

Further elaboration on the work of the Scientific Committee with respect to Category (b) items

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INTRODUCTION

We received a request from the Chair of the Commission on 5 February with the following key paragraphs:

As a result of the discussions of the Small Working Group on the Future of the IWC established at last year's Annual Meeting, the Commission requests that the Head of Science and the Chair of the Scientific Committee provide a report at the upcoming Intersessional Meeting in March 2009 on progress made to date and any future plans to address the issues assigned to the Scientific Committee from the 33 items developed by the Commission as part of the "Future of the IWC" process (see Tables 1 and 2 attached).

We realize that many of these items are already being addressed in the annual Work Plan of the Scientific Committee, which the Commission has endorsed. We further realize that it is very difficult for the Scientific Committee to predict when a given issue will be completed.

Finally, we recognize that this request is neither trivial nor simple, and will require considerable time between now and the intersessional meeting to complete. Nonetheless, some of the Contracting Governments to the IWC believe that one or more of these 19 issues are sufficiently important that the current priorities of the Scientific Committee may need to be changed. To provide for such a discussion, a summary of whether a given issue has been included in the most recent Work Plan of the Scientific Committee, and, if so, the expected time period for completion, would be very helpful.

This document is our response to this request. The short period of time between receiving this request and the present meeting (during which there have been four scientific workshops that one or both of us have had to attend), means that the comments in this document represent our best attempt to answer this request on behalf of the Scientific Committee – we have not been able to consult with the full Committee as we would have preferred.

DISCUSSION

Appendix 1 provides the summary of the information by element related to the work of the Scientific Committee – it is largely based on the text developed for the Small Working Group, with, as appropriate our comments about 'timelines'. It will be recalled that when the list of elements was developed it was recognised that there would be overlap amongst them; that is particularly true for the scientific elements. Therefore this document, whilst retaining all of the elements in the Appendix, focuses on some of the broader overlapping issues in the text here that will affect our ability to estimate 'completion dates' for a number of the elements, many of which refer to broad issues rather than specific tasks.

The work of the Scientific Committee is primarily carried out by sub-committees and working groups (either topic or species/area-based) that meet in parallel sessions during the first 8-9 days of the Annual Scientific Committee meeting or at specialised intersessional workshops. All of these activities are in response to priority work requested by the Commission and are included in the draft workplan presented to the Commission for approval at each annual meeting. It should be noted that removing or giving lower priority to a particular group or groups may not result in a 'speeding' up of the other groups – whether it does or not will depend on the personnel involved and the nature of the particular topics being considered and, in some cases (particularly with respect to ecosystem-related topics), work carried out by other organisations and research groups.

Table 1 summarises the sub-groups of the Scientific Committee that the Commission agreed should work in Madeira and our attempt to identify those which will deal with at least some aspects of the various elements. It is clear from this Table that almost all of the groups are already considering, to a greater or lesser extent, the majority of the elements and that all of the elements are covered by at least one and usually several groups. Newer elements such as conservation management plans and co-operative non-lethal research programmes are or could be relevant to all groups to a greater or lesser extent. Some groups (e.g. stock definition and increasingly environmental concerns) are fundamental to the working of all of the other sub-groups (and thus are also relevant to all elements).

In the sections below we elaborate on some of the issues that overlap several elements. You are also referred to the earlier Secretariat paper that provided background to all 33 elements (IWC/S08/SWG3).

Conservation Plans

Co-incidentally, the Scientific Committee received two documents on this topic at last year's Scientific Committee meeting. One was the document produced by the Government of Australia that has already been considered by the Commission (IWC/60/15) and the other was a longer document presented to the Scientific Committee that dealt with the process for

developing effective conservation plans (Donovan *et al.*, 2008)¹; a summary of the process required and the links between them is given in Fig. 1. The Committee received the document and agreed that all of the Scientific Committee's groups would take this process into account in their work, either in working towards full conservation plans for particular species/areas where there is an urgent conservation need (e.g. western North Pacific gray whales) or in using the framework as a guide when making research or management recommendations such that they are in a form that can ultimately contribute to a conservation management plan.

It can be seen from the figure that fully developed conservation plans integrate the work of all sub-committees. They should include consideration and prioritisation of all potential anthropogenic threats, both direct (e.g. hunting, bycatches and ship strikes) and indirect (e.g. habitat degradation including chemical and noise pollution, environmental change etc) and associated mitigation measures. The last will often include matters that are not related to whaling. These will require collaborative approaches amongst the relevant national and international authorities e.g. related to fisheries, marine protected areas, pollution etc) and monitoring not only of cetaceans themselves but of anthropogenic and environmental factors.

The evaluation of potential threats may require modelling exercises similar to those used for the RMP/AWMP as well as information from in-depth assessments. Work on conservation plans is envisioned to be an ongoing process and thus it is not possible to set a single time limit for completion. A conservation plan itself should be seen as a living document. However, as Donovan *et al.* point out, incorporation of timelines, priorities, responsible players and the legal framework is fundamental to individual conservation plans and incorporated 'actions'. Actions can relate to research, management and legislative, compliance, monitoring, capacity building/public awareness and co-ordination.

Finally, they stress that effective conservation plans require the participation of all stakeholders (including relevant authorities) – they must have a sound scientific basis but are not the province of scientists alone. How to achieve this broad involvement is something that the Commission will need to consider; the authors had noted that one possibility is that the Scientific and Conservation Committees might work together on determining appropriate broader mechanisms.

Ecosystem related issues including ecosystem approach to management, environmental and climate change

The Scientific Committee has been and continues to address these issues in a variety of ways including the establishment of an ecosystem modelling working group. The importance attached to this work is witnessed by the fact that since Santiago the Committee has held a joint workshop with CCAMLR on ecosystem modelling and a specialist workshop on climate change and cetaceans.

However, as these and previous meetings of both the IWC Scientific Committee and other relevant bodies (e.g. FAO, CCAMLR) have emphasised, predictive ecosystem modelling is an extremely complex and difficult issue from the perspectives of the available data and analysis and modelling. It is clear that obtaining results sufficiently reliable to directly inform management advice should not be expected within at least the next few years and could require considerable time, even for what some term 'simple' systems such as the Southern Ocean. It also requires considerable collaboration with other bodies – in many cases the data on cetaceans are considerably stronger than those for other components of the ecosystem (e.g. lower trophic levels such as krill, fish and squid species) which may be intrinsically more difficult to measure/model as well as oceanography. In addition, even the IPCC models related to climate change are extremely variable and not always at the appropriate temporal and geographical scale to allow inferences about cetaceans. Given this, it is extremely difficult to produce a 'timeline' for the completion of such work. The Committee is working to ensure more direct collaboration with other groups and in particular to ensure that cetaceans are seen as an important component of ecosystem models.

However, in addition to direct ecosystem modelling the Scientific Committee also incorporates the concept of environmental change into its work on both the RMP and the AWMP. *Inter alia*, the scenarios considered include time varying trends in carrying capacity, natural mortality and productivity, and the occurrence of 'catastrophes' which were intended to reflect in an integrative manner environmental impacts including climate change; the results of preliminary ecosystem modelling can in some circumstances inform the choice of scenarios to consider even when the results are not sufficiently robust to be used directly in management. In addition, both the RMP and AWMP incorporate regular (5 year) *Implementation* reviews during which new information on cetaceans and their environment is evaluated to ensure that the parameter space tested by the simulation trials is adequate; if it not new trials are determined. The Scientific Committee is at

¹ Donovan, G., Cañadas, A. and Hammond, P. 2008. Towards the development of effective conservation plans for cetaceans. 15pp. Paper SC/60/O17 presented to the IWC Scientific Committee, June 2008, Santiago, Chile. 15pp.

present reviewing the need to consider additional trial scenarios with respect to environmental change as detailed in last year's report; it is expected that that work will be completed by the 2010 annual meeting.

Co-operative non-lethal research programmes

This issue was raised as an important initiative by Australia in document IWC/60/16. It is clear that the results of such initiatives are intended to be reviewed by the Scientific Committee and can make an important contribution to its work, particularly as the intention is to take into account Scientific Committee needs and recommendations. The importance of international collaboration is clear for migratory species that are found in the waters of more than one nation and in the high seas. In many ways this expands on previous collaborative research work undertaken in co-operation with or by the Scientific Committee including the IDCR/SOWER cruises, the NASS cruises, POLLUTION 2000+ and the SOWER/CCAMLR 2000 cruises. Such programmes have been shown to be of major benefit to the work of the Scientific Committee. Again, it is difficult to apply a *general* timeline – it is expected that individual programmes will have their own timelines and that such programmes in general will contribute in the long-term to the work of the Scientific Committee. The results of a workshop on southern ocean partnerships will be available for consideration at the Madeira meeting.

Collaboration with other groups

It is clear from the text above that the broad issues of cetacean conservation and management requires collaboration with other bodies at a number of levels, not merely scientific. At the scientific level close co-operation already occurs with a number of bodies; members of the Scientific Committee (including the Secretariat) participate fully in the work of, for example, CCAMLR, SO-GLOBEC, IUCN (especially the western gray whale panel), CMS cetacean agreements, FAO (with respect to bycatch) and it is looking to strengthen and broaden this collaboration.

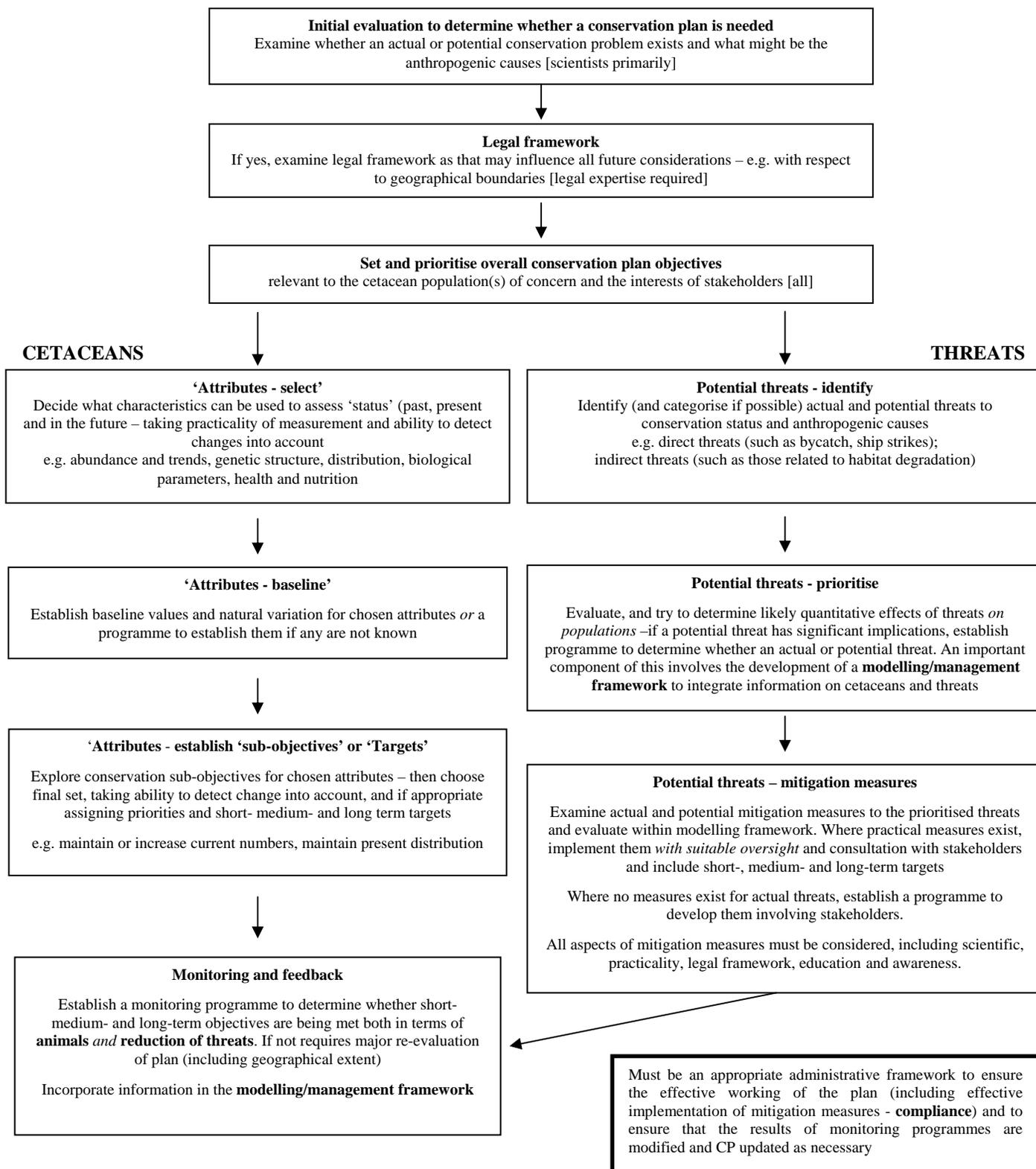
CONCLUSION

This document, although completed in a rather short time and without the opportunity to consult with our colleagues, does, we believe, show that the scientific category (b) issues are included into the workplan of the Scientific Committee and, for example in the case of the conservation plan concept, become an increasingly important mechanism to integrate the work of the sub-committees and working groups into effective conservation and management advice. The complexity of many of the topics (especially those with an ecosystem component) makes it difficult for us to provide precise timelines – indeed the changing nature of the environment and anthropogenic activities mean that many topics will require the continued attention of the Committee. However, specific individual actions (be they research or mitigation and management) will be assigned timelines. As an aside, the development of detailed guidelines for the *Implementation* process for the RMP with an associated timeline has proved very effective. A proposal for similar guidelines (with a timetable) for in-depth assessments (an important component of and basis for conservation plans) is expected to be forthcoming at the Madeira meeting.

Table 1

Scientific Committee sub-committees, working groups and standing working groups scheduled for the 2009 Annual Meeting and elements that are relevant to those groups.

Title	Elements addressed by the group
Revised Management Procedure	Bycatches, Climate change, Conservation Management Plans, Co-operative non-lethal research programmes, Data provision, Ecosystem-based approach to management, Environmental threats to cetaceans
Aboriginal Subsistence Management Procedure	Bycatches, Climate change, Conservation Management Plans, Co-operative non-lethal research programmes, Data provision, Ecosystem-based approach to management, Environmental threats to cetaceans
Bowhead, Right and Gray Whales	Bycatches, Climate change, Conservation Management Plans, Co-operative non-lethal research programmes, Data provision, Ecosystem-based approach to management, Environmental threats to cetaceans, Marine protected areas
In-depth Assessment	Climate change, Conservation Management Plans, Co-operative non-lethal research programmes, Data provision, Ecosystem-based approach to management, Environmental threats to cetaceans,
Working group on North Pacific common minke whales	Bycatches, Conservation Management Plans, Co-operative non-lethal research programmes, Data provision, Ecosystem-based approach to management, Environmental threats to cetaceans
Southern Hemisphere whale stocks other than minke and right whales	Bycatches, Conservation Management Plans, Co-operative non-lethal research programmes, Co-operative non-lethal research programmes, Data provision, Ecosystem-based approach to management, Environmental threats to cetaceans, Marine protected areas
Stock Definition	Conservation Management Plans, Co-operative non-lethal research programmes, Data provision, Ecosystem-based approach to management,
Estimation of bycatch and other human-induced mortality	Bycatches, Conservation Management Plans, Co-operative non-lethal research programmes, Data provision, Ecosystem-based approach to management, Environmental threats to cetaceans, Marine protected areas
Environmental Concerns	Climate change, Conservation Management Plans, Co-operative non-lethal research programmes, Data provision, Ecosystem-based approach to management, Environmental threats to cetaceans, Marine protected areas
Ecosystem Modelling	Climate change, Co-operative non-lethal research programmes, Data provision, Ecosystem-based approach to management, Environmental threats to cetaceans,
Small Cetaceans	Bycatches, Climate change, Conservation Management Plans, Co-operative non-lethal research programmes, Data provision, Environmental threats to cetaceans, Marine protected areas
Whalewatching	Conservation Management Plans, Co-operative non-lethal research programmes, Data provision, Ecosystem-based approach to management
DNA	Bycatches, Co-operative non-lethal research programmes, Data provision, Ecosystem-based approach to management
Special Permits	Climate change, Co-operative non-lethal research programmes, Data provision, Ecosystem-based approach to management, Environmental threats to cetaceans,

Fig. 1. Steps towards effective conservation plans (from Donovan *et al.* 2008)

Appendix 1

Outline of issues and mechanisms for progressing work on Category (b)² elements/issues with a scientific component

Some issues that have been raised ³	How issues are either already being addressed or how they could be addressed
ELEMENT 3: BYCATCH AND INFRACTIONS (SWG 3: P. 8; SWG 4REV: PP. 65-66)	
Continued work on bycatch issues despite disagreements in some areas (e.g. with respect to small cetaceans).	<p>The Scientific Committee continues to examine scientific aspects of bycatch of large whales and small cetaceans in terms of assessing effects at the population level, reviewing mitigation measures and incorporating it into work on the RMP and AWMP and presenting this work to the Commission. It will be assisted in this process by work associated within the conservation management plan framework (see Element 10 below). Several aspects of this work are undertaken in co-operation with other international bodies including, ASCOBANS, ACCOBAMS and FAO.</p> <p><i>This is ongoing work. The problem of incidental catches in fishing gear is worldwide and applicable to a wide variety of fishery types, species of cetaceans and geographical areas. Mitigation measures will be similarly varied and will need to be developed in conjunction with the relevant national and international authorities. Consideration of bycatches is an important component of conservation plans. In particular cases it is important that timelines are set.</i></p>
ELEMENT 4: CLIMATE CHANGE (SWG 3: P. 3; SWG 4REV: PP. 67-68)	
(a) Further efforts to estimate effects on cetaceans at the scientific level	<p>The Scientific Committee has this item on its agenda and is examining this issue from a number of perspectives – in particular it has recently held a joint workshop with CCAMLR with respect to the Southern Ocean and it will be holding a 2nd full workshop on the topic in Spring 2009 (the first was in 1996). The Scientific Committee has recognised that this is a complex issue from both a data and modelling perspective that will require medium- to long-term efforts. Its work with respect to incorporating such effects under whaling management procedures is considered under (b) below.</p> <p><i>This is ongoing complex work. The Scientific Committee is continuing to give this matter priority as witnessed by its recent intersessional workshops and the establishment of an ecosystem modelling working group and report to the Commission on its findings. Given the need for collaboration with other bodies and the focus on non-cetacean as well as cetacean datasets, it is not possible to set a 'completion' date but realistically it will not be for several years for any of the current systems under consideration. The recommendations of the two workshops will be presented to the Scientific Committee</i></p>

² These are issues which are non-controversial or less controversial and which, if left unresolved, would not prevent a package being agreed concerning category (a), *provided* that a mechanism exists or can be established to address them. These are primarily but not exclusively scientific and administrative issues. (There may be issues which, while controversial, may not need to be tackled immediately as part of the package in (a) above.

³ For each element, the issues are listed in no particular order and may overlap.

Some issues that have been raised ³	How issues are either already being addressed or how they could be addressed
	<i>in Madeira and the Committee will report to the Commission on the findings.</i>
(b) Allowance for effects: management of whaling	<p>Both the RMP and the AWMP are tested with scenarios that use proxies (e.g. changing carrying capacity, catastrophes and changes in reproductive/survivorship) for environmental changes including climate change. The Committee regularly reviews these scenarios and is doing so at present for RMP trials. In addition, both the RMP and AWMP have mandatory reviews every 5 years to ensure that the tested scenarios are adequate in the light of new knowledge.</p> <p><i>The Scientific Committee has identified that this should be accorded priority and work is underway to evaluate the need for additional trials. It is expected that from the perspective of the generic RMP evaluation, this will be completed within two years; as noted above for individual AWMP and RMP Implementations, the process involves re-evaluation at least every five years in the light of new information.</i></p>
(c) Allowing for effects: species not subject to whaling (especially heavily depleted populations)	<p>The Scientific Committee has stressed that the effects of environmental change may affect all species/populations including those for which catches would not be allowed if the RMP was implemented – indeed highly depleted populations are probably the most vulnerable to such changes. The Committee continues to investigate this and will be assisted in this process by work associated within the conservation management plan framework (see element 10 below).</p> <p><i>The generic difficulties have been highlighted already but the Scientific Committee will need to incorporate this in the context of the modelling required in the context of conservation plans. Recommendations made by the Climate Change workshop will be presented to the Scientific Committee in Madeira, incorporated into its workplan and the Committee will report to the Commission.</i></p>
(d) General small cetacean issue	<p>The question as to the level to which this issue should be examined for small cetaceans falls under the category (a) element 30. At present the Scientific Committee is examining the issue for all cetaceans.</p> <p><i>Recommendations made by the Climate Change workshop will be presented to the Scientific Committee in Madeira, incorporated into its workplan and the Committee will report to the Commission.</i></p>
(e) Mitigation actions	<p>At its previous workshop, the Scientific Committee noted that mitigation measures related to the general issue of climate change are well known and it asked the Commission to urge member countries to take such action. These relate to matters outside the regulation of whaling. Mitigation measures related to ‘tertiary effects’ of climate change (e.g. possible increased shipping) will be considered by the Scientific Committee in terms of the way it reviews such anthropogenic threats now. It is relevant in terms of the development of conservation plans as discussed above.</p> <p><i>It is primarily Commission (and in many cases it would need to be in conjunction with other intergovernmental bodies) responsibility to incorporate advice from the Scientific Committee in terms of mitigation measures. As before this is ongoing work.</i></p>
(f) Need for co-operation with other bodies	<p>The Scientific Committee is already working in collaboration with other scientific bodies e.g. those within CCAMLR, CMS as well as Southern GLOBEC. The need for further collaboration (e.g. with</p>

Some issues that have been raised ³	How issues are either already being addressed or how they could be addressed
	<p>respect to possible mitigation measures) will need to be identified as work progresses.</p> <p><i>The need for collaboration with other bodies is recognised. Co-operation with some bodies (e.g. the CMS cetacean agreements, CCAMLR, SO-GLOBEC are well developed. Co-operation with other relevant bodies needs to be developed when identified.</i></p>
(g) Level of priority to be given to this work	<p>The Scientific Committee is addressing this as one of its priority issues both in a general context and in the context of the RMP/AWMP; it is necessarily an iterative ongoing subject and future work will <i>inter alia</i> depend on the recommendations from the forthcoming workshop and the level of priority allocated by the other scientific bodies.</p> <p><i>The Scientific Committee is giving, and should continue to give this matter priority and report to the Commission on its findings.</i></p>
ELEMENT 10: CONSERVATION MANAGEMENT PLANS (SWG 3: P. 21; SWG 4REV: PP. 85-86)	
(a) The value of conservation management plans as a framework for conservation actions related to recovering species/populations with respect to non-whaling related threats. The development of conservation management plans is a complex and iterative process that even with the appropriate framework will normally take several years.	<p>The Scientific Committee has agreed the value of such a framework and will be taking this into account in its agenda for the forthcoming meeting (and beyond). This is discussed much more thoroughly in the main text of this document.</p> <p><i>The Scientific Committee has decided to incorporate this concept within all of its work and to give this matter priority. It is of its essence ongoing work but timelines will be incorporated into individual plans and actions.</i></p>
(b) The appropriate way to link the work of the Commission and its subsidiary bodies on the scientific and mitigation measure/management actions (including involvement of stakeholders – see (c) below).	<p>This is a matter for the Commission to decide – one suggestion has been that the Conservation Committee (and see Element 9) may be an appropriate technical body to work with the Scientific Committee towards translating scientific advice into appropriate mitigation measures for consideration by the Commission. This would need to be undertaken in conjunction with stakeholders including relevant national and intergovernmental bodies. This is discussed much more thoroughly in the main text of this document and in Donovan <i>et al.</i>, 2008.</p> <p><i>Determining the appropriate forum and strategy could be placed on the Commission's Agenda.</i></p>
(c) The need to involve/co-operate with other appropriate national and intergovernmental regulatory bodies that are responsible for non-whaling-related threats.	See the comments under (b) above.
ELEMENT 12: COOPERATIVE NON-LETHAL RESEARCH PROGRAMMES (SWG 3: P. 24; SWG 4REV: PP. 90-91)	
(a) Organised regionally outside IWC to develop priorities and research needs	<p>It is intended that the resultant programmes will be submitted to the Scientific Committee for review. This is discussed much more thoroughly in the main text of this document.</p> <p><i>This will contribute to the ongoing work of the Scientific Committee.</i></p>
(b) General issues with respect to non-lethal and lethal	This is covered under element 23 (Research under special permit) and in particular in the new process to

Some issues that have been raised ³	How issues are either already being addressed or how they could be addressed
research	review scientific permit work.
ELEMENT 13: DATA PROVISION (SWG 3: P. 25; SWG 4REV: P. 92)	
(a) Ensure that scientific and operational data essential for management are available for review and analysis	The Scientific Committee has developed an approach to this issue (including the Data Availability Agreement and the Requirements and Guidelines related to the RMP) that it believes is working well. <i>The Commission has already endorsed this approach.</i>
ELEMENT 14: DEVELOPMENTS IN OCEAN GOVERNANCE (SWG 3: P. 26; SWG 4REV: PP. 93-94)	
The need to move away from a sector-based single species approach to the conservation and management of marine living resources to an ecosystem-based approach, co-operating with and taking account of the work and outcome of other relevant treaties (e.g. UNCLOS, CBD).	The Scientific Committee has already begun to address aspects of this issue and co-operates with CCAMLR in particular (see Element 15). The general issue is discussed much more thoroughly in the main text of this document. <i>This is an important yet complex issue that will require several years more work.</i>
ELEMENT 15: ECOSYSTEM-BASED APPROACH TO MANAGEMENT (SWG 3: P. 27; SWG 4REV: PP. 95-96)	
(a) No specific definition agreed.	The Scientific Committee is working on this issue on two fronts: (1) using ecosystem information to inform single-species management (e.g. under the scenarios used to test the RMP and AWMP); (2) working towards developing ecosystem models (see (b) below) that may ultimately be used in a predictive manner. This is discussed much more thoroughly in the main text of this document. <i>The Scientific Committee is giving this matter priority but recognises that it is a complex issue that will require several years more work.</i>
(b) Level of priority to be given to this work.	The Scientific Committee is addressing this as one of its priority issues both in a general context and in the context of the RMP/AWMP; it is necessarily an iterative ongoing subject and future work will <i>inter alia</i> depend on the recommendations from relevant workshops and the level of priority allocated by the other scientific bodies. <i>The Scientific Committee is giving this matter priority but recognises that it is a complex issue that will require several years more work. In terms of the RMP/AWMP scenarios it is anticipated that this will be completed within two years in the generic sense as well as at least every five years for specific Implementations.</i>
(c) As with Element 4 (Climate change), complex scientific issue from data and modelling perspective, need for co-operation with other bodies.	As noted under Element 4, the Scientific Committee is embarking upon the long-term work needed to begin to develop ecosystem models that may eventually lead to some predictive modelling that can be used to inform management; this work can only be effectively undertaken in collaboration with CCAMLR, SO-GLOBEC and others – and the Scientific Committee is pursuing this. <i>This is ongoing complex work. The Scientific Committee is continuing to give this matter priority as witnessed by its recent intersessional workshops and the establishment of an ecosystem modelling working group and report to the Commission on its findings. Given the need for collaboration with other</i>

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	<i>bodies and the focus on non-cetacean as well as cetacean datasets, it is not possible to set a 'completion' date but realistically it will not be for several years for any of the current systems under consideration.</i>
ELEMENT 16: ENVIRONMENTAL THREATS TO CETACEANS (SWG 3: P. 28; SWG 4REV: PP. 97-98)	
(a) Level of priority to be given to this work and incorporation into the conservation and management of cetaceans.	<p>The Scientific Committee has recognised the importance of addressing threats other than whaling and has established a standing working group on this subject as well as holding specialists workshops and important research programmes (POLLUTION 2000+ and SOWER 2000). It is working towards greater incorporation of the work of this group with the other sub-committees, noting the value of a conservation management plan framework in this context. The RMP and AWMP at present address these issues in their simulation testing frameworks that are regularly reviewed (and see Element 4: Climate Change and 15: Ecosystem-based approach to management).</p> <p><i>The Scientific Committee is giving these matters increasing priority – again this is ongoing work and it is not possible to set generic completion dates – individual situations will be given specific timelines.</i></p>
(b) Need for co-operation with other bodies that have some regulatory capacity on factors outside whaling.	<p>The co-operation with other bodies at a scientific level is underway.</p> <p><i>Where mitigation measures may be proposed on matters other than whaling, there is a need to consider a broader co-ordination with other bodies at a Commission level.</i></p>
ELEMENT 20: MARINE PROTECTED AREAS (SWG 3: P. 40; SWG 4REV: PP. 103-104)	
(a) This issue is integrally related to the discussion of Element 27 (Sanctuaries) part of which is being considered as category (a)	See the discussion under Element 27.
(b) No general definition of MPAs.	<p>The flexibility in the definition of MPAs is valuable and the Scientific Committee may consider a variety of possible targeted MPAs as potential mitigation tools within the context of conservation management plans (see Element 10).</p> <p><i>The Scientific Committee has agreed to integrate the concept of conservation management plans into its work and where appropriate this will include MPAs. Again this is ongoing work it is not possible to set generic completion dates – individual situations will be given specific timelines.</i></p>
(c) Incorporation of Marine Protected Area concepts into IWC Sanctuaries;	<p>The Scientific Committee is attempting to incorporate such concepts (e.g. measurable goals) in its review of existing and proposed Sanctuaries – this will need to be done in co-operation with the Commission who has the responsibility to set such goals at least in a qualitative manner.</p> <p><i>The Scientific Committee will give this matter priority when it is reviewing specific proposals or undergoing periodic reviews of existing Sanctuaries.</i></p>

Some issues that have been raised ³	How issues are either already being addressed or how they could be addressed
(d) Need for co-operation with other bodies with respect to addressing threats other than whaling.	The co-operation with other bodies at a scientific level is underway. <i>Where mitigation measures may be proposed on matters other than whaling, there is a need to consider a broader co-ordination with other bodies at a Commission level.</i>
ELEMENT 28: SCIENCE – ROLE OF SCIENCE AND FUNCTIONING OF THE SCIENTIFIC COMMITTEE (SWG 3: P. 62; SWG 4REV: PP. 116-117)	
<i>The report of the intersessional correspondence group established by the Commission (IWC/M09/5) deals with this matter.</i>	

