

SCIENTIFIC COMMITTEE HANDBOOK

GREG DONOVAN AND PHIL HAMMOND

1 TABLE OF CONTENTS

2	Introduction	2
3	Place in the Commission System.....	2
4	Membership and officers.....	3
4.1	Membership (RoP A1-7)	3
4.1.1	national delegates	3
4.1.2	Invited participants.....	4
4.1.3	Representatives of specified intergovernmental organisations	4
4.2	Officers (ROP C4)	4
5	Structure and meetings (ROP C1-5, D1-3).....	5
5.1	The plenary and sub-groups.....	5
5.1.1	The role of convenors.....	6
5.2	Logistics	7
5.3	Intersessional correspondence groups.....	7
6	Reports and papers (RoP E1-5)	8
6.1	National progress Reports.....	8
6.2	Scientific committee PRIMARY papers	8
6.3	For information papers	9
6.4	Scientific committee working papers	9
6.5	Scientific Committee reports (including SUB-GROUPS/WORKSHOPS)	10
7	Research Fund.....	11
8	process for review of scientific permits	11
9	DATA AVAILABILITY AGREEMENT	13
10	Scientific work (TO BE COMPLETED).....	13

2 INTRODUCTION

The Scientific Committee was established by the Commission in 1950. This in part is a reflection of Article IV of the Convention that refers to scientific research and the publication of results, statistics and reports and in part a reflection of Article V2 of the Convention that states that *inter alia* Schedule amendments ‘...shall be based on scientific findings....’¹ It has met each year since then (Appendix 1).

The Scientific Committee was established in accordance with the Commission’s Rule of Procedure M1 and its general terms of reference are given in Rule M4².

The Rules of Procedure (ROP) of the Scientific Committee are decided by the Commission and published each year in the Annual Report of the Commission as well as being available on the Commission’s website³.

This document has been developed to provide a relatively simple explanation of the work of the Scientific Committee and its procedures and to be of value for scientists and non-scientists alike. It is intended to be a living document, regularly updated and incorporated into the IWC website.

3 PLACE IN THE COMMISSION SYSTEM

The Scientific Committee is one of four Committees established by the Commission, the others being the Finance and Administration Committee, the Technical Committee and the Conservation Committee (see Fig. 1). Formally, the Scientific Committee reports directly to the Commission (which considers the Committee’s report under appropriate items under its plenary agenda) but in practice, some relevant sections of its report are first reported to other bodies of the Commission, depending on their Agendas (see Table 1). The Technical Committee has not met for several years but when it did meet the Scientific Committee used to provide advice on *inter alia* commercial whaling catch limits. The broad Scientific Committee agenda is determined each year by the Commission when it discusses a work plan proposed by the Scientific Committee. If other Commission bodies require the advice of the Scientific Committee then they may request this via the Commission. Occasionally, individual Commissioners ask the Committee for advice and this is dealt with if time permits; however, priority is given to items agreed by the full Commission.

Table 1

Recent examples of the Scientific Committee first reporting to other bodies of the Commission

Commission body	Scientific Committee items
Aboriginal subsistence whaling sub-committee	Aboriginal subsistence whaling management procedure (AWMP), advice on aboriginal subsistence whaling catch limits
Budgetary sub-committee	Research fund proposals
Conservation Committee	Ship strikes
Finance and Administration Committee	Rules of Procedure changes

¹ The Full Convention text can be found at <http://www.iwcoffice.org/commission/convention.htm#convention>

² <http://www.iwcoffice.org/commission/procedure.htm>

³ <http://www.iwcoffice.org/commission/procedure.htm#scientific>

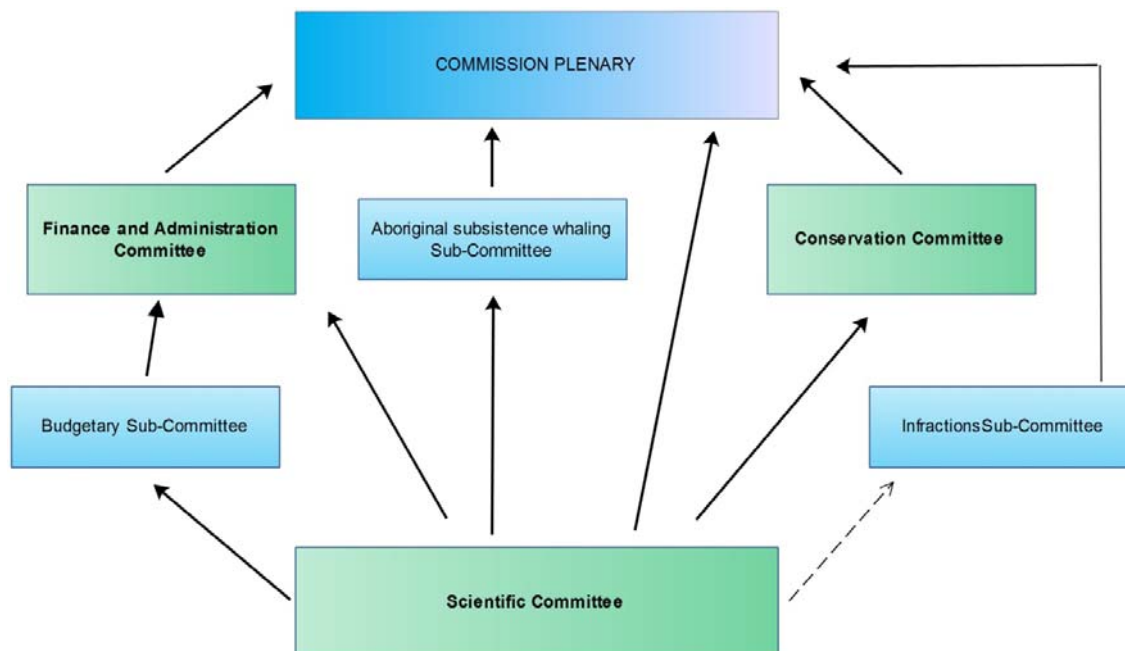


Fig. 1. Schematic summary of IWC structure showing information/reporting flow. The Technical Committee has not met in recent years so is not included. Feedback/requests from other bodies of the Commission to the Scientific Committee than the Commission plenary are channelled through the plenary.

4 MEMBERSHIP AND OFFICERS

4.1 MEMBERSHIP (ROP A1-7)

The membership of the Scientific Committee comprises the following:

- (1) **national delegates;**
- (2) **invited participants;**
- (3) **representatives of specified intergovernmental organisations.**

In addition, Scientific Committee meetings can be attended by **scientific representatives of non-member governments, observers from non-governmental organisations** (whose CVs show that they have sufficient scientific background to understand the technical discussions) and **local scientists**, at the discretion of the Chair of the Scientific Committee (in consultation with the Chair and Vice-Chair of the Commission if the Chair believes attendance is inappropriate). Observers receive papers but cannot participate in discussions unless specifically invited to do so by the Chair under special circumstances.

4.1.1 NATIONAL DELEGATES

Member nations have the right to nominate national delegations to the Scientific Committee; there is no limit to the size of any delegation. Each country represented on the Scientific Committee nominates a Head of Delegation who has one vote, should voting be required. However, the Scientific Committee has wisely chosen

not to use voting to 'decide' scientific matters (see section 5) and voting is not used apart from occasionally with respect to choosing a Chair and/or Vice-Chair (see section 3.2).

4.1.2 INVITED PARTICIPANTS

Invited participants (IPs) are non-voting members of the Scientific Committee. Although treated as one category, IPs fall into two broad categories:

- (1) those scientists that are identified by the Convenors (see Item 4.1.1) as providing necessary expertise for them to complete their work and for which funding will be provided by the IWC *if available*; and
- (2) those scientists who request to participate in meetings of the Scientific Committee, can provide the Chair of the Scientific Committee with information showing that they will contribute to the Committee's work and have their own funding.

The timetable and process for invited participants to Annual Meetings is summarised below:

4 months prior	Convenors suggest IPs based on draft agenda/workplan. Other scientists may request to attend explaining their potential contribution to priority items
3.5 months prior	Chair in consultation with convenors and Secretariat develop list of IPs and invitation letter sent stating that funding <i>may</i> be available. If prospective IPs cannot obtain their own funding they are asked to submit estimated costs within two weeks. Governments are also asked if they will fund scientists on the list residing in their countries
3 months prior	Secretariat supply Chair with consolidated list of potential IPs and costs for decisions on funding based on priorities and consultations with convenors and Secretariat
2 months prior	IPs informed of outcome of funding requests

Although IPs can participate fully in the Committee's scientific work, they are expected to use discretion with respect to 'potentially controversial' recommendations and/or those pertaining to the Committee's procedures and policies. The Chair or sub-committee chair may identify such topics and may rule IPs out of order at his/her discretion.

4.1.3 REPRESENTATIVES OF SPECIFIED INTERGOVERNMENTAL ORGANISATIONS

The Scientific Committee has a history of co-operation with a number of relevant IGOs (including FAO, UNEP, ASCOBANS, ACCOBAMS, CCAMLR etc) and, subject to confirmation by the Chair of the Scientific Committee, their representatives may attend as non-voting members. IUCN (which has both governmental and non-governmental members) is accorded the same rights.

4.2 OFFICERS (ROP C4)

The formal officers of the Scientific Committee are the **Chair** and the **Vice-Chair**; they are assisted by the IWC Secretariat's **Head of Science**. The Chair and Vice-Chair are elected by the Heads of Delegation, normally (since 1980) every three years; unless there are special circumstances, the Vice-Chair succeeds the Chair automatically. Although voting can occur, the preferred approach is to reach consensus. The role of the Chair and Vice-Chair is to facilitate the work of the Scientific Committee in providing the best scientific advice to the Commission, not to represent their country. To accentuate this, when presenting the results of the Scientific Committee's work to the Commission, the Chair of the Scientific Committee sits with the Secretariat's Head of Science and thus represents the Committee, not his/her national delegation. A list of Chairs since the inception of the Committee is given in Table 2.

The primary tasks of the Chair of the Scientific Committee (usually in conjunction with the Vice-Chair and the Head of Science) are:

- (1) Annual Meeting related
 - (a) to develop the draft agenda for the annual Scientific Committee meeting and circulate it 60 days in advance;
 - (b) to integrate any comments received on the draft and circulate a revised draft agenda 21 days in advance for discussion and adoption at the opening plenary;
 - (c) to develop a timetable and *modus operandii* for the annual meeting for discussion and adoption at the opening plenary (see Item 5);
 - (d) to appoint Convenors for sub-committees, standing working groups etc (see Item 5);
 - (e) to approve invited participants, observers and local scientists (see 3.1.1);
 - (f) to Chair annual meetings;
 - (g) to present the work of the Scientific Committee to the Commission;
- (2) to determine the participation of the expert group to review special permits (see Item 8);
- (3) to participate in the Data Availability Group (see Item 9).

Table 2

Chairs of the Scientific Committee, 1950-onwards

Chair	Country	Years
N.A. Mackintosh	UK	1950-63
J.T. Ruud	Norway	1964
D.G. Chapman	USA	1965-74
K.R. Allen	Australia	1975-79
J.L. Bannister	Australia	1980-82
M.F. Tillman	USA	1983-85
G.P. Kirkwood	Australia	1986-88
R.L. Brownell Jr	USA	1989-91
P.S. Hammond	UK	1992-93
S.B. Reilly	USA	1994-96
J.L. Bannister	Australia	1997-99
J.E. Zeh	USA	2000-02
D.P. Demaster	USA	2003-05
A. Bjørge	Norway	2006-09
D. Palka	USA	2010-

5 STRUCTURE AND MEETINGS (ROP C1-5, D1-3)

The primary meeting of the Scientific Committee is the **annual meeting**. This is usually held immediately prior to the Commission's annual meeting although the Commission is now discussing holding the Scientific Committee meeting up to two months prior to the Commission meeting. At the request of the Commission, the Scientific Committee may hold full intersessional meetings on particular issues but these are rare. More commonly, the Scientific Committee holds **intersessional workshops** that do not comprise the full Scientific Committee and the results are reported to the Scientific Committee at annual meetings; these workshops may either be on a specific one-off topic (e.g. climate change and cetaceans) or forward ongoing work of the Committee (e.g. with respect to Revised Management Procedure *Implementations*).

5.1 THE PLENARY AND SUB-GROUPS

The authoritative body is the full Scientific Committee. Its broad agenda is set in response to the needs of the Commission. The Scientific Committee's Rules of Procedure outline in the terms of reference the primary topics of interest and their origin in either the Convention, Schedule, Commission Resolution or Commission

decision. In addition a more detailed work plan and priority topics is agreed at the end of each Scientific Committee meeting and presented to the Commission for approval/modification.

The authoritative body is the full Scientific Committee. Its broad agenda is set in response to the needs of the Commission. The Scientific Committee's Rules of Procedure outline in the terms of reference the primary topics of interest and their origin in either the Convention, Schedule, Commission Resolution or Commission decision. In addition a more detailed work plan and priority topics is agreed at the end of each Scientific Committee meeting and presented to the Commission for approval/modification. In order to most efficiently address its broad agenda, the Committee forms a number of sub-committees and working groups (generically called sub-groups), with their own convenors and rapporteurs. The 'Convenors' group' comprises the Chair, Vice-Chair, Head of Science, Secretary to the Commission, Secretariat computing manager and convenors. Rapporteurs play a vital role in the work of the Committee. They are members appointed by the relevant chairs and their responsibility is to take notes during the sessions and develop a draft report (see Item 5.5).

Some are 'Standing' and have been established on the instruction of the Commission, some are ad hoc, established for a particular item, whilst the majority are sub-committees that tend to appear consistently over a number of years with occasional major shifts (e.g. see Table 3). All of these are subservient to the whole. Sub-groups make recommendations to the Committee – it is the Committee that makes recommendations to the Commission. Occasionally, the full Committee does not agree with the conclusions or recommendations of a subgroup. Although this has been rare it is entirely proper – the Plenary is not obliged to rubber stamp a subgroup report or else discussions of such reports would be meaningless. How this is handled in reports is dealt with under Item 5.

The Chair decides on the appropriate sub-groups based on the workplan and finalises this in the notes to the draft agenda. As noted under Item 3.2, it is the Chair's responsibility to appoint Convenors for each of the sub-groups; this requires a balance of a number of features including experience, geographical spread, a balance of the need for new blood with the need for continuity (more important in some groups than others). Participants select which sub-groups they plan to attend during online registration.

Table 3

Example of sub-groups: 2009 Annual Meeting: S-C = sub-committee; SWG = standing working group; WG = working group

Title	Convenor	Type
Revised Management Procedure	Bannister	S-C
Development of an Aboriginal Subsistence Management Procedure	Donovan	SWG
Bowhead, Right and Gray Whales	Kitakado	S-C
In-depth Assessments	Walløe	S-C
In-depth assessment of western North Pacific common minke whales with a focus on 'J' stock	Hammond	WG
Other Southern Hemisphere whale stocks	Zerbini	S-C
Stock Definition	Bravington	WG
Estimation of bycatch and other human-induced mortality	Perrin	WG
Environmental Concerns	Moore	SWG
Address multi-species and ecosystem modeling approaches	Gales	WG
Small Cetaceans	Fortuna	S-C
Whalewatching	Kato	S-C
DNA	Pastene	WG
Special Permits	Bjørge	WG

5.1.1 THE ROLE OF CONVENORS

The Convenor's responsibilities can be summarised as follows:

- (1) to facilitate intersessional progress on identified tasks including providing advice to the Chair as appropriate;

- (2) to identify potential invited participants;
- (3) to draw up the draft agenda for the sub-group's work for discussion and agreement at an organisational meeting of the sub-group;
- (4) if elected chair (as is normally the case) by the sub-group at its opening meeting:
 - (a) to meet in the **Convenors' group**⁴ to determine the business and timetable for the day
 - (b) to provide advice to the Chair on other meeting-related matters should they arise;
 - (c) to chair the sub-groups meetings efficiently and fairly and if necessary establish small expert groups;
 - (d) to authorise working papers should they be deemed necessary (see below);
 - (e) to appoint rapporteurs⁵ and ensure the sub-group's report follows the guidelines for reports⁶, to present the sub-group report to the full Plenary and to provide an initial draft for the relevant sections of the Plenary report;
 - (f) to ensure that the final version of the sub-group report is completed by the end of the day after the Scientific Committee meeting;
 - (g) to meet in the Convenors' group the day after the Scientific Committee meeting to finalise the draft work plan for the coming year to be submitted to the Commission.

5.2 LOGISTICS

The workload of the Committee is such that simultaneous sessions must be held; whilst every attempt is made by the convenors to avoid clashes of sub-groups with overlapping personnel, it is not always possible. In 2009, the aim was to have a scheduled 105 sessions (three concurrent sub-group meetings for each of five work sessions per day, starting at approximately 08:30 and ending typically at 18:00) but with the possibility of evening sessions. However, if possible, evening sessions are avoided to allow: (1) rapporteurs to draft reports; (2) time for small break out groups (e.g. to do simulation runs and testing); and (3) dedicated sessions on particular topics that can be attended by all. Full details of the 2009 Schedule can be found on the IWC website⁷.

Table 4

Example time schedule for an Annual Scientific Committee meeting: 2009

Date	Items	Comments
Sunday 31 st May	Plenary session, then read documents	Items 1-4
Monday 1 st June	Initial meetings of sub-committees and working groups (about 15 minutes each)	To elect chairs and adopt agenda, identify documents, etc
Tuesday 2 nd June Monday 8 th June	Predominantly sub-committees (possibly some short plenary meetings)	To complete agenda and agree report
Tuesday 9 th June	<i>Tentative rest day</i>	Subject to cancellation if insufficient progress is made....
Wednesday 10 th Friday 12 th June	Plenary sessions. Intention to finish no later than 5pm on Friday 12 th June	To complete agenda and agree report, including work plan and draft initial agenda for 2010
Saturday 13 th June	Convenors to complete editorial work on sub-committee and plenary reports; consider refinements of the draft initial agenda, priorities, and changes in organisational structure implied by the draft initial agenda or by discussions during the meeting.	

5.3 INTERSESSIONAL CORRESPONDENCE GROUPS

⁴ The 'Convenors' group' comprises the Chair, Vice-Chair, Head of Science, Secretary to the Commission, Secretariat computing manager and convenors.

⁵ Rapporteurs play a vital role in the work of the Committee. They are members appointed by the relevant chairs and their responsibility is to take notes during the sessions and develop a draft report (see Item 5.5).

⁶ http://www.iwcoffice.org/documents/sci_com/handbook/guidelines_for_rapporteurs.pdf

⁷ http://www.iwcoffice.org/documents/sci_com/handbook/outcome_and_follow-up.pdf

In addition to meetings, the Committee and its sub-groups may establish intersessional correspondence groups. There are at least two types: (1) those with a broad mandate to explore issues that have proved intractable during a meeting with a view to proposing a way forward at the next meeting; and (2) those with a specific mandate and tasks that require considerable progress and commitment from members to allow the Committee to move forward at its next meeting. The 2009/10 intersessional correspondence groups, together with their terms of reference and membership can be found on the IWC website⁸.

As a result of problems in the past the Committee has agreed to pay careful attention to drafting clear terms of reference and responsibilities, and in the case of type (2) groups, establish a process to follow in the event of disagreement within the group (e.g. consultations with the Chair and Convenors' group). Experience has shown, however, that intersessional correspondence groups are rarely a substitute for face-to-face meetings on complex topics for a number of reasons, including the workload of members.

6 REPORTS AND PAPERS (ROP E1-5)

The Scientific Committee receives and writes a number of documents and reports. These are summarised briefly below. Apart from working papers (see conditions below), all papers are publicly available in the Secretariat's archives although some have conditions on citation (see Item 5.2).

6.1 NATIONAL PROGRESS REPORTS

Scientific Progress Reports have their origin in Article VIII, Paragraph 3 of the Convention. All member nations are urged by the Commission to provide Progress Reports to the Scientific Committee following the most recent guidelines developed by the Scientific Committee and adopted by the Commission. The report is intended as a concise summary of the cetacean research undertaken in member countries as well as a summary of information on direct and incidental anthropogenic mortality.

The template for such reports can be downloaded from the IWC website⁹. General information in the reports covers the intersessional period between Annual Committee meetings (or, if a report is not submitted each year for some reason, the period since the last report), however statistical information should be provided by calendar year or season as explained in the template.

6.2 SCIENTIFIC COMMITTEE PRIMARY PAPERS

Primary scientific papers (not 'For Info' papers – see below) should be submitted to the Committee following an agreed template and style¹⁰. Authors are requested to submit at least preliminary titles, authors and ideally an abstract about 6 weeks before the meeting. Papers are allocated document numbers and categories by the Secretariat. Primary papers must be submitted by the end of the first day of the Annual Meeting. Under special circumstances, the Chair in consultation with the Head of Science may either extend this deadline or agree to upgrade a working paper (see 5.4 below) to the status of a primary paper and allocate a document number.

If papers are provided sufficiently early (normally around 3 weeks before the meeting), they are copied by the Secretariat for distribution at the meeting (otherwise authors must bring sufficient copies themselves). At one time, all primary papers were copied for all participants. Considerable effort has been made in recent years to reduce copying to save both paper and energy by asking participants only to sign up for those categories for which they will require hard copies and those sub-groups for which they genuinely plan to attend. This process

⁸ http://www.iwcoffice.org/documents/sci_com/SCRepFiles2009/Annex%20Q%20-%20Final.pdf

⁹ http://www.iwcoffice.org/sci_com/scprogress.htm

¹⁰ <http://www.iwcoffice.org/publications/styleguide.htm>

is proving very successful and is evolving. Table 5 provides examples of the document categories for the 2009 Annual Meeting.

Table 5

Categories of Papers presented to the Scientific Committee for SC61 in 2009

Category	Title	Description
AWMP	Aboriginal Whaling Management Procedure	Papers mainly relevant to the AWMP, the Greenlandic Research programme and aboriginal subsistence whaling by Greenland and St. Vincent and The Grenadines
BC	Bycatch	Papers mainly relevant to the issue of estimation of bycatch
BRG	Bowhead, right and gray whales	Papers relevant to these species, including stocks subject to aboriginal subsistence whaling that are not directly related to the AWMP process
E	Environmental Concerns	Papers mainly relevant to environmental concerns
EM	Ecosystem Modelling	Papers relevant to the Ecosystem Modelling working group
IA	In-depth Assessments	Papers mainly relevant to Antarctic minke whale assessments, SOWER cruises, IWC-DESS, sperm whales
JR	JARPN II Review	Revised JARPN II review papers and response papers
NPM	Western North Pacific common minke whales	Papers relevant to the in-depth assessment of western North Pacific common minke whales
RMP	Revised Management Procedure	Papers relevant to general RMP matters and Implementations or Implementation Reviews
SCP	Scientific Committee Process	Papers relevant to the working methods of the Scientific Committee including improvements to the review process for Scientific Permits and Sanctuaries
SD	Stock Definition/DNA	Papers mainly relevant to Stock Definition, including general stock identity issues TOSSM and those related to the issue of DNA testing
SH	Southern Hemisphere assessments	Papers mainly relevant to the assessment of Southern Hemisphere humpback and blue whales
SM	Small Cetaceans	Papers mainly relevant to small cetaceans
WW	Whalewatching	Papers mainly relevant to whalewatching
O	Other	Papers that do not fall easily into one of the above categories

Similar rules apply to primary papers submitted to workshops although the deadlines may be more tolerant.

Submission of primary papers does not preclude publication in peer-reviewed scientific journals (or indeed elsewhere), although they reside in the Secretariat, are publicly available on request and are considered part of the public domain. Some papers include words along the lines 'not to be cited without authors' permission. However, if they are to assist in the work of the Committee then this restriction of citation does not extend to citation in the context of the meeting at which they are submitted but rather to future citations outside the report of the Scientific Committee or its subsidiaries.

With respect to citation of primary papers elsewhere, the policy of the Commission's *Journal of Cetacean Research and Management (JCRM)* is that the citation style makes clear that these are unpublished manuscripts; other journals may have other policies. Similarly, the policy of *JCRM* is that if authors specify that the paper should not be cited without their permission that must be respected. Although not all authors make such a specification, it is in any case good scientific practice (as well as courteous) to inform authors of unpublished papers that one intends to cite them and make use of the data therein. This is important as, for example, by the time of citation the document may have been submitted/accepted for publication (or already published), in which case it is more appropriate to cite the (to be) published version.

6.3 FOR INFORMATION PAPERS

This category is for papers that have been: submitted to a journal, are in press, or have been published; or have been submitted to another meeting (IWC or elsewhere) and allocated a document number. This is primarily to avoid confusion at a later date. Standard sets of 'For Info' papers are available for consultation at meetings and convenors may request hard copies of such papers they consider especially relevant to their business (copyright permitting).

6.4 SCIENTIFIC COMMITTEE WORKING PAPERS

Working papers are intended to expedite resolution of disagreements or stimulate debate within the meeting. They are only distributed with the agreement of the chair of a sub-group or the plenary. Recognising that such papers are often written at the last minute in order to stimulate discussion or present the results of a preliminary analysis which subsequently the author feels (or is told) is flawed, it has been agreed that they officially disappear at the end of the meeting unless appended to the Committee or sub-committee reports with the author's permission, or with the agreement of the Chair and the Head of Science, be upgraded to a primary paper (see 5.2 above). Any working paper that forms the basis of management advice must be appended. Non-appended working papers have no status once the meeting is closed and thus cannot be cited in primary papers or publications (or the report of the Committee or one of its sub-groups).

6.5 SCIENTIFIC COMMITTEE REPORTS (INCLUDING SUB-GROUPS/WORKSHOPS)

The Scientific Committee report is the public face of the work of the Committee. It has to serve a number of functions providing a concise yet comprehensive account of the scientific work undertaken for the benefit of (1) the participants; (2) scientists not attending the meeting; and (3) the Commission. Achieving this in the short period of time available is not easy (the Commission is discussing the possibility of separating the meetings of the Scientific Committee and the Commission which, if agreed, would allow more time to finalise the report). The Scientific Committee report and Annexes (primarily the work of the sub-groups) is extensive comprising in some years over 400 published pages in JCRM – that wording must be agreed by all participants. A primary component of the plenary report is a summary of the work of the sub-groups. When reporting the work of the sub-groups each Convenor provides a draft of what could comprise the main Committee discussions of those topics – while it is not common for the Plenary session to radically alter conclusions reached in sub-groups, this can happen. As noted above (Item 4), the Plenary is the ultimate body to decide the Committee's view.

In terms of reporting, if the Plenary as a body disagrees with the conclusions of a sub-group, this is handled quite simply by (1) explaining the reasons for the change in the Plenary report and (2) including a footnote to the relevant section of the subgroup report.

However, at various times in its history, the Committee has struggled with how to deal not with major changes by the Committee but rather with comments by an individual or small group of individuals. The concern has been that by including such comments in the full Plenary report, they are effectively 'given far greater weight than similar comments made in the sub-committee itself.

Given this, the Committee agreed (in 2004) that:

- (1) every attempt is made to achieve consensus on subgroup conclusions and recommendations – in particular sufficient time must be made available for a full presentation to the Committee of major issues in a sub-committee report (e.g. development of a new *SLA*, provision of catch limits, modifications to annotations to the RMP);
- (2) if the Chair rules that there is insufficient time to debate an issue, this must be clearly stated before discussion starts or during the discussion and reflected in the Plenary report;
- (3) general discussion that does not alter subgroup conclusions or recommendations shall be briefly reported along the lines of 'There was additional discussion of the conclusions/recommendations but the Committee endorses the view of the subgroup.' Statements under individuals names should not be allowed in the body of the report but they may request to have a statement included in a 'Minority Annex' – the Plenary report will merely record that 'a minority statement (or statements) is (are) given in Annex Z.'

(4) if the general discussion results in the Committee being unable to agree as a body to a conclusion /recommendation, the report will reflect the discussion with a brief rationale under 'Some.... Others ...Yet others' culminating with a statement that 'under such circumstances, the Committee was unable to endorse the sub-committee conclusion/recommendation.'

Rapporteurs play an important role in report writing. Informal guidelines for rapporteurs have been developed and they can be found on the IWC website¹¹.

The Rules of Procedure deal with the availability of reports. In summary, the Annual Meeting report is given to the Commission as soon as possible but certainly by the beginning of the opening plenary; it is confidential¹² until then. Extracts of the relevant sections of the report go to other bodies of the Commission as required in the period between the Scientific Committee meeting and the Commission Plenary. Reports of Special Committee Meetings (and sometimes intersessional Workshops) are confidential until they sent by the Secretary to the full Committee, Commissioners and Contracting Governments and/or made available on the website. Reports of intersessional Steering Groups or sub-committees are confidential until they have been discussed by the Scientific Committee, normally at an Annual Meeting.

7 RESEARCH FUND

Each year, the Commission approves a research budget for the Scientific Committee for work that the Committee believes is essential to its work in providing the best scientific advice to the Commission. This includes *inter alia* Workshops (see Item 4), data processing, data collection and collation, analyses and the costs of inviting experts to annual and intersessional meetings (see Item 3.1.2). Most of the research supported by the IWC arises from discussions at annual meetings of the Committee. However, the Committee can accept applications for funding for research projects, the objectives of which are to advance the work of the Committee following a *pro forma* available on the IWC website¹³. In recent years, the Committee has not been able to fund more than the work recommended by the sub-groups to the Plenary. For 2009/2010 the research budget is £308,320¹⁴.

In addition, the Committee has a procedure to consider applications for the use of tissue samples or photo-identification photographs¹⁵.

8 PROCESS FOR REVIEW OF SCIENTIFIC PERMITS

Article VIII of the Convention allows governments to issue their nationals special permits to take whales for scientific research. The Schedule (Para. 30) provides for the Scientific Committee to review and comment on them. However, although the Committee and the Commission itself can comment on proposed permits, the final decision over content and numbers of animals resides with individual Contracting Governments. The issue of scientific permit whaling has become increasingly controversial within the Commission as has the question of the review of scientific permit proposals and results.

All proposed permits have to be submitted for review by the Scientific Committee following Guidelines issued by the Commission but the ultimate responsibility for their issuance lies with the member nation. The Scientific Committee's review has concentrated on the following issues, whether:

- the permit adequately specifies its aims, methodology and the samples to be taken;

¹¹ http://www.iwcoffice.org/documents/sci_com/handbook/guidelines_for_rapporteurs.pdf

¹² Confidential does not preclude Committee members discussing the report with their Commissioners but rather the outside world.

¹³ http://www.iwcoffice.org/documents/sci_com/handbook/funding_requests.pdf

¹⁴ http://www.iwcoffice.org/documents/sci_com/handbook/funding_table.pdf

¹⁵ http://www.iwcoffice.org/documents/sci_com/handbook/UseofSamplesProp.doc

- the research is essential for conservation and management, the work of the Scientific Committee or other critically important research needs;
- the methodology and sample size are likely to provide reliable answers to the questions being asked;
- the questions can be answered using non-lethal research methods;
- the catches will have an adverse effect on the stock;
- there is the potential for scientists from other nations to join the research programme.

The Committee inevitably includes the scientists who are proposing the permit and the usual way that the review was carried out was for all scientists to be present for discussions although the comments of the proposers and the rest of the Committee are identified in the report. As one might expect with such a large group of scientists, the review of any permits rarely resulted in unanimity either in favour or against the scientific merit of the proposal. The published reports of the Scientific Committee have reflected the agreements and disagreements of the review process, for both new and continuing permits (eg. JCRM 10. pp341-42; JCRM 11. p64).

In an attempt to improve the review process for both new permit proposals and periodic review of results of ongoing or completed programmes, in 2009, the Committee proposed a new approach that was accepted by the Commission. The primary change involved the initial review of a new proposal, or interim and final reviews of permit programmes at a small specialist workshop with a 'limited but adequate' number of invited experts (The 'Panel') who may or may not be present members of the Scientific Committee. In addition to the Panel, a limited number of scientists associated with the proposal can attend the workshop in an advisory role, primarily to present the proposal and answer points of clarification and not to participate in the discussion of the Panel. The practical way this was implemented at the first meeting this process (a review of the ongoing JARPNII programme) was that proponents provided brief presentations of their documents to the Panel in the morning session and answered questions of clarification; for the rest of the day the Panel was left alone to discuss the results and develop its report. A summary of the approach and timetable is given in Table 6 and the detailed process is available on the IWC website¹⁶.

Table 6

Schematic schedule of events in the Scientific Committees process of (a) reviewing Special Permit proposals and (b) periodic reviews of results from ongoing Special Permit research and final results from completed Special Permit research. The dates shown in the tables are for illustrative purposes only assuming an Annual Meeting beginning on 1 June.

(a) Review of Special Permit proposals	Schedule of events
Receipt of Special Permit proposal	>6 months prior to Annual Meeting (1 Dec)
Distribute proposal to Vice Chair, HoS and SSG	1 week
SSG suggest names for the Specialist Workshop	2 weeks
Chair, Vice Chair & HoS develop list of Specialists and reserves	2 weeks
Final comments from SSG	1 week
Invitation and documents to Specialists	1 week
Hold Workshop	>100 days prior to Annual Meeting (23 Feb)
Final Workshop Report made available to Proponents	> 80 days prior to Annual Meeting
Distribution of the Proposal, Workshop Report and comments from Proponents to the Committee	> 40 days prior to Annual Meeting
Discussion and submission of documents to the Commission	Annual Meeting (1 June)
(b) Periodic and final reviews	Schedule of events
Information on likely analytical methods to be used in the documents to the Workshop	9 months prior to Annual Meeting (1 Sept)
Distribute documents to Vice Chair, HoS and SSG	1 week
SSG suggest names for the Specialist Workshop	2 weeks
Chair, Vice Chair & HoS develop list of Specialists and reserves	2 weeks

¹⁶ http://www.iwcoffice.org/_documents/sci_com/SCRepfiles2008/Annex%20P%20FINALsq.pdf

Final comments from SSG	1 week
Invitation and documents to Specialists	1 week
Receipt and circulation of results/review documents from Special Permit research	>6 months prior to Annual Meeting (1 Dec)
Hold Workshop	>100 days prior to Annual Meeting (23 Feb)
Final Workshop Report made available to Proponents	> 80 days prior to Annual Meeting
Distribution of result documents, Workshop Report and comments from Proponents to the Scientific Committee	> 40 days prior to Annual Meeting

9 DATA AVAILABILITY AGREEMENT

The Scientific Committee uses a very large amount of data to provide the best advice to the Commission. Some of these data are provided by Member governments to the IWC as a requirement under the Convention/Schedule. These data are held and administered by the Secretariat. Other data are provided by or can be made available from governments, other organisations and individuals. The availability of these data has sometimes proved to be a complex and sensitive issue. Recognising that a balance must be struck between the needs of the Scientific Committee and the rights of the scientists who have invested considerable time and effort in collecting the data, the Scientific Committee has formulated a Data Availability Agreement¹⁷, overseen by a Data Availability Group (DAG) comprising the Chair and Vice-Chair of the Committee and the Head of Science.

Under this Agreement, there are two procedures. Procedure A applies to data required for the RMP, the AWMP or to provide advice on aboriginal subsistence whaling catch limits before the relevant Strike Limit Algorithms have been completed. Procedure B applies to data other than catch limits required for analyses deemed important in providing advice to the Commission (e.g. on the status of stocks not subject to IWC regulated whaling). Under Procedure A, there are deadlines for papers using those data to be submitted to the Scientific Committee, which depend on whether they use standard or novel methods and whether they are a new analysis or a response to such an analysis.

Summaries of the available data are listed at http://www.iwcoffice.org/sci_com/data_availability.htm. There are agreed protocols for approaching certain organisations for data available under Procedure B. Applications for such data must be copied to the DAG. For the successful operation of the agreement, certain conditions must be met that ensure the rights of the data holders as detailed in the data availability rules. An example standard agreement letter is available from http://www.iwcoffice.org/sci_com/data_availability.htm.

10 SCIENTIFIC WORK (TO BE COMPLETED)

The Scientific Committee covers a wide range of scientific subjects with respect to the conservation and management of cetaceans. Much of this is ongoing work and the following sections provide *brief* summaries of the work of the present sub-groups, including their remit from the Commission. It is expected that these sections will be drafted by the relevant Convenors in conjunction with Donovan and Hammond and updated as necessary. Some of this work has been included as explanatory text in Chair's summaries this year.

¹⁷ The full data availability rules can be downloaded from http://www.iwcoffice.org/sci_com/data_availability.htm.

Particularly for the more technical sub-groups the sections will include explanations (and in some cases PowerPoint presentations such as that given this year wrt the RMP *Implementation Process*) of fundamental tools used e.g. in RMP and AWMP.

It will also contain sections with respect to:

- The catch database

- The data from IDCR/SOWER cruises including (IWC-DESS, biopsy and photo-identification)

- Ship strikes database

The Appendices have not been printed to save paper.

APPENDIX 1

LIST OF MEETINGS OF THE SCIENTIFIC COMMITTEE

Year	Chair	Venue	Year	Chair	Venue
1950	Mackintosh	Norway	1980	Bannister	UK
1951	Mackintosh	S.Africa	1981	Bannister	UK
1952	Mackintosh	UK	1982	Bannister	UK
1953	Mackintosh	UK	1983	Tillman	UK
1954	Mackintosh	Japan	1984	Tillman	UK
1955	Mackintosh	USSR	1985	Tillman	UK
1956	Mackintosh	UK	1986	Kirkwood	UK
1957	Mackintosh	UK	1987	Kirkwood	UK
1958	Mackintosh	UK	1988	Kirkwood	USA
1959	Mackintosh	UK	1989	Brownell	USA
1960	Mackintosh	UK	1990	Brownell	Netherlands
1961	Mackintosh	UK	1991	Brownell	Iceland
1962	Mackintosh	UK	1992	Hammond	UK
1963	Mackintosh	UK	1993	Hammond	Japan
1964	Ruud	Norway	1994	Reilly	Mexico
1965	Chapman	UK	1995	Reilly	Ireland
1966	Chapman	UK	1996	Reilly	UK
1967	Chapman	UK	1997	Bannister	UK
1968	Chapman	Japan	1998	Bannister	Oman
1969	Chapman	UK	1999	Bannister	Grenada
1970	Chapman	UK	2000	Zeh	Australia
1971	Chapman	USA	2001	Zeh	UK
1972	Chapman	UK	2002	Zeh	Japan
1973	Chapman	UK	2003	DeMaster	Germany
1974	Chapman	UK	2004	DeMaster	Italy
1975	Allen	UK	2005	DeMaster	Korea
1976	Allen	UK	2006	Bjørge	St Kitts
1977	Allen	Australia	2007	Bjørge	USA
1978	Allen	UK	2008	Bjørge	Chile
1979	Allen	UK	2009	Bjørge	Madeira