number of researchers working on closely related topics in the same general scientific area.

3. Head: Senior Scientist within each Section or Research Group.

4. Review Panel: This is the group which will carry out periodic reviews of major scientific groupings on behalf of the Scientific Council.

IARC Scientific Review process

A. Aims

1.   Independent scientific review is essential to ensure the highest quality of IARC science.

2.   The relevance of any research activity must be seen within the overall strategy for the IARC as determined periodically by the Governing Council.

3.   In order to ensure the highest quality of research, IARC will seek independent peer review conducted according to the highest international standards. The review process will involve a site visit by an expert Review Panel to assess both the past and proposed future work of the Groups. A full report of the Review will be prepared, which will include a Consensus Statement prepared by the Review Panel. Where deemed necessary, reviews of specific Research Groups could be conducted between reviews.

4.   Members of the IARC Scientific Council should play a key role in such Review Panels. However, these should be complemented by scientists of international repute from outside the Scientific Council.

B. Objectives

5.   The objectives of the Review are to conduct a detailed scientific review of the Research Groups comprising an IARC Section, based on past achievements and future plans. The Review will include an evaluation of the scientific standing, managerial ability

and research output of the Section and Group Heads. The Review will provide advice to the IARC Director on strategy for future research in the area covered by the Section. These reviews also provide the opportunity for senior scientific staff to reassess their own research aims and directions.

C.   Selection of the Review Panel

6.   Reviews will usually be arranged for late November/early December and will report to the Scientific Council meeting in the following January/February.

7.   Guidelines for selection of the Review Panel:

a.   A Chairperson for each Review will be nominated by the IARC Scientific Council at their meeting prior to the Review taking place. The Chairperson, except for exceptional circumstances, should be a current member of the Scientific Council and should be independent of the IARC scientific programme.

b.   The Review Panel should be comprised of approximately equal numbers of appropriately qualified members of the Scientific Council and non-members expert in the areas being reviewed.

c.   Members of such Review Panels should be scientists who have experience in the area being reviewed, have outstanding research credentials and no conflicts of interest with the programmes being reviewed. Restricted involvement in IARC work is permissible but should always be declared in advance.

d.   As each Research Group will be reviewed by at least two members of the Panel the Review Group Panel should be of sufficient size to allow for this.

e.   The process of identifying and inviting members of the Review Panel should occur as soon as possible after the Chairperson has been identified.

f.   Reviewers will be selected jointly by the Chair of the Review Panel, the Chair of the Scientific Council and a designated member of the IARC Secretariat, who will be nominated as IARC Coordinator for the review.

g.   In the month after the Scientific Council agrees the Section and Groups for review, the Section Head and the Group Heads should provide a brief (1–2 pages) summary of future proposals for their respective Groups. Several alternative names, with short CVs/publication lists should be proposed to cover each field of research (including Scientific Council members and external members).

h.   A short-list of reviewers, with at least two names for each research area, is prepared by the group named above. The Director and the Section Head may object to any proposed reviewer, on the grounds of conflict of interest. The objections and their reasons are circulated to the Review Panel Chair by the IARC Coordinator, followed by one or more conference calls to arrive at a final list.

i.   Invitations to reviewers should be sent, and acceptance received, at least six months before the date of the Review. Conference calls should be used to identify alternates if necessary, following the above procedure.

D.   Review documents

8.   The material relevant for the review should be distributed to the members of the Review Panel at least two months before the site visit.

9.   The written submissions from the scientists in each Research Group form the framework for the Review. They should be equally balanced between achievements and future plans, providing a comprehensive overview of the work performed during the last five years and of future short, medium and long-term research plans. The papers should provide sufficient detail for the Review Panel to assess the quality of the research proposals, the Group's expertise and its abilities to achieve the goals.

10.   The review documents should, subject to discussion between the Review Panel Chair and the IARC Coordinator, be prepared in the format detailed in Annex 4. In addition to the Working Papers prepared for each Group, one will be prepared for the full Section giving a general description, its strategic vision, its role within IARC, and its operational management.

11.   The reviewers may query some elements of the report in advance with the Section Head. All these queries go through the Review Panel Chair to ensure that all Panel members are aware of the query and the response.

E.   The Review

12.   The Review Panel will assess the quality of the scientific research and the congruence of the work with the IARC mission and strategy.

13.   Because of time constraints during the Review meeting, it is suggested that a draft report, which will form part of the Consensus Statement, be produced prior to the meeting, based on the material provided.

14.   The Review Panel Chair should assign at least two Panel members to review each Research Group, two months before the review. Each Panel member should be assigned two Groups to review.

15.   Each Review Panel member should draft reports on these two assigned Groups prior to the Review. These should be based on the format of the Consensus Statement as given in Annex 5, but may be modified following discussion among the Review Panel. These reports should be circulated to the other reviewers in advance.

16.   The timetable of the review should be agreed in advance by the Chair of the Review Panel and the IARC Coordinator. A suggested timetable is given in Annex 6. This will need to be modified in light of the number of Groups to be reviewed and the number of reviewers.

17.   The Director and Group Heads will have an opportunity for individual private meetings with the Review Panel.

18.   Each Group Head will make a brief presentation (15 minutes with 60 minutes for discussion). This presentation should be focused on the Group's strategic plan and how this is to be achieved by the projects described in the Working Paper. The emphasis should be on research plans; only highlights of the past five years' achievements should be briefly presented. This session will provide the opportunity for the Review Panel to probe the details of the proposals and the Group's ability to deliver the programme.

19.   In general, only the Research Group Head, and in exceptional cases other senior scientific staff, will attend and present orally at the Review. Other Senior Scientists can be invited by the Review Chair to present their work orally if they are entirely responsible for an independent research activity, which is resourced from within the main programme. Any proposal for key collaborators to attend the scientific session must be discussed in advance with the Director and the Review Chair.

20.   Following each presentation, the Review Panel will meet privately to discuss its findings and to identify any issues for which further clarification is required. The Section Head may then be invited to respond to any queries and to discuss other pertinent issues. A Section Head may also have a brief *in camera* meeting with the Review Panel from which the Director and his staff are excluded.

21.   The two Review Panel members previously assigned to review each Group will have an informal meeting with the scientists, students and post-docs within these Groups. Junior members of the Group being reviewed will prepare posters that will be displayed in the area where lunch- and tea-breaks will be taken. The Review Panel will comment on the quality of the training environment.

F.   Presentation and discussion of results

22.   At the end of the Review, the Section Head and the IARC Director will be debriefed by the Review Panel. This will include a brief summary of the assessment of the Panel and will advise the Section Head of the scores for the components of the programme.

23.   The Review Panel will draft a Consensus Statement summarizing its findings and conclusions, based on the format in Annex 5.

24.   Following the Review, the Consensus Statement, edited in IARC format by the IARC Secretariat, will be circulated to all members of the Review Panel for approval.

25. Each Section Head will be invited to identify any **factual** inaccuracies, which will be corrected and, if he/she wishes, to comment on and respond to the Consensus Statement. Any proposed change in the text will have to be approved by at least two thirds of the members of the Review Panel. These comments will accompany the Consensus Statement when it is submitted to the IARC Secretariat. The Director may incorporate these comments into his response to the Consensus Statement to the IARC Scientific Council at its meeting following the Review.

G.   Submission to Scientific Council

26. The Consensus Statement of the Review Panel shall be a Scientific Council document discussed by the IARC Scientific Council at its next meeting. It should be available to the Scientific Council at least two weeks in advance of the Scientific Council meeting following the review.

27. The Chairperson of the Review Panel will attend the Scientific Council meeting to present the report.

28. At this Scientific Council session, the Section Head reviewed may be invited to respond to questions or to express responses to the review, but this must not imply any element of re-review.

29. The Director will respond to the findings of the Review Panel.

30. The Scientific Council shall advise the Director on the Review.

29. The outcome shall be transmitted to the Governing Council, generally held in May following the Scientific Council.

H.   Process resulting from the Review

30. In the event that the work of a Research Group or a researcher is determined to be unsatisfactory in terms of its science or in its contribution to the IARC strategy, the research may be terminated and the Group disbanded. In such an eventuality, WHO Staff Rules and Regulations will be applied.

31. Within 10 working days following the meeting of the Scientific Council, the IARC Director will meet individually with each Group reviewed, in the presence of the Director of Administration and Finance, to summarize the outcome of the Review.

I.   Follow-up on the recommendations

32. During the second Scientific Council meeting after the Review, approximately one year after the review took place, the Director will present the actions that were taken on the recommendations.

Annex 4: Suggested format of Working Paper from Group Heads prior to review

The emphasis is to be on clarity and brevity.

1.   Introduction

1.1 General description of individual Groups

1.1.1   Strategic vision of Group

1.1.2   Role of Group within IARC

1.1.3   Current professional (indicate level) and other staff (including Ph.D. students) and visiting fellows

1.1.4   Vacancies

1.1.5   Professional staff (indicate level) that left IARC in previous five years

1.1.6   Operational management/mandates and responsibilities of senior scientists

1.1.7   Brief CVs of P4 and P5 staff

1.1.8   Extended CV of Group Head

1.2 The Group's involvement in training programmes/courses

1.2.1   Courses held

1.2.2   Location

1.2.3   Attendance

1.2.4   Informal training, consisting of meetings with:...........................

1.3 Recommendations for the Group by previous Review Panel(s)

2.   Research report

2.1 Past performance by the Group

2.1.1   Overall: landmarks/specific circumstances that influenced performance

2.1.2   List of all significant projects in past five years

2.2 For each finished and longer-term ongoing project: 1 page (maximum) summary in the following format:

Title of project [add as many as necessary]

2.2.1   Principal investigator

2.2.2 Role of the Group: initiator or collaborator, names and affiliations of main collaborators

2.2.3 Funding source and amount

2.2.4 Background/motivation

2.2.5 Brief: design and methods

2.2.6 Results

2.3 Publication list, containing publications from the Group over the past five years categorized in peer-reviewed papers, book chapters/reviews with the five most significant papers starred

2.4 Copies of two key publications; and title pages of other major publications

2.5 A list of meetings at which Group members have been invited speakers

3. Future research proposal

3.1 Strategic vision of the Group for the next five years

3.1.1 Overall

3.1.2 Short, medium, and long-term goals

3.2 A one to two page summary for each shorter-term ongoing and planned project in the following format:

Title of project [add as many as necessary]

3.2.1 Ongoing/planned

3.2.2 Principal investigator

3.2.3 Role of the Group: initiator or collaborator

3.2.4 Funding source and amount/requested budget

3.2.5 Background/motivation

3.2.6 Design and methods (sufficient detail should be provided to allow the reviewers to form an opinion on the feasibility of the proposed work)

3.2.7 Expected results and impact

3.2.8 Expected completion date

3.2.9 Relevance of project to goals of Group and of IARC as a whole

3.3   Priority score of the ongoing and planned projects:

    3.3.1   4   Essential

    3.3.2   3   Desirable

    3.3.3   2   Useful

If projects have been specifically requested or commissioned (e.g. by WHO), please indicate this.

Annex 5: Suggested format of Consensus Statement of Review Panel

1. The Group's past work:

1.1 Overview of the Group's work in the last five years

1.2 Critical appraisal of the Group's work in the last five years

2. The Group's future plans:

2.1 Overview of the Group's future plans and strategic vision

2.2 Critical appraisal of the Group's future plans

3. The Group's assessment (SWOT):

3.1 Assessment of the Group's Strengths

3.2 Assessment of the Group's Weaknesses

3.3 Assessment of the Group's Opportunities

3.4 Assessment of the Group's Threats

4. Evaluation of the Group and Section

The **past performance** and **future plans** of each Group and of the Section should be scored independently for **quality** and **relevance**, as follows:

a. Assessment of scientific quality (using the four-point scale below)

A single score should be assigned for the work of each Research Group, the Section as a whole, and separately for the performance of each Group and Section Head.

Scoring:

The following classification will be used:

1: **Outstanding**: Work of the highest international calibre, pioneering and trend-setting.

2: **Satisfactory**: Work that is internationally competitive and will make a significant contribution to science or public health.

3: **Questionable**: Work which is not of a high scientific standard, but which could be improved.

4: **Unsatisfactory**: Work which is of poor scientific standard and is unlikely to make a contribution to science or public health.

b. Assessment of the relevance of the work to the mission of IARC

This should include how well the proposed work benefits from IARC's unique position, how well it appears to fit with the IARC strategy and how it might impact on public health.

A single score should be assigned for the work of each Research Group and for the Section as a whole.

Scoring:

The following classification will be used:

1: **Perfect fit**: This type of work is ideally suited to the mission of IARC.

2: **Good fit**: This type of work is suited to the mission of the Agency.

3: **Questionable fit**: Uncertain.

4: **Poor fit**: Work which should not continue.

Scores should be accompanied by justifications and recommendations for action, where necessary.

5. Overall recommendations for the Group

Annex 6. Suggested timetable for the review

The following are approximate guidelines:

1	Welcome by IARC Coordinator or Director on the evening before the review; short explanation of IARC and the review procedures.	1 hour
2	Meeting of Review Panel on the first evening to agree on processes, discuss procedures and terms of reference, assign tasks, review the timetable.	1 hour
3	Presentation by the Section Head: overview, organizational procedures, staff, vacancies, budget, cross links between Groups and Section.	1 hour
4	Presentation of each Group by Group Head: **15 minutes presentation**; **one hour discussion**.	5 hours
5	Review Panel meets privately to discuss its findings, to identify issues for clarification, and a private discussion with each Group Head.	2 hours
6	Roundtable meeting with junior scientists/postdocs; possible tour of facilities.	2 hours
7	Drafting of report. During this time period, any Group Head or the Section Head can request a meeting in private with the Review Panel.	5 hours
8	The draft report is given to the Director, IARC Coordinator, Section and Group Heads, who will have an opportunity to review the section of the Review Panel's draft report relating to their Group only, and to meet with the Review Panel at the time of the visit, to allow correction of factual errors or misunderstandings.	1 hour
9	Presentation of the Review Panel's summary conclusions and gradings to individual Group Heads in respect of their own proposals (30 minutes per Group), and to the Director for Section/Group Heads.	2-3 hours
10	Finalization of the report.	1 hour
11	Total duration in case of four Groups (breaks excluded). This means that for the Review of more than three Research Groups, two and a half days instead of two days should be planned.	21 hours